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HIV/AIDS and the Changing Landscape of War in Africa

Stefan Elbe

Since the discovery of AIDS more than two decades ago, 60 million people have been infected with HIV, the virus that causes AIDS, and more than 20 million have died from AIDS-related illnesses. The HIV/AIDS pandemic has become a humanitarian and human security issue of almost unimaginable magnitude, representing one of the most pervasive challenges to human well-being and survival in many parts of the world.¹ It has taken a particularly heavy toll on sub-Saharan Africa, where AIDS is now the primary cause of death.² In light of this magnitude, HIV/AIDS is not only having devastating effects on the individuals and families touched by the illness; it is also beginning to have much wider social ramifications. In some African countries, HIV prevalence rates have reached between 20 and 30 percent of the adult population. In these countries HIV/AIDS is giving rise to a vast array of economic, social, and political problems.

An important development overlooked by scholars in this regard is the growing impact of HIV/AIDS on the nature and conduct of armed conflict in Africa.³ As the director of the Joint United Nations Program on HIV/AIDS

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1. For discussions of "human security," see United Nations Development Programme, *Human Development Report, 1994: New Dimensions of Human Security* (New York: Oxford University Press, 1994); Roland Paris, "Human Security: Paradigm Shift or Hot Air?" *International Security*, Vol. 26, No. 2 (Fall 2001), pp. 87–102; Jenny Hadingham, "Human Security and Africa: Polemic Opposites," *South African Journal of International Affairs*, Vol. 7, No. 2 (Winter 2000), pp. 113–121; and Caroline Thomas, *Global Governance, Development, and Human Security* (London: Pluto Press, 2000). With specific reference to HIV/AIDS, see Ulf Kristoffersson, "HIV/AIDS as a Human Security Issue: A Gender Perspective," paper prepared for the Expert Group Meeting, Windhoek, Namibia, November 13–17, 2000; Deepika Grover, "Local Responses to AIDS in South Africa: Gender/Human Insecurity and Social Organising in the Context of Dwindling Social Resources," paper presented at the annual meeting of the International Studies Association, Chicago, Illinois, February 21–24, 2001; and Pieter Fourie and Martin Schönteich, "Africa's New Security Threat: HIV/AIDS and Human Security in Southern Africa," *African Security Review*, Vol. 10, No. 4 (2001), pp. 29–57.

2. Joint United Nations Programme on HIV/AIDS (UNAIDS), *AIDS Epidemic Update* (Geneva: UNAIDS, December 2001), p. 2.

3. For recent studies on the security dimensions of infectious diseases in general, see National Intelligence Council, *National Intelligence Estimate: The Global Infectious Disease Threat and Its Implications for the United States* (Washington, D.C.: National Intelligence Council, January 2000); Chemical and Biological Arms Control Institute (CBACI) and Center for Strategic and International Studies (CSIS), *Contagion and Conflict: Health as a Global Security Challenge* (Washington, D.C.,

(UNAIDS) recently noted, "Conflict and HIV are entangled as twin evils."⁴ Armed conflicts certainly facilitate the spread of HIV/AIDS, but the virus also leaves its distinctive mark on the nature and conduct of war in regions where prevalence rates are already high. Historically, novel social developments have tended to influence the ways in which societies wage war, and HIV/AIDS has proven no different. "Over the past five years," one analyst has noted, "HIV/AIDS has changed the landscape of war more than any other single factor."⁵ To date, however, academic attention to this relatively new aspect has not been commensurate with the increasingly significant role that HIV/AIDS has played in recent armed conflicts in Africa.⁶ The question for scholars is: What happens when a sexually transmitted, lethal illness such as AIDS is introduced into the social environment in which these conflicts take place?

This article argues that HIV/AIDS is increasingly influencing three components of armed conflicts in Africa: their combatants, how the conflicts are conducted, and their social significance. The argument developed over the next five sections is that although these influences may at times be subtle, together they are elevating the social cost of armed conflict in Africa to new levels.

The first section presents an overview of the AIDS epidemic in Africa. The second section explains how armed forces in Africa, embedded within this

and Stanford, Calif.: CBACI and CSIS, January 2000); Jonathan Ban, *Health, Security, and U.S. Global Leadership* (Washington, D.C.: CBACI, 2001); Andrew T. Price-Smith, *The Health of Nations: Infectious Disease, Environmental Change, and Their Effects on National Security and Development* (Cambridge, Mass.: MIT Press, 2001); and Patrick W. Kelley, "Transnational Contagion and Global Security," *Military Review*, Vol. 80, No. 3 (May-June 2000), pp. 59-64.

4. Peter Piot, speech delivered to the UN Security Council special session "The Situation in Africa: The Impact of AIDS on Peace and Security," New York, New York, January 10, 2000, p. 1.

5. Graça Machel, "The Impact of Armed Conflict on Children: A Critical Review of Progress Made and Obstacles Encountered in Increasing Protection for War-Affected Children," paper presented at the International Conference on War-Affected Children, Winnipeg, Canada, September 10-17, 2000, p. 15.

6. For studies of the broader security implications of HIV/AIDS, see Rodger Yeager and Stuart Kingma, "HIV/AIDS: Destabilising National Security and the Multi-National Response," *International Review of the Armed Forces Medical Services*, Vol. 74, Nos. 1-3 (2001), pp. 3-12; Greg Mills, "AIDS and the South African Military: Timeworn Cliché or Timebomb?" in Michael Lange, ed., *HIV/AIDS: A Threat to the African Renaissance?* Occasional Paper (Johannesburg, South Africa: Konrad Adenauer Foundation, 2000); Lindy Heineken, "Strategic Implications of HIV/AIDS in South Africa," *Conflict, Security, and Development*, Vol. 1, No. 1 (2001), pp. 109-113; Roxanne Bazergan, "UN Peacekeepers and HIV/AIDS," *World Today*, Vol. 57, No. 5 (May 2001), pp. 6-8; Lindy Heineken, "Living in Terror: The Looming Security Threat to Southern Africa," *African Security Review*, Vol. 10, No. 4 (2001), pp. 7-17; and Stefan Elbe, *The Strategic Dimensions of HIV/AIDS*, Adelphi Paper (Oxford: Oxford University Press for the International Institute for Strategic Studies, forthcoming); United States Institute of Peace (USIP), *AIDS and Violent Conflict in Africa* (Washington, D.C.: USIP, October 15, 2001); International Crisis Group (ICG), *HIV/AIDS as a Security Issue* (Washington, D.C., and Brussels: ICG, June 19, 2001); and Marcella David, "Rubber Helmets: The Certain Pitfalls of Marshalling Security Council Resources to Combat AIDS in Africa," *Human Rights Quarterly*, Vol. 23, No. 3 (August 2001), pp. 560-582.

