AIDS in Uganda: Understanding the Causes of High Risk Sexual Behaviour

by Anna Borzello

Why would anyone have unsafe sex in Uganda, a country with one of the highest levels of HIV infection in the world? According to research by Nelson Sewankambo, an epidemiologist and Acting Dean of Makerere University Medical School, the reasons have a lot to do with poverty, tradition, and fatalism.

"People's lives are complex," he says. "The conditions in which they live some times propel them into compromising situations. And when people are vulnerable, they make choices that might not be healthy."
High risk community

In 1989, Dr. Sewankambo — one of the first persons to document HIV, the virus that causes AIDS, in Uganda — began examining why many Ugandans place themselves at risk through unsafe sex. With funding from the International Development Research Centre (IDRC), he and Dennis Willms, a medical anthropologist at McMaster University in Canada, focussed on To-day, the pseudonym for a small trading centre in Rakai District, Western Uganda, which straddles the main trucking route leading from the Kenyan coast to Central Africa. The Rakai district has a very high incidence of AIDS. In some parts of the district, half of the adult population is HIV positive.

In Uganda, long-distance truck drivers, commercial sex workers, and patients with sexually transmitted diseases have long been identified as high risk groups for HIV infection. But the researchers soon discovered that other groups are even more vulnerable and that risky sexual behaviour is often born of necessity.

Surviving poverty

Uganda has one of the lowest per capita incomes in the world, and simple survival forces some women into sex. Those who brew and sell alcohol at home are particularly vulnerable. Their customers often demand sex, refusing to pay unless the women sleep with them. Even fetching water from a local well can be risky. In times of drought, the queues are long and the men who manage the bore holes are able to obtain sexual favours from young girls in exchange for access to water.

But having sex is not the same as having unsafe sex. According to Dr. Sewankambo, many men are unwilling to use condoms, either because they don't believe in AIDS education messages that advocate the use of condoms, or because they have decided that their sexual pleasure outweighs any health risk.

Sexual abstinence difficult

Local customs can also cause sexually risky behaviour. For example, sexual abstinence is difficult in a culture where widows are inherited by the brother of their former husband.

Dr. Sewankambo hopes that his four year study will help in the design of effective community intervention programs, which is the focus of Phase Two of this project. "Intervention is not purely a medical matter," he says. "We need to consider the life situations of people. If money is at the heart of the problem, then we need to help them generate income" in ways that don't place them at risk.

Overcoming fatalism

Dr. Sewankambo believes the biggest hurdle facing the Uganda-Canada research team is overcoming fatalism. There is a widespread view among residents of To-day that "everybody is infected so we're going to die anyway. We can't avoid it, so why try?" he explains. "How do we make the community appreciate that not everyone is infected, so that people become more positive about their life and future?"

This question is key to ensuring that interventions last beyond the project's lifetime. "We don't want to pull out until we have made a difference," he says. "And we don't want to impose a solution on the community. We want the community to be active participants."

Anna Borzello is a freelance journalist based in Uganda.

Resource Persons:

Dennis Willms, Associate Professor, McMaster University, Department of Anthropology and Department
Links to explore ...

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- Alternatives for Thai Sex Workers, by Daniel Girard
- An AIDS Test that Travels Well, by John Eberlee
- A Critical Mass of AIDS Research, by Jim Beatty
- Infectious Diseases: A Growing Global Threat, by John Eberlee
- Soaps for Social Change, by Kevin Conway

Additional resources:

- HIV/AIDS World Situation: maps and charts
- UNAIDS: The Joint United Nations Programme on HIV/AIDS
- World Health Organization: HIV/AIDS Surveillance
- WHO Office of HIV/AIDS and Sexually Transmitted Diseases (ASD)

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Octubre 2003
Active tourists typically know Northern Thailand as a region for fabulous trekking holidays among the peoples of the hills. But to many Thais, the area is often better known for supplying prostitutes to massage parlours, go-go bars and escort services around the country.

