Focus

AIDS and conflict: a growing problem worldwide

Serious armed conflicts occur regularly in many regions of the world. In 2003, more than 72 countries were identified as unstable, and various conflicts have resulted in over 42 million refugees and internally displaced people worldwide (IASC, 2003).

Populations fleeing complex emergencies such as armed conflicts generally face destitution and food shortages. Their situation is made worse because they often have no access to health care, either because systems have collapsed or simply do not exist in refugee hosting areas. For example, in the 1998–2001 war in the Democratic Republic of Congo, 80% of the estimated 2.5 million ‘excess deaths’ resulted from malnutrition, communicable diseases and other factors aggravated by the violent conflict (IRC, 2001).

These conflicts can also create conditions that increase the risk of contracting infections such as HIV, and may also lead to their spread. This can happen either during the conflict itself, or after it is over. In some cases, armed conflict increases HIV levels or changes HIV distribution patterns.

In other cases, conflict has appeared to serve as a brake on the epidemic. This has led to the view that greatest vulnerability may well occur during the often fragile post-conflict period. Differing scenarios show the relationship between HIV and conflict is much more complex and varied than previously thought, and is clearly context specific.

Whatever the case, countries recovering from armed conflict need to integrate an AIDS response into their recovery programmes—particularly HIV-prevention activities. Without this, and without significantly scaled-up international support, HIV infection may rapidly escalate and threaten national efforts to recover from the fighting and the displacement it causes. Likewise, HIV-related activities should be integrated into refugee assistance and other humanitarian programmes.

Factors in conflicts that may lead to the spread of HIV

Evidence shows HIV levels among certain populations and regions within a country can sometimes increase during complex emergencies such as armed conflict. In Rwanda, the 1994 genocide is believed to have contributed to the epidemic expanding to rural areas, which had previously been less affected. This came about because urban and rural populations were mixed together in refugee camps in neighbouring countries.

Armed conflict can increase the likelihood of exposure to HIV infection in several of the following ways:

- Population displacement: conflict often prompts large numbers of people to flee the fighting, which uproots them from their usual areas of residence. When people move from low-prevalence to high-prevalence HIV settings, they inevitably face increased risk of HIV exposure. In addition, rapid population movements disrupt social networks and institutions that normally protect and support people. Furthermore, displacement frequently places people in chaotic circumstances in which access to condoms and other prevention tools may be scarce.
• Breakdown of traditional sexual norms: the chaotic conditions associated with conflict often lead to the disintegration of traditional values and norms regarding sexual behaviour, which contributes to an overall increase in risk of HIV exposure (Hankins et al., 2002).

• Women and girls: armed conflict can create conditions of such severe deprivation that women and girls, in particular, are coerced into exchanging sex for money, food or protection. The presence of large numbers of armed men in uniforms often means a sex industry springs up, increasing HIV risk for sex workers and uniformed services personnel (see ‘Prevention’ chapter).

• Rape as a ‘weapon of war’: in a variety of recent conflicts—including Bosnia-Herzegovina, Democratic Republic of Congo, Liberia and Rwanda—combatants have used rape as a weapon of war. A study in Rwanda revealed 17% of women who had been raped tested HIV-positive, compared with 11% of women who had not been raped (UNAIDS/UNHCR, 2003). In some conflicts, young men and boys have also been targets of rape.

• Collapse of health systems: when armed conflict triggers health system malfunction and collapse, national blood supply safety is threatened, and HIV prevention and care programmes can disintegrate.

• Increased substance use: to cope with chaos caused by conflicts, some individuals—including children—may seek comfort in increased alcohol consumption, or turn to other psychoactive substances, including glue and illicit drugs. Drug injecting is especially likely when conflicts disrupt supply routes of drugs that are usually ingested, sniffed or smoked. This can lead to drugs being introduced that are more likely to be injected (Smith, 2002; Strathdee et al., 2002; Hankins et al., 2002).

Conflict situations: prevention among uniformed services and peacekeepers

Over 25 million people serve in armed forces around the world, although this number could be closer to 50 million if members of civil defence and paramilitary forces are taken into account. Most armed forces personnel are young men and women in their 20s and 30s and, as such, they represent one of the professional groups most affected by AIDS.

Uniformed services personnel generally have an ethos of risk-taking that can place them at higher risk of HIV infection. Often soldiers and peacekeepers are posted away from their families and communities for long periods of time, removing them from the social discipline that would normally prevail in their home communities. During conflict both consensual and non-consensual sexual encounters tend to increase, and adherence to prevention measures declines.