larger social context, have become a high-risk group for the transmission of HIV/AIDS. The third section illustrates how the virus has been used as a weapon of war in some regions of the African continent. As a result, the social ramifications of these conflicts have begun to extend far beyond the battlefield, leading, as the fourth section argues, to a significant increase in the number of eventual AIDS-related war casualties. The article concludes by suggesting that the emerging symbiosis between HIV/AIDS and armed conflict in Africa can be reversed only if the combatants, as a high-risk group and vector of the illness, participate in local and international efforts to reduce its spread. To this end, it also suggests several policy recommendations.

HIV/AIDS in Africa

Armed conflicts in Africa are increasingly occurring in environments of widespread HIV/AIDS prevalence. To appreciate this important change in the broader social context of these conflicts, it is useful to consider the magnitude of the AIDS pandemic in Africa over the past two decades. Logistical, political, and human rights constraints complicate the task of collecting accurate data. Nevertheless, UNAIDS and the World Health Organization estimate that, in several sub-Saharan countries, between a fifth and a third of the adult populations are living with HIV/AIDS. In sub-Saharan Africa approximately 28.5 million persons are HIV positive, an estimated 3.5 million of whom became infected in 2001 alone.⁷ At the same time, it is exceedingly difficult to generalize about the effects of HIV/AIDS in Africa, and important regional variations need to be considered.

Within sub-Saharan Africa, southern Africa has the largest proportion of people living with HIV and AIDS. South Africa alone is estimated to have around 5 million infected citizens, or roughly 20 percent of the adult population of the country. Officially, this is also the largest absolute number of HIV infections in any state in the world. Moving northward, in Botswana 38.8 percent of the adult population is thought to have contracted the virus, while in Mozambique 13 percent of adults are estimated to be living with the virus. Namibia has an adult prevalence rate of around 22.5 percent, while in Zimbabwe the figure is close to 34 percent. In Angola, where systematic testing began only recently, the adult HIV prevalence rate is 5.5 percent. In neighboring Zambia, approximately 1.2 million people are living with HIV, which trans-

7. UNAIDS, *A Global Overview of the Epidemic* (Geneva: UNAIDS, July 2002), p. 22. Subsequent HIV prevalence figures are taken from this study.

lates into an adult prevalence rate of nearly 21.5 percent. In central Africa, the Democratic Republic of Congo has an adult prevalence rate of around 5 percent, the threshold at which it becomes extremely difficult to prevent a larger, more widespread AIDS epidemic. In Burundi the adult prevalence rate is 8.3 percent, while in neighboring Rwanda it is estimated to be nearly 9 percent. In Tanzania 1.5 million people are living with HIV.

In eastern Africa, too, HIV prevalence rates continue to be very high, having reached 15 percent of the adult population in Kenya in 2001. Ethiopia is thought to have around 2.1 million infected persons. Uganda, by contrast, has been able to stabilize and even reduce its prevalence rate following the creation of programs designed to prevent the spread of HIV; the rate of HIV infection in Uganda fell from around 14 percent in the early 1990s to roughly 5 percent in 2001. In western Africa, Nigeria has 3.5 million HIV-infected persons and a 5.8 percent adult prevalence rate. Côte d'Ivoire has an estimated 690,000 adults living with HIV and an adult prevalence rate of nearly 10 percent. In Sierra Leone, the rate has increased to 7 percent not least due to the conflict between the government and the Revolutionary United Front.⁸ Importantly, however, infection rates in five west African countries (Burkina Faso, Congo, Nigeria, Sierra Leone, and Togo) are close to or slightly above the crucial 5 percent threshold.

Data on HIV prevalence rates in northern Africa are scarce. Local studies indicate that HIV is spreading among the populations in both northern and southern Sudan. In southern Sudan, in particular, the rates are increasing partly because of the ongoing hostilities between the government and the separatist Sudanese Popular Liberation Army and partly because of the region's proximity to other countries with high infection rates such as Kenya, Uganda, and Zaire.⁹ In southern Algeria around 1 percent of pregnant women who visit antenatal clinics test positive for the AIDS virus.¹⁰ In Libya a court recently dismissed charges brought against nine Libyan citizens, six Bulgarian health workers, and a Palestinian who had been detained since early 1999. They had been accused of involvement in a foreign intelligence plot to destabilize Libya by intentionally infecting 393 children at the Al-Fateh Children's Hospital in Benghazi, northeast of Tripoli, with HIV-contaminated blood.¹¹ Still, northern Africa remains the least affected region on the continent.

8. See Simon Robinson, "Battle Ahead," *Time*, July 16, 2001, p. 31.

9. Gustavo Capdevila, "UN Issues Call for Emergency Aid," *Inter Press*, February 18, 1997.

10. UNAIDS, fact sheet "HIV/AIDS in Africa," Geneva, Switzerland, December 2000.

11. "Libya Court Rejects HIV Plot Charges," *BBC News*, February 17, 2002.

These figures are best seen as indicators of broad trends, not as an exact reflection of the prevailing reality. Nevertheless, this brief survey underscores the immense magnitude of the AIDS epidemic in Africa, which has the misfortune of hosting not only a significant number of the world's armed conflicts but also its most serious AIDS pandemic.