Little formal education, poor awareness of sexually transmitted diseases, the lure of a well-paid job and cultural attitudes that do not stigmatize young women who work in prostitution, have led to the trend, according to the results of interviews in 10 villages in the northern provinces of Chiang Rai and Phayao.

Women can earn many times more as commercial sex workers than as factory labourers, according to Thailand's Population and Community Development Association (PDA). The PDA is teaming up with the Thai Red Cross Society in Bangkok in an IDRC-sponsored project with the goal of testing a package of employment alternatives to prostitution for young women aged 12 to 19 from Northern Thailand.

Clearly they have set themselves a tremendous task. Estimates of the number of employees in the commercial sex industry in Thailand vary widely. The PDA-Thai Red Cross group puts the figure at between 300,000 and 500,000 in more than 10,000 establishments around the country. The northern provinces, particularly Chiang Mai, Chiang Rai and Phayao, appear to provide the majority of women to the profession. One of the first goals of the project was to find out why.

A desire to make money to support an impoverished family was seen as one of the reasons young women turn to commercial sex work. But motivation based on economic need was surpassed by the relatively positive image the trade has in the north. It is often seen as a way to achieve material wealth and a comfortable lifestyle because it is widely known that Thai women can make more in the sex trade than in virtually any other career. Added to the material reward is a long history of northern women with their lighter skin being more favoured by Thai men and therefore finding it easier to break into commercial sex work. It was difficult for researchers to find northern women working at physically demanding jobs such as in factories or on construction sites.

The sex trade can provide an immediate payback in the form of cars, material goods and the means to build homes for their families. By comparison, other careers often cost money to pay for training courses and uniforms, for instance. Continuing one's education after primary school is considered to require too many financial resources while not yielding enough monetary reward.

And when the career in commercial sex work is completed, the women can return home and, according to interviews with boys in each of the villages, marry men who think that their career in sex work confers a higher status and more worldliness than would have come from remaining in the village.

But eventually, the rising incidence of human immunodeficiency virus (HIV) infections and acquired immune deficiency syndrome (AIDS) will likely alter attitudes to sex work. When one or two people in a
village die from AIDS, the image of sex work will change, according to the PDA. The World Health Organization (WHO) reported last year that about two million Asians one-fifth the global total of those afflicted have been infected with the AIDS virus and the continent is expected to suffer its fastest spread in the coming years.

**Human and economic costs**

Thailand currently has about 500,000 HIV carriers, the second most in Asia after India, which has approximately one million in a population that is some 15 times greater than Thailand, who officials said. In addition to the human costs, the Thai government has projected a potential loss of US$9 billion to the country’s economy by the end of the century if the spread of the disease cannot be slowed. The forecast by the PDA is even more alarming. It projects 4.2 million Thais will be HIV positive and 920,000 deaths will have occurred from the disease by the year 2000, who officials said while needle-sharing and sex between men are considered important modes of transmission, about 75 percent of all infections in Asian countries occur through heterosexual contact.

For Thailand, that finding appears particularly ominous. PDA and Thai Red Cross officials say that despite popular opinion, Thai men, not highly visible tourists, are the main customers in the country’s sex business. Researchers cite a May 1990 report by the Deemar Company that showed 75 percent of Thai men surveyed had visited a prostitute.

In selecting five villages in each of Chiang Rai and Phayao provinces, the researchers sought communities with a high incidence of females going into sex work where an AIDS awareness program had never existed and that were at the poverty level. Both provinces also have a high incidence of HIV infections.

The team interviewed about 1,200 people by questionnaire in the villages and in Bangkok about their views on commercial sex work, including girls and young women aged 12 to 19 considered at risk of choosing that career, males of the same age, parents, village authority figures and women who have become factory workers, janitors and construction labourers. In-depth interviews with small segments of each group were also held.

**Promoting alternatives**

The team is now compiling its data to develop, implement and then monitor a pilot program offering young women alternatives to sex work. While still being designed, the research shows the pilot program must be three-pronged to be successful: provide jobs that pay well enough to offer a legitimate alternative to the much better paying commercial sex trade, increase the formal education level achieved by young women perhaps through a scholarship program and give lessons on sexually transmitted diseases and AIDS to five respected leaders from each village who will then take the training back home.