Data on AIDS among uniformed forces are scant. However, in general, estimates suggest that sexually transmitted infections among uniformed services personnel could be at least twice as high as in the general population. In some countries where HIV has been present for more than 10 years, armed forces report infection rates of 50–60%. Even in peaceful Botswana, one in three members of the military has tested HIV-positive. HIV prevalence in the Cambodian military was 5.9% in 1995; this figure had increased to 7% by 1997. High HIV-prevalence levels are creating substantial losses in command-level continuity,
reducing military preparedness, causing high recruitment and training costs and ultimately debilitating some national uniformed services.

**Countries respond**

Fortunately, soldiers are also a ‘captive audience’—used to learning new skills, following orders and taking initiative. This makes them potentially excellent agents for change and role models for other young people. Globally, the military and other uniformed services have begun to respond to AIDS within their ranks. An increasing number of countries, including Botswana, Chile, the Philippines, South Africa, Thailand, Ukraine and Zambia, have implemented prevention measures within their armed forces, ranging from prevention education to condom distribution. Brazil, the Dominican Republic, Mozambique, Peru and Uruguay pledged to carry out similar activities when their Ministries of Defence, Interior, and Health signed partnership declarations with UNAIDS.

A variety of approaches have been used successfully. The Ugandan Peoples’ Defence Force has used ‘Post Test Clubs’ to increase HIV awareness and reduce stigma. These test clubs are open to everyone who has had an HIV test, regardless of the results. They aim to instill hope through providing support for people living with HIV and their families. HIV prevalence in Uganda’s military fell from over 10% in 1990 to less than 7% in 2003. In Cambodia, since 1997, a brand of condoms marketed specifically to the military has helped reduce unprotected sexual contacts between Cambodian soldiers and sex workers, from 70% to 54%.

Similar projects have also been initiated among non-military staff. In Myanmar, UNAIDS, the United Nations Office on Drugs and Crime (UNODC), Care International and the Ministry of Home Affairs are working on a prevention programme targeting police personnel and their families. Lithuania is implementing similar activities among its border guards and police force.

During 2002–2003, UNAIDS actively promoted and supported similar new initiatives in over 40 countries. Meanwhile, the UNAIDS Office on AIDS, Security and Humanitarian Response has developed a comprehensive programming, training and awareness-raising package. The training focuses on increasing HIV awareness, encouraging prevention, eliminating sexual violence, and promoting gender equality, human rights, condom distribution and care and support services for HIV-positive personnel.

**Prevention among peacekeepers**

As of 2004, the UN Department of Peacekeeping Operations was involved in 15 missions worldwide, with some 89 countries contributing over 45 000 personnel. UNAIDS and the Department are mounting an AIDS response in all major peacekeeping operations. It is aimed at preventing HIV among personnel and helping peacekeepers to become advocates for HIV awareness wherever they are mobilized. The HIV/AIDS Awareness Card for Peacekeeping Operations is integral to the strategy developed by UNAIDS and the Department, and has been translated into 11 languages. It contains basic messages on HIV, as well as relevant codes of conduct for civil and military peacekeepers.

However, there are still several challenges to implementing AIDS strategies in peacekeeping settings. First, HIV training needs to be tailored to the wide range of cultures represented by peacekeepers. Second, training is provided for officers, but there is no mechanism to ensure that this information reaches the lower ranks.

Five new peacekeeping missions were established in 2004, and UNAIDS and the Department are working together to ensure that AIDS is addressed at mission level, and in each of the troop-contributing countries prior to deployment.
HIV and conflict: a complex relationship

Increased vulnerability during conflicts

Experts studying HIV spread within conflict situations have often believed there is a direct correlation between conflict and HIV vulnerability. However, this does not necessarily translate into increased HIV transmission. During Sierra Leone’s 10-year civil war, indirect indicators suggested the increased vulnerability was indeed translating into increased HIV infections.

- Indications of high HIV levels: Sierra Leone’s government estimated HIV prevalence among sex workers at 27% in 1995, and 71% in 1997 (Kaiser et al., 2002). Meanwhile, in the same period, surveillance in the country’s antenatal clinics showed HIV prevalence rose from 4% to 7%. These findings echoed other studies that stated 11% of peacekeepers returning to Nigeria from Sierra Leone were HIV-positive—more than double Nigeria’s then-current HIV prevalence (Smith, 2002).

- Low HIV awareness: among surveyed peacekeepers and soldiers from the national army, only 23% could cite at least three HIV-transmission routes; 38% reported not being worried about AIDS; and only 39% had used a condom during their last sexual encounter (McGinn et al., 2001).

- High levels of sexual violence: a 2001 study found 9% of women displaced by armed conflict had been sexually assaulted (UNAIDS/UNHCR, 2003). Other reports documented that rebel militia members systematically raped young girls and women (Salama et al., 1999).