HIV/AIDS in Africa's Armed Forces

The HIV/AIDS pandemic has already begun to diminish the operational efficiency of many of Africa's armed forces. Indeed these forces are at its core. Prevalence rates of sexually transmitted diseases among military personnel usually exceed those of the civilian population by a factor of two to five. In many African militaries, this is also true with regard to HIV.¹² These higher prevalence rates result from a variety of factors: Soldiers, for example, are of a sexually active age; they are highly mobile and away from home for long periods of time; they often valorize violent and risky behavior; they have greater opportunities for casual sexual relations; and they may seek to relieve themselves from the stress of combat through sexual activity. These same factors make soldiers more vulnerable to other sexually transmitted diseases that can increase their chances of contracting HIV through unprotected sex.

Recently, the defense ministries of several countries in sub-Saharan Africa documented HIV prevalence rates among their armed forces that averaged between 10 and 20 percent. In some countries, however, where the AIDS virus has been present for more than ten years, the prevalence rates have climbed to as high as 50 to 60 percent.¹³ The U.S. National Intelligence Council lists the following figures for HIV prevalence in selected military populations in sub-Saharan Africa: Angola 40–60 percent, Congo-Brazzaville 10–25 percent, Côte d'Ivoire 10–20 percent, Democratic Republic of Congo 40–60 percent, Eritrea 10 percent, Nigeria 10–20 percent, and Tanzania 15–30 percent.¹⁴ These figures were provided to the council by the U.S. Defense Intelligence Agency. It remains unclear, however, how they were obtained and, in light of their considerable margins, whether they are based on actual testing or anecdotal evidence. Regardless, they are compatible with a recent South African defense intelligence assessment that arrived at the following figures: Angola 50 per-

12. UNAIDS, fact sheet, "AIDS and the Military," Geneva, Switzerland, May 1998, p. 2.

13. Lindy Heineken, "AIDS: The New Security Frontier," *Conflict Trends*, Vol. 3, No. 4 (2000), pp. 12–15.

14. National Intelligence Council, *The Global Infectious Disease Threat*.

cent, Botswana 33 percent, Democratic Republic of Congo 50 percent, Lesotho 40 percent, Malawi 50 percent, Namibia 16 percent, South Africa 15–20 percent, Swaziland 48 percent, Zambia 60 percent, and Zimbabwe 55 percent.¹⁵

These two sets of figures jibe with media reports from these countries. With regard to southern Africa, Mosiuoa Lekota, the South African defense minister, has stated that 17 percent of his country's soldiers are HIV positive,¹⁶ although some recent reports place the figure closer to 50–60 percent.¹⁷ The Namibian defense minister, Erkki Nghimtina, has claimed that nearly one-third of Namibia's 15,000-strong National Defense Force are living with HIV/AIDS.¹⁸ In Botswana the military infection rate is reported to be around one-third,¹⁹ while in parts of the Zimbabwean armed forces, the figure may have reached 75–80 percent as early as 1993.²⁰ In Zambia the figures for HIV infection in the defense forces are so high that authorities have decided not to disclose them.²¹ One report also suggests that Malawi's key public services, including the military, would see a reduction in their workforces of between 25 and 50 percent by 2005 due to the spread of HIV/AIDS.²²

Further northward, public sources have reported HIV prevalence rates of 22 percent in the armed forces of the Central African Republic, and as high as 50 percent of the troops in Angola and the Democratic Republic of Congo.²³ Other reports have suggested that the Congolese armed forces have a 14 percent infection rate and that AIDS is now the number one cause of death among these forces. According to Congolese Col. Prosper Kinzonzi, the equivalent of three

15. Heineken, "Living in Terror," p. 11.

16. "17 Percent of South African Soldiers HIV-positive: Minister," Agence France-Presse, September 15, 2000.

17. Jean Le May, "More Than Half of South Africa's Army 'May Have HIV,'" *Independent* (London), July 15, 2002.

18. "HIV/AIDS Rife in Namibia Defence Forces," Panafrikan News Agency, February 16, 2001.

19. Heineken, "AIDS: The New Security Frontier."

20. Mills, "AIDS and the South African Military," p. 69. Paul Kirk, however, reports prevalence rates of 75 percent of the armed forces of Malawi and 80 percent of the armed forces of Zimbabwe. Kirk, "Sixty Percent of Army May Be HIV-Positive," *Daily Mail and Guardian* (Johannesburg), March 31, 2000.

21. Masautso Chipako, "Who Will Deliver the Military from High AIDS Figures?" *Times of Zambia*, June 26, 1999.

22. "HIV/AIDS Devastating Military," UN Integrated Regional Information Network, March 3, 2001; and Martin Foreman and Thomas Scalway, *Men and HIV in Malawi* (London: Panos Institute, November 2000). This is also supported by statements from Gen. Joseph Chimbayo, the commander of the Malawi army. See Michelle Sieff, "HIV/AIDS: Under Siege," *World Today*, Vol. 57, No. 5 (May 2001), p. 5.

23. Sven Groennings, ed., *HIV/AIDS Strategy in Latin America and Africa: Military and Civil-Military Policies and Issues*, Occasional Paper No. 1 (Geneva: Civil Military Alliance to Combat HIV and AIDS, April 1997), cited in Martin Foreman, *AIDS and Men—Old Problem, New Angle*, HIV/AIDS Briefing No. 6 (London: Panos Institute, December 1998).

companies died from AIDS-related illnesses between 1989 and 1993.²⁴ In Sierra Leone, more than 21 percent of the 1,099 candidates recently screened for military service tested positive for the AIDS virus. Another 1,000 soldiers who showed signs of disease over the past three years were found to be HIV positive. According to Maj. James Samba, the rate of infection among Sierra Leone's 12,000-strong military force is between a quarter and a third.²⁵ Given the sensitive nature of such information and that data of this kind are often considered a matter of national security, accurate figures are hard to obtain. Although this means that these figures must be treated with caution, it underscores the perceived relationship between HIV/AIDS and security.