Since financial success has a higher priority than schooling in northern communities, getting the money to provide higher-paying work in and near the villages will likely be the most important task. Project officials also hope to produce a video and compile their findings for governments and organizations to replicate the program elsewhere in Thailand and other countries.

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An AIDS Test that Travels Well

by John Eberlee

Few advances have made as large an impact in controlling the spread of AIDS as diagnostic blood tests for the human immunodeficiency virus (HIV). In the developed world, HIV testing has virtually eliminated the risk of viral infection through blood transfusion and has helped health authorities monitor the spread of AIDS.

However, for many developing countries, HIV testing can be an unaffordable luxury. Currently available HIV tests are designed for use by highly trained technicians working in modern clinical laboratories. The tests simply do not travel well to communities where the electricity may be turned off for several hours a day.

But this unsatisfactory situation is about to change. In a project funded by IDRC and the Rockefeller Foundation, researchers at the Program for Appropriate Technology in Health (PATH), a non-governmental organization based in Seattle, Washington, have developed the first screening test ever designed with the realities of developing countries in mind. The test detects antibodies to HIV-1 and HIV-2 AIDS viruses. It gives an answer in 20 minutes, costs just 25 cents per sample, and travels remarkably well.

KEEPING THINGS SIMPLE

"We insisted from the start that the technology be kept simple," says Dr Don de Savigny, the IDRC project coordinator. "We wanted a test that would work as well as the best commercially available tests but be more appropriate for resource-poor settings." This meant the test had to work without electricity, instrumentation or cold-chain, be easy to learn and sustain, and be manufacturable in developing countries."

The test kit features a plastic dipstick shaped like a comb with eight test strips or teeth. The test is performed by dipping the teeth in blood samples for 10 minutes, rinsing them, followed by a soaking in a reagent solution. If a red dot appears on a tooth, then the corresponding sample is almost certainly contaminated.

Evaluations conducted by the World Health Organization and Health and Welfare Canada indicate the dipstick is as reliable as screening tests already on the market. Field trials in Uganda, Kenya, Brazil, China, Indonesia, India and Thailand indicate high sensitivity and false positive readings less than 2% of the time, which is comparable to screening tests used in Canada. So far, Kenya, Uganda, Cameroon, China and Thailand have expressed interest in manufacturing the test; India and Indonesia are already manufacturing it.

According to Dr de Savigny, children and mothers stand to gain the most from this technology. "Blood transfusions are very common in the developing world, especially in Africa where there is a high incidence
of malaria," he says. "Hospitals there see a lot of children with life-threatening anemia who, if they don't get a transfusion within 24 hours, will die. In those situations, if you don't have the ability to screen blood, you transfuse anyway and hope for the best." Besides reducing the spread of HIV, the dipstick may also open some doors in AIDS research. Logistical barriers have so far prevented scientists from monitoring the incidence of HIV in developing countries. But the low cost of the dipstick means it may be possible to conduct surveys involving thousands of people to find out how far HIV has spread.

The dipstick test has already been used to conduct the first seroprevalence survey for HIV in Haiti. IDRC supported Dr Michel Cayemittes of the Institut Haitien de l'Enfance and Dr Catherine Hankins of the Montreal General Hospital to do the research. They used blood samples from simple finger pricks collected on filter paper, a technique pioneered in Canada. The samples came from a randomly selected group of pregnant women from across Haiti. Test results were unlinked from identifiable individuals so that donors remained anonymous.

The Haitian-Canadian team tested its blood samples both conventionally at the laboratory of the Federal Centre for AIDS in Ottawa and using the dipstick technology in Haiti. The results again proved that the dipstick test is reliable and, moreover, it can be used with just a spot of dried blood.

"The cost of collecting blood samples is also a consideration," says Dr de Savigny. "But we've shown that you can use the dipstick on dried blood. All it would take to collect enough blood for testing purposes is a finger prick."

