

# **HIV/AIDS in Asia – An expanding menace to health and regional security: Challenges for military action**

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## **INTRODUCTION**

The relentless HIV/AIDS pandemic is an expanding threat to socio-economic development, stability and security in Asia, and threatens to become a human tragedy on an enormous scale. An estimated 7.2-7.5 million people in Asia and the Pacific are now living with HIV/AIDS (see Figure 1) – of whom 2.1 million are young people of 15-24 years of age.<sup>i</sup> Almost 1 million people in this region acquired HIV in 2002, more than 3,000 new infections every day. While the world has largely focused on the unfolding catastrophe of HIV/AIDS in Africa, the epidemic has been steadily gathering momentum in Asia, where it now threatens to become the largest in the world.

Wide social disparities, limited access to basic services, a burgeoning sex trade, growing injecting drug use, and high population mobility – all these aid the spread of HIV in this vast region. It is very likely that over 40% of the world's new HIV infections from now to 2010 will occur in Asia and the Pacific – a region that now accounts for only 20% of new annual infections of HIV.<sup>ii</sup>

A significant portion of HIV epidemic growth in this region has been in China, where over a million people now live with HIV. Heterosexual contact has taken over driving the epidemic in this country, and sex worker infection rates have increased markedly. The number of HIV/AIDS infected persons could reach 10 million by the year 2010, the Shanghai Morning Post quoted experts as saying.

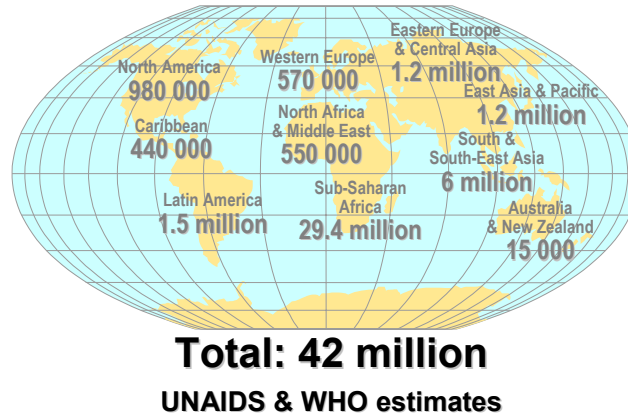
In South and Southeast Asia in particular, the HIV/AIDS epidemic is on the march. Although prevalence is still relatively low in most of these countries, in many places incidence rates are increasing at alarming rates. If left unchecked, the spread of HIV will accelerate ruthlessly, surpassing the “tipping point”, and rates will climb the steep slope of the epidemiological curves. Epidemic spread is of special concern in India, where almost 4 million people are now living with HIV, and the potential for an epidemic explosion very real.

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Figure 1

## Adults and children estimated to be living with HIV/AIDS as of end 2002



### The Destabilising Socio-Economic Consequences of HIV/AIDS

The experience in Africa has revealed that HIV/AIDS dramatically shortens life expectancy and human potential, draining family, community and national resources. The pandemic has truly become a severe development crisis in Africa and threatens to become the same in Asia. It erodes the social and economic fabric and the political stability of whole regions and can contribute to a series of humanitarian emergencies, exacerbating poverty and food insecurity.

- **Household economies** suffer with the loss of income, large health care expenditures, and consumption of family savings to pay for funeral and mourning costs.
- **The education sector** is hit with the loss of students, loss of experienced teachers, and households too poor to educate their young.
- **Formal economic sectors** face increasing expenditures, rising labour costs and reducing revenues – particularly affected are mining, tourism, agriculture and transport.
- **Health-care systems** are stressed and later inundated with the number of people seeking services, and a demand for care that is more expensive. Many caregivers become HIV-positive, others may be seriously ill with AIDS, and still others may have died. The overall result: rising health care costs, a progressive loss of resources, a health care system that is less and less able to cope, and loss of confidence in the government and the entire health care system.

Economists have begun to tally the economic toll exacted by this pandemic, with the lessons of Africa revealing that high-prevalence countries lose up to 0.5 to 1.0 % per capita GDP growth per year. Indicators such as life expectancy and literacy rates show a dramatic impact. By 2010, life expectancy in Namibia, for example, will drop from 70.1 years to 38.9 years. In these circumstances, the threat to national and regional stability is very real and, for Asia and the Pacific, should impart a sense of urgency to bring HIV prevention efforts up to scale.

### **HIV and other Sexually Transmitted Infections (STIs) in Military Operations**

Military populations have always formed one of the largest and most significant sectors of society.<sup>iii</sup> In a contentious post-Cold War era, national militaries perform an increasingly prominent role. Wars and internal civil disorders can be found in at least 50-60 countries around the globe at almost any point in time. National military personnel are also used in interventions to contain domestic and also in international disputes. In 2003, 15 United Nations peacekeeping operations were underway in Africa, the Americas, Asia, Europe, and the Middle East. Some 89 countries contribute military observers, civilian police and military troops to these operations, involving a total of 35'000 to 39'000 men and women.<sup>iv</sup>

Just as militaries have always figured centrally in human affairs, epidemic disease has presented a perennial problem for military populations and for civilians with whom they come in contact. U.S. Marine Corps Brigadier General A. J. Ognibene put it very well when he addressed a military medical seminar on the subject of infectious diseases in the theatre of operations:

***"Disease is woven intricately into the fabric of war. The story of one cannot be told without the other and yet, each succeeding generation of history, soldier and scholar alike, seems destined to repeat the errors of history and fail to perceive the impact of disease."***<sup>v</sup>

Troops regularly find themselves deployed in environments whose climatic and weather conditions are conducive to the spread of infection, and in disrupted social environments that serve as ideal circumstances for disease transmission from person to person. The spread of infectious disease has always been a concern for the military – malaria, cholera, influenza, TB, dengue, viral hepatitis and STIs.<sup>vi</sup> Military STI rates are usually higher than in comparable civilian populations and, in times of conflict, STI rates rise even further.