Nor are the impacts of these high prevalence rates only of marginal relevance. According to Maj. Gen. Matshwenyego Fisher, chief of staff of the Botswana defense force, "AIDS in the military as well as in the national environment is no longer an academic issue; it is a reality that has to be tackled with all the vigor and effort that is commensurate with its ramifications."²⁶

These high rates are influencing at least four aspects of operational efficiency among Africa's armed forces. First, they are generating the need for additional resources for the recruitment and training of soldiers to replace those who have fallen ill, have died, or are expected to die in the near future from HIV/AIDS. Additional resources are also required to provide health care for soldiers who are sick or dying.

Second, the spread of HIV/AIDS is affecting important staffing decisions. High HIV prevalence rates eventually lead to (1) a decrease in the available conscription pool from which to draw new recruits, (2) deaths among officers higher up the chain of command, and (3) a loss of highly specialized and technically trained staff who cannot be easily or quickly replaced.

Third, the presence of HIV/AIDS can hinder the ability of soldiers to carry out their duties. It can result in increased absenteeism and reduced morale, as healthy soldiers must assume heavier workloads until replacements are found for those who are sick or have already died. Another factor is the emotional impact on soldiers of watching their comrades die slow, painful deaths. Fears of caring for injured soldiers in light of the possibility of contracting the virus, and the question of how to secure blood supplies during military operations, are similarly becoming concerns for the efficient execution of deployments.

24. Lyne Mikangou, "AIDS the Number One Cause of Death in the Army," *Inter Press*, January 10, 2000.

25. James Astill, "War Injects AIDS into Sierra Leone," *Daily Mail and Guardian* (Johannesburg), May 21, 2001.

26. Quoted in UNAIDS, "AIDS and the Military," p. 7.

Fourth, HIV/AIDS is generating new political and legal challenges for civil-military relations in terms of how to deal with this issue in the ranks and how to treat persons living with the virus.²⁷ The Namibian military, for example, recently lost a lengthy court case involving its decision to exclude HIV-positive persons from the armed forces. The court found the military's decision to be unconstitutional.

Although the combined impact of these factors is unlikely to prevent militaries from engaging in combat activities altogether, they are beginning to take a toll on operational efficiency. Lindy Heinecken, of the South African Centre for Military Studies, has noted that high HIV/AIDS prevalence rates have meant that the armed forces in some African countries have been unable to deploy a full contingent on short notice, in some cases not even half of their troops.²⁸ It is an assessment shared by Greg Mills, director of the South African Institute of International Affairs, who when writing about sending a peacekeeping mission to Congo noted that "the high rate of infection in SADC [Southern African Development Community] armies . . . calls into question the nature and size of their potential contribution" to such a mission.²⁹ Although this impact may not necessarily be detrimental to the capabilities of armed forces in the region, it does pose important new challenges. Moreover, it illustrates one way in which HIV/AIDS has already begun to have implications for the security sectors of countries with high prevalence rates.

HIV/AIDS also has consequences for international security more generally because, as mentioned above, many of these armed forces contribute to international peacekeeping operations. HIV/AIDS presents novel political problems for these operations, as it becomes widely known that peacekeepers contribute to the spread of HIV/AIDS where and when they are deployed. This has already begun to affect the perceptions of countries hosting such operations as well as of those states contributing to them.³⁰ The Cambodian government, for example, places considerable blame for its country's high level of HIV prevalence on the United Nations Transition Authority in Cambodia, even though there is no epidemiological data to determine how significant a factor it is in relation to other possible sources of the epidemic. How much these perceptions will strengthen in the years to come remains to be seen, but clearly they have created concerns and political tensions that need to be ad-

27. For an elaboration of these points, see Elbe, *The Strategic Dimensions of HIV/AIDS*, chap. 2.

28. Heinecken, "Strategic Implications of HIV/AIDS in South Africa," p. 110.

29. Mills, "AIDS and the South African Military," p. 70.

30. See Elbe, *The Strategic Dimensions of HIV/AIDS*, chap. 3.

dressed.³¹ Moreover, they are likely to raise questions about the West's strategy of devolving peacekeeping operations in Africa to the regional level.³²

Thus, in addition to its potential long-term destabilizing impact, the HIV/AIDS pandemic poses a range of novel challenges for those charged with carrying out decisions to deploy armed force—be it in offensive, defensive, or peacekeeping operations. Moreover, as one of the high-risk groups for contracting HIV/AIDS, armed forces will have an important, long-term role in efforts to address the AIDS pandemic. In terms of the complex role that HIV/AIDS has played in recent African armed conflicts, however, this marks only the first phase of a much more destructive cycle that has emerged over the past decade.

HIV/AIDS as a Weapon of War

While HIV/AIDS is diminishing the operational efficiency of many armed forces in Africa, it is also providing them with a novel psychological and biological weapon of war, the use of which has been threatened when hostilities have broken out. One of the most striking aspects of recent armed conflicts in Africa is the deliberate targeting of civilians and the widespread use of rape, which has been employed as a systematic tool of warfare in conflicts in Liberia, Mozambique, Rwanda, and Sierra Leone. Although official statistics are not yet available, human rights workers from Sierra Leone have reported that during the country's eight-year civil war, armed rebels and insurgent forces raped thousands of women.³³ Human Rights Watch has documented the systematic nature of the sexual violence perpetrated against women by rebel forces, noting how the latter "planned and launched operations in which they rounded up girls and women, brought them to rebel command centers and then subjected them to individual and gang-rape."³⁴ In the Rwandan conflict, observers have suggested that between 200,000 and 500,000 women were raped.³⁵ In some areas, especially in and around the capital, Kigali, the vast majority of fe-

31. See U.S. General Accounting Office, *UN Peacekeeping: United Nations Faces Challenges in Responding to the Impact of HIV/AIDS on Peacekeeping Operations* (Washington, D.C.: Government Printing Office, December 2001).