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A Critical Mass of AIDS Research

by Jim Beatty in Nairobi

Since its emergence in the early 1980s, AIDS has become the African continent's biggest health threat. It is already the number one killer among adults in some sub-Saharan countries.

The World Health Organization estimates that by the year 2000, 40 million people worldwide will be infected with AIDS or HIV, the human immunodeficiency virus that triggers the killer disease. Of those, 25 million will be in Africa. Thus, Africa appears destined to continue to bear a disproportionate share of the AIDS pandemic.

In this environment, IDRC is supporting a collaborative research effort by the University of Nairobi and the University of Manitoba intended to find ways to protect certain vulnerable groups. The team of African, Canadian and European researchers is led by the University of Nairobi's Dr. J.O. Ndinya-Achola and the University of Manitoba's Dr. Frank Plummer. Plummer, a Winnipeg native, has conducted research on AIDS from a base in Nairobi, Kenya for some 10 years. Over that period, the research has included studies focusing on three diverse but important groups affected by AIDS: sex workers (prostitutes), children, and long-distance truck drivers. Plummer's collaborators in the 70-person team have become one of the most prominent AIDS research groups in the world and certainly the best known such research team in Africa.

Some of their most remarkable findings to date have emerged from a study of 1,700 Nairobi sex workers, 95% of whom have AIDS or are infected with HIV. The researchers are trying to determine why the remaining uninfected five percent whose behaviour is apparently no different from that of their cohort have not acquired the disease. "We're very interested in how they resist HIV infection", says Plummer. "Something makes the AIDS-resistant sex workers special. We're pretty sure they're resistant to HIV in some way", says Plummer. "They could have cellular immunity to HIV. There's something about their white blood cells that kills the disease. Finding the answer could mean a cure, or at least a vaccination, for AIDS. It's the best clue in determining if there is a natural immunity", he says. Dr. Joanne Embree, of the University of Manitoba's Medical Microbiology and Pediatrics Department, says if the prostitutes have an immune defence mechanism, then you're well on your way to finding something to cure it or at least minimize the effect of AIDS. And if researchers determine the women are genetically immune to the virus we can look at gene therapy or something to block the (genetic) receptor.

MOTHER TO CHILD TRANSMISSION

The group is also trying to determine the role of breast milk in HIV transmission between mother and baby. Out of 500 children of HIV-positive mothers, 47% were infected with the virus. Half of those children were infected through breast feeding.

"That's an incredibly important issue," says Plummer. "Breast feeding is almost universal in Africa. And
for impoverished women, without the resources to buy food or provide clean water, there is no alternative to breast feeding to nourish an infant.

"Even if there were a choice, the benefits of breast feeding in developing countries cannot be overlooked. They are vital to the health of the child in the first few years in the prevention of disease, particularly potentially fatal diarrheal diseases."

This study is not yet complete but already the researchers think that a three to six-month period of breast feeding rather than the suggested two years may be a better practice for HIV-positive mothers. The researchers hope that a shorter period of breast feeding will lower the transmission rate of HIV while still giving the babies the necessary immunities to fight other diseases.

Plummer says the research group initially focussed mainly on women and children: little research was directed toward hard-to-reach men. Then, as part of a study led by the Kenyan researcher Dr. J.J. Bwayo, they set up a roadside clinic near a police checkpoint to contact truck drivers, who generally have a high frequency of HIV and other sexually transmitted diseases.

"There is a lot of HIV along the truck routes", says Plummer. "They are a mobile population who play an important role in the geographic spread of HIV." It has even been suggested that long distance truck drivers may, in part, be responsible for introducing HIV to Kenya from neighboring countries.

Of the 800 men in the study, about 30% have HIV, a figure that is growing by about four percent a year. Plummer calls the roadside bars and truck stops that the drivers frequent "little HIV factories". Research has shown a higher prevalence of HIV in towns near major highways than in nearby towns further from the road.

