

Spotlight

After the tsunami: HIV prevention and disaster relief

In the weeks following last December's tsunami disaster, children began showing up at medical clinics in Aceh, Indonesia, hot with fever and covered with the characteristic red rash that spells measles. The cramped tent camps where the children lived helped spread this disease, which takes a surprisingly deadly toll in populations displaced from their homes. Our team of health workers ventured out daily with national health authorities to prick arms with vaccination needles and pop vitamin A capsules—which can lessen measles complications—into tiny mouths.

As we traveled from camp to camp the reproductive health nurse on our team found time, even in the midst of the outbreak, to identify midwives, learn about the situation of women, and distribute kits filled with clean baby delivery supplies and materials.

She had been hired for this job. Emergency relief was once about providing food, shelter, clean water, and basic medical services. But now, supporting good reproductive health has unquestionably joined these as a top priority, partly because of HIV/AIDS. Relief experts now recognize that devastation—such as that caused by the tsunami—can heighten AIDS risk factors, making HIV prevention efforts an important part of an emergency response.

"Many of the conditions that facilitate the spread of HIV are worsened in a post-disaster context," says Yannick Guegan, who works with the humanitarian affairs department of UNAIDS, the Joint United

Nations Programme on HIV/AIDS.

Guegan points to mass displacements of people from their homes and communities, social instability, worsening poverty due to income loss, and the influx of new populations (including reconstruction and relief workers, soldiers, and transporters) as factors associated in the past with the transmission of HIV/AIDS. "The experience from other emergency situations like in South Africa some years ago, or in East Timor, has demonstrated an increased vulnerability in emergency situations, and that can change the incidence of sexually-transmitted disease, including HIV/AIDS."

Survivors have many competing needs in the aftermath of disasters so only simple methods of promoting HIV prevention are feasible. In the mid-1990s aid agencies developed the Minimum Initial Service Package (MISP), a set of actions to counter HIV and sexual violence and attend to other reproductive health needs in the midst of pressing emergencies. Over the past several years MISP has received a stamp of approval from many of the key agencies in disaster and emergency response—from the United Nations refugee agency UNHCR, to the disaster standards organization SPHERE. These top-level backers are urging relief workers to integrate simple approaches to HIV/AIDS prevention into emergency disaster assistance activities.

MISP addresses HIV prevention in two key ways: making condoms freely available and ensuring that medical equipment and blood for transfusion are free from infectious agents. "Anything more comprehensive than that wouldn't really be appropriate in the first few weeks," says Sandy Krause, who directs the reproductive health project of the Women's Commission for Refugee Women and

Children. Krause and a colleague set out for Asia soon after the tsunami hit, visiting emergency responders in Aceh to talk about MISP and assess its implementation.

The response to the tsunami also provides communities with the opportunity to develop more comprehensive HIV/AIDS prevention and education activities as part of the post-emergency response that will be sustainable over the long term. "The approach of the UN in the post-tsunami period is trying to develop a 'recovery plus' plan, meaning make things better than they were before," says Guegan. "We see it as an opportunity to accelerate the response to HIV."

Understanding the risk after the tsunami

The tsunami struck low HIV-prevalence countries such as Sri Lanka and Indonesia, where UNAIDS estimates that less than one out of every thousand adults aged 15-49 is infected with HIV. The disaster also hit countries such as India and Thailand where adult prevalence runs higher (0.4 - 1.3% in India and about 1.8% in the case of Thailand), and Somalia where HIV prevalence is not known. India's tsunami-stricken state of Tamil Nadu has the highest HIV/AIDS rates in the entire country; 2003 data showed that 83.8% of injection drug users and 8.8% of female commercial sex workers in this state were infected with HIV.

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The fear is that these rates could rise if post-tsunami hardships and stresses push survivors into drug use or other high-risk activities like commercial sex work. Untold numbers of families have lost boats, businesses, and other sources of income, and Guegan fears that the resulting poverty could also pressure women into sex work.

Sex workers will not lack potential customers. Thousands of outsiders have poured into tsunami-devastated areas to lend a hand in the reconstruction efforts, among them soldiers from around the world. In some countries HIV rates among military personnel are 2-5 times those of respective civilian populations. The presence of soldiers could contribute to the spread of HIV/AIDS, and history has highlighted that risk. During the six years of the Ugandan Civil War, researchers found a link between the geographic pattern of AIDS and the placement of the Ugandan National Liberation Army.