32. Mills, "AIDS and the South African Military," p. 70.

33. Douglas Farah, "A War against Women," *Washington Post*, April 11, 2000, p. 1.

34. "Sierra Leone: Getting Away with Murder, Mutilation, Rape," *Human Rights Watch Report*, Vol. 11, No. 3a (July 1999), <http://www.hrw.org/reports/1999/sierra>.

35. Manuel Carballo, Carolyn Mansfield, and Michaela Prokop, *Demobilization and Its Implications for HIV/AIDS, Linking Complex Emergency Response and Transition Initiative (CERTI) Crisis and Transition Tool Kit*, October 2000, p. 16, n. 5; and Lisa Sharlach, "Rape as Genocide: Bangladesh, the Former Yugoslavia, and Rwanda," *New Political Science*, Vol. 22, No. 1 (March 2000), p. 98.

male survivors were victims of rape.³⁶ Though not a new phenomenon, rape is an important manifestation of how recent conflicts have been waged, and how conflicts can spread beyond combatants to civilian populations.

Diseases, too, have long been used as weapons of war. During the bubonic plague in Europe, attackers catapulted infected dead bodies over city walls with the aim of infecting and weakening both the enemy and the city's inhabitants. The weaponization of naturally occurring and man-made biological agents in the course of the twentieth century and the renewed threat of bioterrorism underscore the continuing relevance of biological agents in warfare. Evidence from recent armed conflicts in Africa suggests that militaries and armed militias have begun to sporadically appropriate HIV as a psychological, and perhaps even biological, weapon of war.³⁷ Indeed UNAIDS officials have claimed that "there have been documented instances in which AIDS has been used as an instrument of war."³⁸ More specifically, they have noted that "soldiers involved in conflicts in the Great Lakes Region of Africa reportedly raped women of 'the enemy side' with the stated intent of infecting them with HIV."³⁹

It is of course notoriously difficult to determine when the transmission of HIV is deliberate, especially in environments where orders are mostly communicated orally. Moreover, the true motivation of the perpetrators is most likely known only to them, and they are unlikely to admit their culpability. At the same time, there is documented testimony from female survivors of rape in Rwanda that the transmission of HIV was a deliberate act. According to some accounts, HIV-positive Hutu men would tell the women they were raping that they would eventually suffer an agonizing death from AIDS.⁴⁰ Margaret Owen has noted that both radio communications and testimony from Tutsi rape victims confirm the deliberate nature of these acts. According to Owen, some of the rapists allegedly taunted: "We are not killing you. We are giving you something worse. You will die a slow death."⁴¹ Similar stories have been recounted

36. Sharlach, "Rape as Genocide," p. 98.

37. Vivienne Nathanson, "Preventing and Limiting Suffering Should Conflict Break Out: The Role of the Medical Profession," *International Review of the Red Cross*, September 30, 2000, pp. 601–615.

38. UNAIDS, "UN Security Council Meeting on HIV/AIDS in Africa: Briefing Pack," January 10, 2000, p. 7.

39. UNAIDS press release, "AIDS Becoming Africa's Top Human Security Issue, UN Warns," January 10, 2000, p. 1.

40. Sharlach, "Rape as Genocide," p. 99. See also Andrew Lawday, *HIV and Conflict: A Double Emergency* (London: Save the Children, 2002), pp. 5, 11.

41. Margaret Owen, "Widows Expose HIV War Threat," *Worldwoman News*, June 12, 2001, p. 1.

by Joseph Karemera, the Rwandan minister of health, who has stated that captured women were taken to HIV-positive soldiers specifically to be raped,⁴² as well as by Chantal Kayitesi, of the Rwandan Association of Genocide Widows.⁴³ In these cases, the transmission of HIV would not appear to be a “one-off” or merely accidental feature of war.

It seems likely, then, that the deliberate transmission of HIV/AIDS has been used in Africa at a minimum as a psychological weapon of war to induce further anxiety among females in societies that have become war zones. Because these societies attach a high social stigma to those who may carry the virus, testifying on these matters is extremely difficult. Indeed, given this stigma, it seems unlikely that victims of rape would lie about having experienced such a horrific event.

Preliminary evidence suggests that the HIV prevalence rate among rape survivors is high. Two-thirds of a recent sample of 1,200 Rwandan genocide widows tested positive for HIV.⁴⁴ Although it has not yet been proven, it is possible that the virus was deliberately spread: Soldiers could have already known that they were HIV positive from having been tested or from having an infected spouse. Another possibility is that they already had some other opportunistic infection that would have increased their chances of contracting HIV. Moreover, given the brutality of other offenses committed during the Rwandan genocide, it seems unlikely that soldiers would have refrained from an act such as rape on humanitarian grounds. Given the duration of the conflict and the deliberate targeting of the civilian population during the hostilities, it could have even been seen as a “useful” strategy.

Similar accusations have been levied by a Congolese minister who claims that, during the conflict in the Democratic Republic of Congo, Ugandan troops used HIV/AIDS as a weapon in cities under their control.⁴⁵ Again, however, these allegations have not yet been proven. It is conceivable, for example, that the Ugandan government may have decided to deploy HIV-positive soldiers rather than healthy troops precisely because of their shorter life expectancies. This could have been seen as a way to reduce the spread of the virus at home.

42. “HIV/AIDS as a Weapon of War,” newsletter of the Civil-Military Alliance to Combat HIV/AIDS, Vol. 1, No. 2 (April 1995), p. 3.

43. Sharlach, “Rape as Genocide,” p. 99.

44. “Genocide Widows Die of AIDS,” *New Vision* (Kampala), December 11, 2001.

45. Mulegwa Zihindula, “Rape: A Weapon of War,” General Board of Global Ministries news archives, December 10, 1998. See also United Nations Security Council, 4087th meeting, January 10, 2000, Official Records of the Security Council, S/PV. 4087 (Resumption 1), p. 40.