In 1990, the project interviewed 350 long-distance truckers. Despite having adequate knowledge of AIDS and other sexually transmitted diseases, 80% reported having had unprotected sex with prostitutes within the previous year and 25% reported weekly sex with prostitutes. Only 10% had ever used a condom.

The roadside clinic attempts to change attitudes about unprotected sex. While drivers wait for police to check their rigs, they are offered HIV tests as well as condoms, education and counselling. "Most everybody in Kenya and Africa knows about HIV but they don't do what they ought to," says Plummer. "We're trying to understand the impediments to translating knowledge to safer behaviour."

"If AIDS continues at its current pace within 10 to 15 years you'll be able to see effects on population growth", says Plummer. "There'll be negative population growth. Right now, 15% of the general population have HIV in Kenya. When 15% of your workforce have a fatal disease, that's pretty important."

Exacerbating the health crisis are governments too poor or too slow to combat the problems. Annual health-care spending amounts to only about $6 for every man, woman and child in sub-Saharan Africa, according to the World Development Report. "Governments are not putting enough money or resources into the problem of AIDS", says Plummer. "They can't hope to cope with the problem with the money they have right now."

LOCAL IMPACT

The research by the Kenyan-Canadian team, along with the educational and counselling components, has made a considerable contribution to slowing the transmission of sexually transmitted diseases in Kenya and beyond. "We've helped a lot of people along the way. We've prevented countless HIV infections", says Plummer.

But the research program has had other important results apart from its findings on sexually transmitted diseases. From modest beginnings, when Plummer and one or two Kenyan colleagues worked on small
studies, it has grown into a sophisticated, world-renowned research team. Sixty members of the 70-person team are Kenyan.

"We've built the human resources to begin to deal with this problem, says Plummer. We've built a fantastic research and training facility. We've trained a lot of Canadians and Kenyans. These studies aren't possible anywhere else in the world."

Embree underscores the importance of the Canadian-Kenyan partnership. "With African investigators much more work can get done", she says. "There is much more cooperation and help. It would be a lot slower and not as well done if the Kenyan investigators weren't working alongside. They've been a great asset. And the expertise will stay in Africa no matter what."

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Infectious Diseases: A Growing Global Threat

by John Eberlee

When it comes to disease transmission, there are truly no borders in the global village. Human activity and environmental change are dramatically increasing the potential for worldwide epidemics of infectious disease -- a fact that makes North/South distinctions less and less meaningful. Despite steady advances in our ability to identify, monitor, and control pathogenic organisms, human populations everywhere are becoming more and more vulnerable to disease. To better protect human health, the world needs a global early warning system, according to panelists at a recent IDRC forum on emerging and resurgent diseases.

"As the Nobel laureate Joshua Lederberg has pointed out, the microbe that felled one child in a distant continent yesterday can reach yours today and seed a global pandemic tomorrow. There is nowhere in the world from which we are remote and no one from whom we are disconnected," said Dr Catherine Hankins, an epidemiologist at McGill University in Montreal.

"Infectious disease remains the leading cause of death and disability worldwide and will continue to do so as a result of changes in society, technology and the environment," she added.

Impact of Disease

In Tanzania, a recent study sponsored by the World Bank found that diseases account for 64% of "discounted life years lost" (a quantitative measure of premature deaths), noted Dr Konrad Mmuni, principal consultant physician with the Muhimbili Medical Centre in Dar es Salaam. The most prominent diseases are AIDS, malaria, tuberculosis, cholera, plague, meningitis, rabies, and dysentery. According to Mmuni, incidence rates of many of these diseases have been increasing dramatically in recent years.
Mmuni blamed Tanzania's woes on inadequate hygiene and overburdened health care facilities. "Locally, there is a stretching of limited resources from trying to treat people with malaria and AIDS." He added that malaria control programs are facing tougher challenges because of a steady increase in both drug-resistant parasites and insecticide-resistant mosquitoes.

**Return of Tuberculosis**

Although the situation is not as serious in the North, the fight against disease has taken a turn for the worse. In Canada, tuberculosis is emerging once again as a serious threat after decades of decline, noted Dr Joseph Losos, director general of the Canadian Laboratory Centre for Disease Control.