Tsunami-related HIV risks extend beyond drug use and sex work. Displaced persons camps and barracks, home to hundreds of thousands of tsunami survivors, pose their own threats. In February and early March 2005, Krause and her team from the Women's Commission conducted interviews and focus groups in Indonesia's hard-hit Aceh province. Acehnese women reported being uncomfortable living in camps with strangers. Krause's team heard rumors of rapes. When Krause's colleagues sought out one rape survivor, they were told that her family had left the area. "The community was saying she wanted it, she wanted the sex," says Krause. "She was isolated socially and then the family moved away."

Krause found that similar stigma extended to HIV/AIDS. "I don't think I've been anywhere where people knew less about HIV. And the stigma was so high, even people who knew [about HIV] didn't want to be seen as knowing."

Krause thinks that the tsunami survivors' lack of HIV/AIDS awareness and their unwillingness to even talk about HIV underscores an urgent need for AIDS prevention activities. Her team found that two months after the tsunami, condoms were not accessible. Boys said that they had to pretend to be married in order to obtain condoms. "It's unethical not to make condoms available," Krause says.

But Krause found it difficult to convince aid workers to take simple steps like making condoms available, without establishing an extensive reproductive health program. "That's what we can't get people to comprehend. They try to set up more comprehensive services," she says. "People don't think you can do something without doing something grand."

Ideas into reality

As part of a major United Nations funding appeal for tsunami relief, the United Nations Population Fund (UNFPA) in January 2005 requested US\$6 million to reduce HIV transmission, implement

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Henia Dakkak

MISP, and prevent sexual violence. This amount was a small portion of the assistance available, only 0.6% of nearly \$1 billion requested.

Henia Dakkak has been working for UNFPA in Aceh. She says that her group has brought ample supplies of male and female condoms, safe baby delivery equipment, and other reproductive health materials into tsunami-affected nations. UNFPA provides these supplies in the form of pre-packaged kits tailored to the needs of small clinics and larger hospitals.

Dakkak says that cities like Banda Aceh have a particular need for the supplies because the tsunami devastated the area's pre-existing family planning network. "They lost their offices, they lost their warehouses, they lost all their supplies," says Dakkak.

UNFPA has even distributed condoms

to militaries, including those that came to provide medical assistance. "They were thinking we have trauma, we have emergency, so let us bring the emergency things that were needed," says Dakkak. "So when it came to the basics, like having condoms, they were not available."

Taking the long view

Assistance for tsunami survivors will be required for years to come and Guegan thinks HIV prevention and control programs will become even more important with the passing of time. "There are more risks in the [long-term] post-tsunami period than in the [immediate] crisis itself," he says, referring to sexual violence and trafficking in the camps, and the long-term presence of transporters and workers in disaster-affected areas.

With the emergency phase of the tsunami disaster over, UNFPA is now using all forms of media to spread information on preventing HIV infection. "People need to protect themselves, people need to understand the risks," says Dakkak. UNFPA has even turned to religious leaders in Aceh to inform the population about prevention methods ranging from abstinence to condoms, pointing out that the use of condoms is not contradictory to Islam. "We are using the mosques and the imams to talk about this," she says. "They are open to making sure the community is protected."

The influx of funding and aid workers also provides a chance to counter the risks by strengthening national AIDS programs in the tsunami-affected areas. Already UNAIDS has called on the Indian government to expand its antiretroviral treatment program to districts in the tsunami zone that were not previously covered. UNAIDS officials have also been visiting donors and relief agencies to promote the idea that HIV/AIDS programs should be included with regular assistance activities. This will help to avoid stigmatizing those who access the services. Aid workers are also trying to improve the aid response by considering women's safety when designing camps, as well as considering the special needs of people living with HIV/AIDS when designing food distribution programs.

If the efforts go well the tsunami response may improve HIV/AIDS programs in future disasters, conflicts, and other emergencies. Research on HIV prevention has already demonstrated that

while disasters like the tsunami may have heightened HIV risk factors, they do not have to increase HIV transmission.

Leaving Aceh two months after the tsunami struck, after a tremendous outpouring of generosity from donors around the world, it was disappointing to witness families still living in tent camps with few sources of clean drinking water. Some residents were forced against their will into cramped wooden barracks. Clearly the job of rebuilding real homes and restoring livelihoods remains urgent, but national governments and aid agencies have the resources to accomplish all this and more.