Any such decision, however, would have had to have been made in awareness of the social consequences for civilians in those regions where the soldiers were deployed. In Sierra Leone, for example, Amnesty International has already reported the first AIDS-related deaths resulting from HIV infections transmitted during rape.⁴⁶

Regardless of whether the spread of HIV through rape can be proven to have been deliberate, the virus's very existence makes this practice all the more problematic on human rights and social grounds. It also further blurs the distinction between (1) rape and deliberate killing and (2) civilians and combatants. Practically speaking, the question of intent is secondary. The likelihood of contracting HIV during rape is, after all, considerable given the violent nature of the act and the fact that it often creates wounds through which the virus can enter into the bloodstream.⁴⁷ This chance of transmission is multiplied when victims are raped repeatedly. In the first instance, therefore, it does not matter whether the transmission was deliberate, because transmission occurred nonetheless—and with lethal consequences. Even in those cases where HIV transmission did not occur, the psychological stress would still have been considerable.

Finally, HIV/AIDS can be used as a weapon of war independent of the practice of rape. One highly disconcerting example involved the apartheid regime in South Africa. In 1998, following the transition to democracy, the country's Truth and Reconciliation Commission heard testimony that the regime may have planned to use HIV against its political enemies. "In at least one case," a South African newspaper reports, "the Civil Co-operation Bureau is thought to have been involved in collecting infected blood—possibly from a dying double agent—to be used in 'an operation.'"⁴⁸ Bacteriologist Mike Odendaal has stated that the head of the Roodeplaat Research Laboratories near Pretoria, which functioned as a front company for the apartheid military, had given him a bottle with HIV-infected blood taken from a man who had died of AIDS in a military hospital. Odendaal testified that he had received orders to freeze-dry the blood for Wouter Basson, a chemical-warfare specialist who allegedly wanted to use it "against a political opponent." Basson's defense counsel denied the allegation, claiming as ridiculous the suggestion that anyone would

46. Amnesty International, "Sierra Leone: Rape and Other Forms of Sexual Violence against Girls and Women," AFR 51/035/2000, June 26, 2000, p. 2.

47. Sharlach, "Rape as Genocide," p. 99.

48. Tvette Van Breda, "AIDS Link to CCB Probed," *Sunday Times* (South Africa), June 21, 1998, <http://www.suntimes.co.za/1998/06/21/news/news11.htm>.

“grab the enemy, inject him with the [HIV] infected blood, and he would only die 14 years later.”⁴⁹

It is not necessary, however, to go to such extremes to weaponize HIV. Willie Nortje and Andries van Heerden, security officers under the apartheid regime, requested amnesty from the Truth and Reconciliation Commission for their part in a different plan. They tried to use four HIV-positive freedom fighters from the African National Congress and the Pan Africanist Congress, who had switched sides to work for the state security forces, to spread HIV/AIDS among sex workers in two Hillbrow hotels in the 1990s. Nortje and Van Heerden apparently hoped that the sex workers would then spread the virus to their other clients.⁵⁰

Such appropriations of HIV/AIDS by armed forces in Africa reflect the virus's increasing significance as a weapon of war. Combatants have sought to use the psychological and lethal effects of HIV/AIDS to gain strategic advantages over their opponents. For this reason, too, a concerted response to the global AIDS pandemic can be successful only if the security sectors have an important role. This is all the more important because HIV/AIDS not only changes the way in which armed conflicts are conducted but also increases the number of persons who will eventually die as a result of these conflicts.

HIV/AIDS and the Casualties of War

HIV/AIDS also affects armed conflicts by significantly increasing the number of eventual war-related casualties. In many African conflicts, indirect casualties of war already exceed munitions-related ones. In the Democratic Republic of Congo, for example, it was estimated that 2.5 million more deaths occurred between August 1998 and March 2001 than would have had there been no conflict. Three hundred fifty thousand of these deaths are thought to have resulted from direct acts of violence; the vast majority of the rest were caused by disease and malnutrition.⁵¹ Given that AIDS is a lethal illness and that armed conflicts further frustrate the ability of individuals and communities to stem the spread of HIV, hostilities in regions with high prevalence rates generate

49. “Apartheid Scientists Kept HIV-Infected Blood for ‘Political Enemy,’” Agence France-Presse, May 24, 2000.

50. “Apartheid Forces Spread AIDS,” Agence France-Presse, November 12, 1999. See also Tom Mangold and Jeff Goldberg, *Plague Wars: A True Story of Biological Warfare* (London: Macmillan, 1999), p. 253.

51. Les Roberts, *Mortality in Eastern Democratic Republic of Congo* (New York: International Rescue Committee, 2001), p. 3.

large numbers of additional civilian casualties of war that are not munitions related. In this way, HIV/AIDS can push conflicts further toward their social limits, wagering the existence not only of the combatants but also of entire segments of society. In addition to the practice of rape, there are at least four other ways in which armed conflicts facilitate increases in the number of HIV transmissions that will eventually lead to AIDS-related deaths.

First, armed conflicts strain already poorly equipped medical facilities. In some African countries, only around 40 percent of people have access to such facilities in peacetime. Armed conflicts, like AIDS itself, place additional strains on this infrastructure and its personnel. Medical facilities that remain operational in wartime frequently lack vital resources such as clean water, trained staff, medicines, and basic equipment. At times they may already be substantially filled with AIDS patients.⁵² Health and medical centers can be targets of looting and are often singled out for attack to demoralize the civilian population.⁵³ Again, the eastern part of the Democratic Republic of Congo has been particularly vulnerable in this regard, with a large number of its hospitals having been destroyed during the hostilities.⁵⁴ While resources have been used to fight off rebel groups from neighboring countries, even basic HIV/AIDS prevention measures have been lacking.⁵⁵ In Sierra Leone the supply of condoms to residents of Freetown was disrupted during the January 1999 rebel invasion, and community- and school-based education programs were discontinued.⁵⁶

Second, civilians are at greater risk of becoming infected with HIV/AIDS because of the demographic disruptions caused by armed conflicts. These disruptions put individuals in situations where they are much more vulnerable to contracting the virus. In refugee camps, for example, women may trade sex for vital goods such as food, water, money, shelter, and firewood; some may even be sold into sexual slavery by family members or spouses.⁵⁷ In other cases, the configuration of the camps themselves may encourage such activities. Water taps and latrines are often situated at considerable distances from the refugees'

52. Oxfam International, *No End in Sight: The Human Tragedy of the Conflict in the Democratic Republic of Congo* (London: Oxfam International, August 6, 2001).