Across Canada, approximately 10% of tuberculosis strains are resistant to antibiotics, and a small percentage of these are resistant to more than antibiotic. "The disturbing news," said Losos, "is that the genetic sequence of some of our strains is starting to look more and more like W-strain, which is resistant to all seven anti-tuberculosis drugs. W-strain is associated with 60-70% mortality rates in the best health care facilities on Earth."

Additional concerns include foodborne pathogens, such as "hamburger disease", a virulent form of *E. coli* that can cause kidney failure in young children; and water-borne pathogens, such as *Cryptosporidium*, that caused massive illness in Milwaukee, Wisconsin a few years ago. Approximately 403,000 people came down with diarrhea after drinking water that met all federal and state standards for water purity, reported Hankins.

**Shifting Patterns of Disease**

According to Dr Jonathan Mann, a professor at Harvard University and founding director of the World Health Organization's Global Program on AIDS (1987-1990), the emergence of infectious diseases in the South and North is associated with six main factors. These include changes to the physical environment, human demographics, international travel and commerce; technological changes such as mass food production, microbial adaptation, and the dismantling of public health measures. The latter change contributed to the resurgence of tuberculosis in North America.

Among these factors, the movement of people and goods has perhaps had the greatest potential impact on global public health. For instance, 42 million travellers visit the tropics every year, which translates into hundreds of millions of contacts between individuals. Not only do people from the North risk catching exotic diseases, but they carry with them antibiotic-resistant bacterial flora, stressed Losos.

**Tiger Mosquito Threat**

One example of the impact of international commerce is the introduction of the Asian tiger mosquito into Texas a few years ago. The mosquito entered the United States via Japan in a load of used tires, some of which stored enough water to provide a habitat for the mosquito larvae. "Its range has now extended as far north as Illinois," said Hankins. "It's a hardy mosquito -- one that can withstand North American winters. It's thought to be capable of carrying at least 15 viruses, including those responsible for dengue and yellow fever."

Global climate change is yet another phenomenon that could prove to have untold impacts on patterns of disease transmission. For instance, higher average temperatures globally could extend the range of certain disease-carrying mosquitoes that were previously limited to warmer regions and lower altitudes.

**Finger-Pointing**

Although diseases are now harder to control, improved surveillance could reduce the risk of local problems...
becoming global epidemics. Although the WHO coordinates with other agencies to establish global surveillance and response teams, the challenge is to ensure the participation of all nations. One obstacle, said Mann, is the universal reflex toward blaming or finger-pointing when an epidemic occurs. He noted that the South is often the victim of this kind of blaming and many countries respond by denying that a public health problem exists.

"Country after country around the world fails to report epidemics of cholera to the World Health Organization, even though it's obvious cholera is occurring, because they are concerned about their international image. There is nothing a country fears more than to be embarrassed," said Mann.

**Questions of Sovereignty**

From the perspective of global health, "we are currently held hostage to national sovereignty," he continued. "Take the example of a plague outbreak. Until or unless the [local] health officials let the World Health Organization come in, or let the Centers for Disease Control in Atlanta come in, you can't go in. And yet the implications of an epidemic for international health could be quite extraordinary."

To resolve this problem, Mann proposed the establishment of global institutional arrangements based on certain universal principles. First, the same rules should apply to both the North and the South, he said. "When an outbreak occurs in a developing country, industrialized country researchers are quite willing and able to go help. But how many times has Canada or the United States brought in foreign researchers at the beginning of a new epidemic to participate in [public health efforts]?

"Second, we need an honest broker: a neutral, transnational organization capable of conducting surveillance, initiating investigations and coordinating responses in a way that is suitable to all of us," he added. "We need simple and fair rules of engagement that describe how and when to enter and deal with a country. And we need to involve NGOs in the process to ensure the free flow of information and to raise the costs to governments of denying that there is a problem."