Global News

“Peace Corps” approach proposed for US doctors

A program to send doctors, nurses, and other healthcare workers from the US to countries most affected by the HIV/AIDS pandemic was proposed recently in a report from the US-based Institute of Medicine. The proposal recommends that a group of 150 trained AIDS healthcare professionals be sent abroad to provide two years of medical service in countries throughout Africa, southeast Asia, and the Caribbean to alleviate the doctor shortage that exists in many countries. This program will be called the US Global Health Service and is modeled after the “Peace Corps.”

According to the report, the scarcity of doctors ranges from one for every 3,448 people in Botswana to just one doctor for every 50,000 Rwandans. In comparison, in the US there is one physician for every 350 citizens. The US Global Health Service Plan would be run in cooperation with the President’s Emergency Plan for AIDS Relief (PEPFAR) and would cost an estimated US\$100 million per year. The program offers physicians many incentives to participate, including repayment of their medical school fees. The 15 countries that already receive PEPFAR funds would be the first to benefit.

The report was requested by the US State Department’s Office of the Global AIDS Coordinator based on a provision of PEPFAR that calls for a program to place healthcare workers overseas in areas severely affected by HIV/AIDS, tuberculosis, and malaria.

India denies having highest number of HIV infections

Richard Feachem, executive director of the Global Fund to Fight HIV/AIDS, Tuberculosis, and Malaria, has warned that India now has the highest number of HIV-infected people, overtaking South Africa. The Indian government officially reports 5.1 million HIV-infected citizens, compared to the most recent estimates from the United Nations that 5.3 million people are infected in South Africa. But Feachem argues that the Indian government’s statistics are an underestimate due to limited testing and that the actual number falls in the higher end of the 2.5 - 8.5 million range.

Feachem also accused the Indian government of not doing enough to combat their epidemic. He pointed out that many of the world’s generic antiretrovirals are produced in India but are not available to Indian citizens at prices they can afford. The government’s National AIDS Control Organization (NACO) quickly denied Feachem’s accusations saying that they stand by their estimates and that programs are being developed to deal with HIV/AIDS in India.

Brazil rejects US grant money

A national commission of scientists, cabinet members, and activists in Brazil recently passed up a US\$40 million grant from the US Agency for International Development (USAID) because accepting the funding required the country to sign a pledge denouncing prostitution, which is not illegal in Brazil. AIDS outreach in Brazil is based on acceptance of marginalized groups like commercial sex workers, injection drug users, and other at-risk groups and working closely with those at risk makes effective HIV prevention possible. The conditions put on this funding were seen as a contradiction to these successful programs. The country’s approach to HIV/AIDS prevention and treatment is often seen as a model and sex worker groups are a strong advocacy force.

Brazil is the first country to refuse US money due to restrictions imposed by the Bush administration. Uganda, a recipient of US funding through the President’s Emergency Plan for AIDS Relief, has recently been criticized by Human Rights Watch for changing its HIV/AIDS prevention programs to emphasize abstinence due to pressure from the US

government.

“Many NGOs in Brazil are supporting the Ministry of Health position to refuse money from USAID. I believe the most important thing is to have a clear understanding about institutional interests, independently of who is the sponsor,” says Octavio Valente of Grupo Pela Vidda in Rio.



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IAVI is a global not-for-profit organization working to speed the search for a vaccine to prevent HIV infection and AIDS. Founded in 1996 and operational in 23 countries, IAVI and its network of partners research and develop vaccine candidates. IAVI also advocates for a vaccine to be a global priority and works to assure that a future vaccine will be accessible to all who need it.

How is voluntary counseling and testing provided to volunteers in clinical research or vaccine trials?

Before a clinical trial of an AIDS vaccine candidate or a clinical research study takes place in a community, the essential components of a research and healthcare system must be in place. These components include infrastructure for a study site, training researchers and healthcare workers at study sites to counsel and test people for HIV, and a place to refer those in need for proper treatment. This is sometimes referred to as the three Ts (Training, Testing, and Treatment); without these there can be no trial.