53. Jordan S. Kassalow, "Why Health Is Important to U.S. Foreign Policy," paper prepared for the Council on Foreign Relations, New York and Washington, D.C., April 2001.

54. Oxfam International, *No End in Sight*.

55. See Mark Lynas, *No Excuses: Facing Up to Sub-Saharan Africa's AIDS Orphans Crisis* (London: Christian Aid, May 14, 2001), chap. 2.

56. Lansana Fofana, "Sierra Leone: Conflict Spurs the Spread of HIV/AIDS," *Inter Press*, July 5, 1999.

57. Rodger Yeager and Donna Ruscavage, *HIV Prevention and Behavior Change in International Military Populations*, CERTI Crisis and Transition Tool Kit, September 2000, <http://www.certi.org>.

dwellings, which means that women and girls risk being raped on their way to and from these facilities. Others may be pressed into performing sexual favors for self-appointed guards.⁵⁸ To date, however, relatively little attention has been paid to the problem of HIV/AIDS in refugee camps, although there are signs that this is slowly changing.⁵⁹

Third, armed conflicts can increase the spread of HIV into rural areas, where mortality rates are likely to rise as a result. During the Rwandan conflict, infection rates in rural areas more than doubled.⁶⁰ Between 1989 and 1998, rural infection rates in Burundi increased from 1 percent to 20 percent—for a variety of reasons, including the erection of refugee camps and continued adherence to traditional practices such as polygamy and ritual scarification with unsterilized equipment.⁶¹ In some cases, this process has been reversed. During the conflict in Sudan, for example, rural inhabitants have moved to urban centers, where there are higher rates of infection.⁶² In both cases, the increased intermingling between urban and rural populations has facilitated the spread of HIV/AIDS.

Finally, armed conflicts contribute to increases in AIDS-related deaths by encouraging an inversion of priorities, as combatants and civilians are forced to deal with more immediate and more pressing needs, allowing them to avoid thinking about the potential consequences of HIV infection. As a result, HIV/AIDS does not receive the attention that it merits. Pascale Crussard, director of CARE's AIDS program in Gitarama, Rwanda, sums it up this way, "The priority for these people . . . is not AIDS. It's security. When people can die tomorrow from a machete wound, I'm not sure they think much about AIDS, from which they could die in 10 years."⁶³

This is true at both the individual and the collective levels. Countries involved with armed conflicts have fewer resources with which to educate their populations about HIV prevention. Ileka Atoki, the Democratic Republic of Congo's ambassador to the United Nations, noted the extraordinary difficulty

58. Judy A. Benjamin, "Conflict, Post-Conflict, and HIV/AIDS—The Gender Connections," remarks presented at the World Bank, Washington, D.C., March 8, 2001.

59. "UNHCR Tackles HIV/AIDS in Refugee Camps," UN Integrated Regional Information Network, August 9, 2001, <http://www.irinnews.org>.

60. Millicent Obaso, remarks presented at the United States Institute for Peace Current Issues Briefing Panel "Plague upon Plague: AIDS and Violent Conflict in Africa," Washington, D.C., May 8, 2001.

61. "Burundi: Rural Population Increasingly Affected by HIV-AIDS," UN Integrated Regional Information Network, April 14, 2000.

62. Nhial Bol, "AIDS on the Increase in the Military, Report Says," *Inter Press*, July 10, 1997.

63. Quoted in James C. McKinley Jr., "Ravaged by War and Massacre, Rwanda Faces Scourge of AIDS," *New York Times*, May 28, 1998, p. 1.

of combating HIV/AIDS in 1991 when his country was being pillaged, and again in 1994, when it became the unwilling host to millions of refugees from neighboring Rwanda.⁶⁴ The situation was similar in Sierra Leone. As Gabriel Madiye, head of Sierra Leone's only hospice for persons living with HIV/AIDS, once remarked, "Here is a country going through a civil war. If you recognize that we have a war and AIDS, which one are you going to put a premium on? War's impact is immediate. AIDS is a silent war."⁶⁵ On both the individual and collective levels, then, armed conflicts create other priorities that further undermine efforts to prevent the diffusion of HIV/AIDS among civilians. The longer this is ignored, the more widespread the pandemic will become.

In the aggregate, then, armed conflicts and their participants constitute an important vector of HIV/AIDS, a virus responsible for killing more than ten times as many people in Africa as the conflicts themselves.⁶⁶ Although these hostilities generate conditions that increase the difficulty of gathering epidemiological data, it is possible to corroborate this link. An epidemiological study carried out by two Cambridge University geographers in Uganda, for example, concluded that "the apparent geographical pattern of clinical AIDS in Uganda partially reflects the diffusion of HIV associated with civil war during the first six years of the post-Amin period."⁶⁷ It is likely that the war to overthrow the Ugandan dictator Idi Amin in the late 1970s played a major role in the emergence of AIDS as a widespread phenomenon in the region. When the last Tanzanian soldiers were returning from Uganda after Amin's overthrow, AIDS cases began to appear on both sides of the border.⁶⁸ It might be a while, however, before the full extent of the longer-term impact of these more recent armed conflicts can be documented, although it is already evident that they are having similar effects.