Can conflict sometimes act as a brake on the epidemic?

Recently, more rigorous research has been carried out on the relationship between conflict and HIV vulnerability and risk. In a few cases, it suggests that under some conditions of conflict, HIV transmission may actually be slowed. In Sierra Leone, once hostilities ceased, the government formed a partnership with the World Bank and the US Centers for Disease Control and Prevention to carry out a national HIV prevalence and behavioural risk survey. The 2002 study confirmed low levels of HIV-related knowledge and high levels of sexual violence.

But contrary to the indirect indicators suggesting increased HIV infection, the study also found much lower HIV-infection levels (1–4%) than previously documented during the conflict. A partial explanation for this is that during the war, movement within the country, cross-border migration and trade became extremely difficult. This helped to ‘insulate’ Sierra Leone from the growing HIV epidemic in West Africa. In the 2002 survey, some 90% of people remained in the country as internally displaced persons; only 10% fled to neighbouring countries. Therefore, in this instance, the increased risk of HIV infection that had translated into high HIV prevalence among sex workers did not actually translate into sustained increased infection among the general population.

Experience in other countries has revealed similar findings. For example, Bosnia and Herzegovina was a war zone from 1992 to 1995, yet it continued to have a very low HIV prevalence (0.0003% of the population in 2001). This is despite the fact that the war displaced large numbers of people, and there were very high levels of sexual violence (Cavaljuga, 2002).
If HIV is not already prevalent in a country in conflict, the virus cannot take advantage of conditions conducive to its spread. In addition, conflict can make a population less mobile, and therefore possibly less likely to encounter HIV than in peacetime.

Refugees and HIV

Millions of people fleeing armed conflict find shelter in large refugee camps. Unfortunately, many of these refugees, especially women and girls, experience poverty, powerlessness, social instability and sexual abuse (Lubbers, 2003). Because refugees are vulnerable from a socio-economic and cultural standpoint, it has long been assumed they face a greater risk of HIV exposure. However, as in some prolonged conflict situations, recent evidence suggests they may not develop higher HIV-infection levels.

Between 2001 and 2003, the UN High Commissioner for Refugees (UNHCR) and its partners measured HIV prevalence among pregnant women in more than 20 camps housing some 800 000 refugees in Kenya, Rwanda, Sudan and Tanzania. The results: refugee populations in three of the four countries had significantly lower HIV prevalence than the surrounding host communities. For example, in northwestern Kenya, 5% of refugees were HIV-positive, compared with an 18% HIV prevalence in the surrounding host country population. In the fourth country, Sudan, the refugee camps and host community had comparable infection rates (Lubbers, 2003).

Several explanations may underlie discrepancies in HIV prevalence between refugee and host-country populations. Historically, the home countries of most refugees in Africa and Asia have typically had lower HIV prevalence than countries hosting the refugees (see Figure 49). Refugees often live in camps in remote rural areas with limited freedom of movement, which may limit their exposure to the host country’s population, especially in high-prevalence rural areas. In addition, international agencies and nongovernmental organizations (NGOs) have mounted HIV-prevention programmes targeting refugee populations. This potentially reduces risk of HIV exposure through sexual

Arriving at estimates of HIV prevalence in conflict situations

In countries with generalized epidemics, most national HIV-prevalence estimates are based on surveillance data that assess prevalence over time among pregnant women who attend selected sentinel antenatal clinics. If these are disrupted during conflict and post-conflict situations, population-based surveys may be used. These surveys may underestimate infection levels if participation is too low. However, they may better reach rural populations that generally have lower HIV levels than urban populations. These surveys also include men as well as non-pregnant women. The Sierra Leone survey (discussed on page 178) was population-based, which may partly explain why HIV prevalence appeared lower after the conflict than in previous sentinel surveillance surveys (Spiegel, 2003).
activity, contaminated injection equipment and unscreened blood supplies.

Angola provides a case in point. When the Angolan conflict ended in April 2002, the country had substantially lower HIV prevalence (5–10% in Luanda and 1–3% in rural areas) than other countries in Southern Africa. Again, compared with surrounding countries, prolonged conflict may have acted as a brake on HIV spread in Angola. As refugees began repatriating from Namibia and Zambia, false rumours surfaced among the Angolan population that as many as 70% of them were HIV-positive. These rumours created great public anxiety that returning refugees would spread HIV and imperil the country’s recovery.

In fact, UNHCR used indirect HIV-prevalence indicators to show that HIV prevalence among returning refugees was much lower than the surrounding host populations’ prevalence in Namibia and Zambia. Strong HIV-prevention programmes in refugee camps meant that returning refugees actually had better HIV knowledge than the average Angolan. Indeed, prevention training in refugee camps may actually help the returning refugees to become an important HIV-prevention resource for Angola (Spiegel and de Jong, 2003).