Eligibility for enrollment in a vaccine trial or a clinical research study (see March [Primer](#) on Understanding Clinical Research Studies) will hinge upon whether a potential volunteer is infected with HIV, so everyone must have an HIV test. For AIDS vaccine trials potential volunteers can not be HIV-infected, but for other types of clinical research studies only HIV-infected individuals can enroll. HIV testing prior to joining a study is voluntary and the process is referred to as research voluntary counseling and testing (RVCT). These programs serve as the gateway to enrollment in studies. Other types of community-based VCT programs involve similar procedures but do not share the goal of enrolling people in a trial. The primary aim of community VCT programs is getting people to know their HIV status and undergo risk-reduction counseling so that they can protect themselves and their partners against HIV infection or be referred for care and treatment.

Like VCT, RVCT is confidential and seeks to help the volunteers understand the risk behaviors associated with HIV infection, the implications of the test results, and how they can reduce their future risk. RVCT also involves explaining what participation in a trial involves and getting the potential volunteer's informed consent to participate in a clinical research or vaccine trial. During this process researchers ensure that volunteers understand what is involved in the trial before enrolling and that their participation is voluntary.

Different models are used to recruit people into RVCT programs where they can find out their HIV status and learn about how studies are conducted. Several

methods of recruitment may be used from general community awareness, focus group discussions, and one-on-one interactions. All approaches involve strong community participation through community advisory boards—groups of people in the community that are familiar with the trial or study.

Pre-test counseling

All volunteers meet with a trained counselor before having an HIV test. In this session the counselor provides each volunteer with basic information about HIV/AIDS and asks questions to determine the understanding of how HIV is transmitted and what methods of protection are available. An important part of RVCT is also explaining what type of research is being conducted at the specific site and informing the volunteer that they may be able to participate.

During pre-test counseling background information is discussed with each volunteer. Information is collected about the volunteer's risk behaviors including sexual behavior, condom use, history of sexually-transmitted diseases, and use of injection drugs. Based on the information provided, the counselor will give explanations and recommendations on how to avoid and reduce the risk of HIV infection. If the volunteer joins the study this information may also be used to determine how his/her risk behavior may change over time. This will be analyzed by researchers at the site.

For volunteers considering joining an AIDS vaccine trial, the counseling session also covers the study procedures. These include regular HIV testing, use of contraceptive methods, duration of the trial, and the necessity of making all scheduled study visits. In an RVCT session the counselor will explain that some volunteers in the trial will receive an inactive substance, called a placebo, instead of the candidate vaccine. Most vaccine trials are double-blinded, which means that neither the doctor nor the volunteer knows who is receiving vaccine or placebo. RVCT counselors will also emphasize that the researchers do not know whether the vaccine candidate is protective or not, and that until Phase III efficacy trials show otherwise the vaccine candidate should be considered as not protective.

A volunteer may choose not to be tested for HIV after receiving pre-test counseling.

Testing

The type of HIV testing that is used may vary by site. Many sites now use the rapid HIV tests that require only a finger prick to collect a blood sample and test for the presence of antibodies against HIV. Results from these tests are available in just 15 minutes. Some trial sites will do two rapid tests at the same time so they can be more assured of the results. At sites where rapid tests are not available it is very important to ensure that volunteers return for their test results so they can receive the post-test counseling and be referred to healthcare facilities for HIV care and treatment should they be HIV-infected. For AIDS vaccine trials, more sophisticated HIV tests may be used in addition to the classic rapid tests to ensure accuracy.

Post-test counseling

Once the results are available the counselor will inform each person whether or not they are HIV infected and help them to understand the results. If the volunteer is not HIV infected the counselor will explain that there is a period of time (called a "window period") between when a person gets infected and when the body makes antibodies against HIV. Though they usually appear in three weeks, it can take up to three to six months for these antibodies to register on the test. If the volunteer reports risk behaviors in this window period then they may be asked to return for a repeat test.

Counselors will review ways for volunteers to reduce risk behaviors in the future, regardless of the test results. For volunteers who are HIV infected the post-test counseling will provide the volunteer with the opportunity to discuss their concerns. The counselor will help the volunteer set a plan of action, including notifying their partners or families finding ways to stay healthy, and referral for care and treatment available in the community.

RVCT has many benefits for communities. Research studies have shown that HIV incidence often declines in areas where extensive testing and public health campaigns promoting HIV education take place. People who know their HIV status are also likely to encourage other members of their community to be tested. This helps support enrollment in vaccine trials or clinical research studies.