*John Eberlee is a writer based in Ottawa and the acting editor of IDRC Reports.*

### Links to explore ...

- **Bednets for Malaria Control** *Insecticide-impregnated bednets may prove to be one of the most effective ways to prevent malaria deaths in Africa.*

- **The Intellectual Arrogance of the North** *Large-scale production of the world's first safe and effective malaria vaccine could begin in 1997. But the vaccine might already have been in use if not for the "intellectual racism" of scientists in the North.*

- **Combatting Leishmaniasis in India** *Creating a better understanding of the causes of leishmaniasis and the most effective responses to it.*

- **Cleaning up on Schistosomiasis** *A natural pesticide derived from the African soapberry plant is lethal to freshwater snails that harbour the schistosomiasis parasite.*

- **A Critical Mass of AIDS Research** *A team of African, Canadian and European researchers explore ways to protect vulnerable groups from AIDS.*

- **GIS for Health and the Environment** *How geographic information systems can be used to monitor*
tropical diseases, water quality, environmental toxicology and overall rural health.

Additional resources:

- Global AIDS Programme
- Global Tuberculosis Programme Internet Site
- U.S. Centers for Disease Control (CDC) Home Travel Information Page
- World Health Organization's (WHO) Division of Control of Tropical Diseases Internet Site
- World Health Organization's (WHO) Emerging and Other Communicable Diseases Internet Site

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SOAPS FOR SOCIAL CHANGE

by Kevin Conway

It's suppertime. In communities across northeast Thailand villagers eagerly await the next instalment of this region's hottest new radio drama. What makes this Thai soap unusual, however, is its subject matter: aids. Behind the jokes and puns is a serious attempt to educate and change risky behaviours.

The group responsible for this novel mini-series is an international team of health researchers. Its co-leaders are Thicumporn Kuysakanond of Thailand's Khon Kaen University and Eleanor Maticka-Tyndale of Canada's University of Windsor. With idrc support, they pioneered an aids awareness program to prevent the spread of hiv through the rural communities of Thailand's dry northeast.

The program was based on the team's earlier research. Local women were interviewed individually and in focus groups. Although the rate of hiv infection across Thailand's northeast is low, most of the women were aware of aids. The results also showed that few women felt personally at risk, despite knowing that their husbands frequented prostitutes.

According to Maticka-Tyndale, the women's sense of immunity is rooted in community norms and the belief system surrounding sexuality. She uses prostitution and married men as an example. There are certain rules. Having sex with someone other than your wife is not wrong, but it should never be a threat to the marriage unit.

As long as men were discreet about their liaisons, wives were expected not to pursue any suspicions they had. Most said they trusted their husbands not to put them at risk.

The interviews also revealed another cultural barrier to open communication between husband and wife; a cool heart. A cool heart or a calm emotional response towards others is a trait that Thai women value highly. We played into all of that, says Maticka-Tyndale. We had to encourage men and women to recognize that they had to prevent hiv transmission or those rules would have been broken.

The radio scripts were based on stories taken directly from the focus group discussions, thus reflecting real village situations. Cliffhangers that ended each broadcast sustained conversation and discussion, says Maticka-Tyndale.

The dramas were styled after a traditional, much-loved form of Thai theatre called Maw Lum. Maticka-Tyndale describes Maw Lum as a mixture of soap opera and improvisational theatre.

With a captive audience wanting more, the researchers held village meetings to discuss the radio shows and make hiv/aids a community issue. Maticka-Tyndale's own research has shown this step to be critical in changing individual behaviour. In some villages these discussions led to community action plans. One community even set up a condom-dispensary near a bus stop so that men heading for town to party would have easy access to protection.
Maticka-Tyndale believes that similar programs could be adapted to other cultures and other countries. The only thing that would change is the radio dramas. Specific interventions, based on prior research, would be tailored to individual communities needs.

The nature of HIV infection is such that measuring the program’s effectiveness was problematic. The best you can do is look at behaviour changes, things like condom sales and distributions and community awareness, says Maticka-Tyndale. However, the lack of hard data didn’t stop Thai health officials, in collaboration with local NGOs, from expanding the pilot to province-wide programs.

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