Experience in Angola and Sierra Leone shows that more and better research, surveillance and behavioural monitoring are needed in emergency situations. The growing understanding of the complex relationship between HIV and conflict means some factors that reduce HIV-related risk (e.g., reduced mobility, improved prevention targeting) may compete with factors that increase risk. Key factors in the balance between these competing forces include the degree of interaction between refugee and host country populations; the type of interaction, including the extent of sexual violence; and the respective HIV prevalence of these groups (see Figure 50). Therefore, careful monitoring is required to provide guidance on appropriate policy and programme responses in different contexts.

Improving HIV surveillance in emergency situations is a daunting task, but agencies working in such situations need to make it a priority. Effective surveillance requires knowledge of HIV prevalence in the areas where affected populations lived prior to displacement. It also needs post-displacement behavioural and biological information on HIV infections among displaced persons and surrounding host communities. Finally, there needs to be a sub-regional approach with improved coordination and information sharing; it should take into account the entire displacement cycle, including repatriation and reintegration.

Biological and behavioural surveillance help agencies better understand factors that accelerate and slow HIV transmission, and facilitate

---

**Figure 50**

HIV risk factors for conflict and displaced persons camps

<table>
<thead>
<tr>
<th>Key Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of origin HIV prevalence</td>
</tr>
<tr>
<td>Surrounding host population HIV prevalence</td>
</tr>
<tr>
<td>Length of time: conflict, existence of camp</td>
</tr>
</tbody>
</table>

**Increased Risk**

- Behavioural change
- Gender violence/transactional sex
- Reduction in resources and services (e.g., health, education, community services, protection, food)

**Decreased Risk**

- Reduction in mobility
- Reduction in accessibility
- Increase in resources and services in host country

Source: Spiegel, UNHCR, 2003

HIV surveillance and emergencies
more effective programme responses. HIV surveillance is not easy to undertake during an emergency’s acute phase. But it is still possible to obtain indirect estimates of HIV prevalence as blood donations are screened, and results documented by age and sex. In post-conflict situations, sentinel surveillance provides information that better reflects the general population as a whole (Spiegel, 2003).

Taking effective action

Until recently, agencies involved in conflict situations paid little attention to HIV prevention, care and surveillance in emergencies. However, the 1994 Rwandan crisis helped them realize that both non-displaced and displaced persons affected by conflict need HIV-related interventions. To underscore this point, in 2002, UNHCR began to implement its 2002–2004 HIV and Refugees Strategic Plan. In particular, it stressed the importance of initiating essential reproductive and sexual health services, including HIV and sexually transmitted infection prevention and care at the very earliest stage of a refugee crisis.

In 2003, UN agencies and NGOs reconstituted an Interagency Standing Committee Reference Group on HIV in Emergency Settings to coordinate action in emergency situations. Guidelines were produced that stressed the importance of multisectoral action. UN agencies have also supported comprehensive HIV-prevention activities in peacekeeping missions in countries such as the Democratic Republic of Congo, Eritrea, Ethiopia and Sierra Leone.

In Liberia, the Liberian Red Cross and the United Nations Population Fund (UNFPA) worked with many local NGOs to establish HIV-prevention and education programmes within camps for internally displaced persons. These included ‘adolescent-friendly’ corners that provided safe places for frank discussion of youth concerns about HIV. Youth teams were established to mobilize and sensitize internally displaced persons and their host communities about HIV. In addition, concerted efforts were made to maintain condom distribution for the displaced.

NGOs working in refugee camps have also recently begun to implement more comprehensive HIV programmes, such as voluntary counselling and testing, and prevention of mother-to-child transmission. For example, in Tanzania, Norwegian People’s Aid started a pilot programme for refugees in Lukole and Kitali camps, and for the surrounding population. During its first three months, the programme counselled nearly 3000 pregnant women, with more than 80% of them accepting HIV testing (Norwegian People’s Aid, 2002).

In Angola, now that peace has returned, UN agencies are working with the government and other partners to keep HIV prevalence low. The UN anticipated that 240 000 refugees would be repatriated from camps in the Democratic Republic of Congo, Namibia and Zambia, and developed an action plan—since endorsed by the Government of Angola. While still in refugee camps, individuals will receive HIV-prevention training and access to condoms. On arrival in Angola, reception centres will provide them with education, condoms and peer-based interventions. The action plan also calls for comprehensive HIV programmes for all Angolans who live in the areas of return. These emerging plans reflect a growing recognition of the need for subregional and integrated approaches to implementing HIV-related interventions in post-conflict repatriation and reintegration situations.