For scholars of armed conflict, the recognition that HIV/AIDS is being spread by soldiers presents a new challenge. The increase in HIV/AIDS-related cases is pushing these conflicts closer to their logical limits, giving rise to questions about the viability of war as a means of addressing social conflict. Today African civilians who manage to survive an armed conflict may still face

64. United Nations press release, SC/6781, January 10, 2000.

65. Quoted in Robinson, "Battle Ahead," p. 31.

66. Sandra Thurman, "Joining Forces to Fight HIV and AIDS," *Washington Quarterly*, Vol. 24, No. 1 (Winter 2001), pp. 191–192.

67. Matthew Smallman-Raynor and Andrew D. Cliff, "Civil War and the Spread of AIDS in Central Africa," *Epidemiology and Infection*, No. 107 (August 1991), p. 78.

68. Edward Hooper, *The River: A Journey Back to the Source of HIV and AIDS* (London: Penguin, 2000), p. 44.

the prospect of slow, painful deaths years after the hostilities have ended—a situation that many Rwandans are currently confronting. These casualties may eventually outnumber those resulting from the conflicts themselves and may, in the long run, pose far greater social and medical challenges.⁶⁹ Thus, the growing influence of HIV/AIDS in conflicts in Africa may present the same stark choice that Western Europe faced half a century ago, albeit for different reasons: Abolish war as an instrument for addressing political differences or gradually be abolished yourself. Whatever the short-term gains produced by armed conflicts, the presence of HIV/AIDS is rendering them increasingly irrational and counterproductive in the long term.

Conclusion

HIV/AIDS has played an increasingly significant role in recent armed conflicts in Africa. It has evolved from a virus that disproportionately affected the armed forces and weakened their operational efficiency to one that has begun to enter into the strategic calculations of combatants as a weapon of war. Given that armed conflicts facilitate the spread of HIV/AIDS, however, the presence of HIV/AIDS is raising the social stakes of these conflicts to new levels. Just as the emergence of industrial and nuclear warfare in the twentieth century wagered the existence not only of combatants but of entire societies, so too is the introduction of HIV/AIDS into armed conflicts in Africa gradually escalating the social costs of war as a way to resolve differences.

This emerging symbiosis between HIV/AIDS and armed conflict can be reversed only if Africa's armed forces, as a high-risk group and vector of the illness, contribute to international efforts to reduce its spread. Success requires their involvement. Only then can local, regional, and international agencies arrange to deliver preventive measures and treatments, to raise awareness in the armed forces about the role they play in the larger pandemic, and to devote serious and sustained national and international efforts to addressing the issue of HIV/AIDS. If the international community is to find a remedy for the global AIDS pandemic, the armed forces in Africa will have to be encouraged through economic and political means to make a contribution to this objective. This of course is a tall order, but not an impossible one. Indeed, in countries such as Thailand and Uganda, considerable decreases were achieved in their

69. For studies of the impact on HIV/AIDS on postconflict transitions, see Johanna Mendelson Forman and Manuel Carballo, "A Policy Critique of HIV/AIDS and Demobilization," *Conflict, Security, and Development*, Vol. 1, No. 2 (2001), pp. 73–92.

overall HIV prevalence rates in no small measure because their militaries chose to cooperate on this issue in an open and responsible manner. Perhaps for this reason more than any other, the AIDS pandemic should be understood not only as a global health issue but also as an international security issue.

POLICY RECOMMENDATIONS

If Africa is to successfully address the spread of HIV/AIDS, its leaders and the international community more generally must increase their level of cooperation and develop a broader approach to which the security sector can contribute. The strategy to best address the security dimensions of HIV/AIDS documented in this article would be one that is implemented simultaneously along three axes.

First, greater efforts are needed to improve health care standards and emergency responses to armed conflicts. In these situations, the role of HIV/AIDS is often not considered. HIV/AIDS prevention and treatment should become more high-profile components of such responses, including procedures to ensure the safety of blood supplies, wider availability of contraceptive devices, and more effective treatment of sexually transmitted diseases that increase the probability of contracting HIV during sexual relations. Such efforts could be enhanced through the provision of basic health care for those already living with HIV/AIDS and by ensuring the use of sterile equipment during medical procedures. Progress in these areas is possible: The UN high commissioner for refugees, for example, has already allocated funds to fight the spread of HIV/AIDS in Zambian refugee camps.⁷⁰

Second, the armed forces themselves should be involved in combating the HIV/AIDS pandemic. In Africa these forces should be encouraged to implement education programs that discuss the illness in an open and serious manner, as well as work to reduce the stigma attached to the illness. Militaries, given their rigid, hierarchical nature and captive audiences, lend themselves to these tasks. Military leaders should also strive to make voluntary and confidential testing widely available, in addition to offering counseling both before and after testing. They should also reevaluate military practices that expose soldiers to HIV transmission, making changes where possible. Crucially, however, the armed forces should address the issue of HIV/AIDS with due consideration of the human rights issues involved. People living with the virus are not the enemy but rather the only hope for achieving viable improvements in the future. Consequently, they should be included in these efforts. Moreover,

70. "UNHCR to Help Refugees Fight AIDS at Camps," *Africa News Service*, October 26, 2000.

armed forces with advanced medical facilities should continue research for a viable and affordable AIDS vaccine. Indeed, Western militaries have an interest in conducting research on strands of the virus that predominate in regions of Africa to which these militaries might someday be deployed. In this way, they could also serve as an important counterbalance to pharmaceutical companies that focus their research primarily on HIV strands found in Western Europe and North America.

Third, an effective strategy for the security sector with regard to HIV/AIDS should incorporate a greater appreciation for the wider efforts already being made to combat the pandemic, such as making cheaper drugs available for African countries and contributing to the Global Fund to Fight AIDS, Tuberculosis, and Malaria. These efforts must be sustained because the causes of the AIDS pandemic are rooted in a much broader set of economic, political, and structural conditions that must be addressed if the pandemic is ever to be contained. The security sector should recognize the convergence of interests regarding the HIV/AIDS pandemic and support this wider endeavor.