Along with the other STIs, HIV poses a significant risk for military personnel, exposing them to getting or passing on the infection. Military personnel comprise the most vulnerable age group – young and sexually active. There is legitimate concern that HIV and other sexually transmitted infections have

the potential of compromising military readiness as officer ranks begin to thin out, and as it becomes increasingly difficult to deploy a complete and integrated company of healthy troops. Perceived diminished capacity in the defence sector can then become part of a larger AIDS-related threat to socio-economic well-being and development, and to national as well as international security. This becomes crucial in Asia, a region that struggles with widespread poverty, displaced and migrating populations, and a mobile sex trade.

In confronting the pandemic in this region, militaries present both a threat of infection and an important potential instrument of its reduction. Each country in Asia and the Pacific needs to recognise with some urgency that the HIV/AIDS pandemic is still expanding and penetrating its armed forces. The Ministries of Defence need an agenda for urgent yet realistic policy development and support to deal with this threat to their own readiness and the security of their countries.

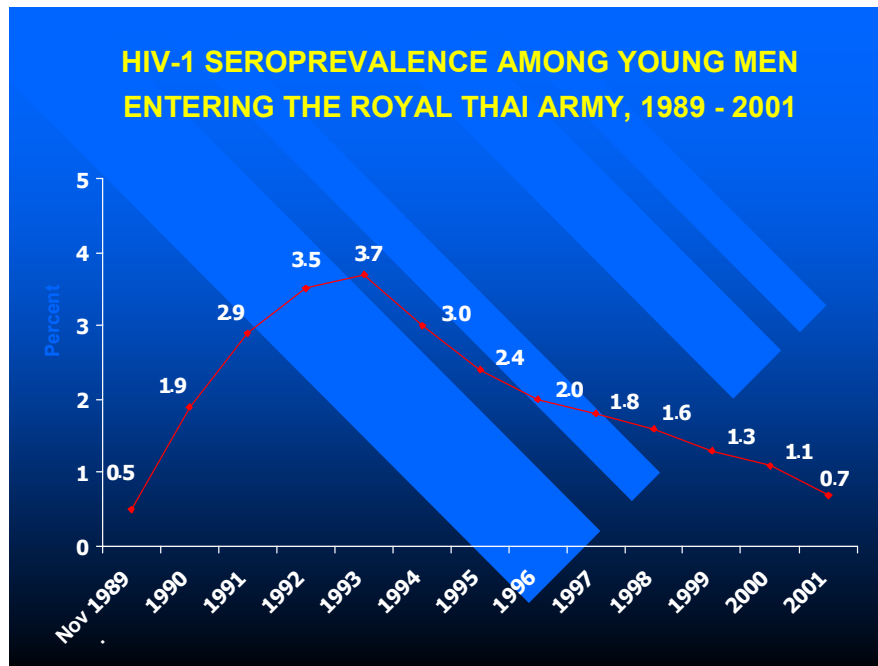
Many of the critical policy issues that need to be addressed are difficult and tread on touchy legal, ethical, constitutional human rights matters. Topics to be considered encompass programmatic tools that militaries can and must share with their civilian counterparts and among themselves. In addition to these are policy issues specific to military services at home and on deployment in peacekeeping and other roles. And finally, these ministries of defence need to mobilise, from within their own treasuries and from external sources, adequate financial resources to move up to full-scale implementation of those policies and programmes. A small number of countries have launched full-scale efforts of this type, and in these countries the positive impact can be identified in the defence sector and also in the general population.

Thailand, for example, has endured one of the oldest HIV/AIDS epidemics in Asia, but has also been cited as one of the first countries to achieve stable and then declining surveillance curves. Between 1985 and 1990, a comprehensive national prevention and care programme was implemented with the Royal Thai Army (RTA) taking the lead in several areas. The military leadership had become greatly concerned about the disease, not only because of an increasing number of infections within the ranks, but also because HIV threatened the recruitment of young men especially from northern Thailand. In response, the RTA launched its own comprehensive HIV/AIDS prevention and care programme, in full cooperation with civilian agencies and international support agencies.

Preventive measures encompassed HIV prevention education, HIV/AIDS awareness classes introduced into all military curricula, peer-group interventions targeted toward STI clinic attendees and other personnel at high risk, and comprehensive anti-discrimination education. Reaching out into communities from which it draws new recruits, the RTA HIV/AIDS prevention and management programme has provided a major boost to civilian initiatives.

The impact can be seen in Figure 2.

Figure 2



Source: Armed Forces Research Institute of Medical Sciences (AFRIMS) of Thailand

Obviously, declining HIV prevalence among young recruits reflects prevalence rates among youth in the wider community and is testimony to the positive impact of the RTA prevention programme in cooperation with the National AIDS Programme under the Ministry of Health.

## CIVIL-MILITARY PROGRAMME IMPERATIVES

Militaries do not exist in a vacuum. The interface with the “civilian” sector is ever present, and there is constant interaction with family members, sex partners and the wider human community. The civil-military connection is particularly close in developing countries where militaries serve as a major avenue of gainful employment and advancement. This constant civil-military interaction is the reason why an effective attack on HIV transmission calls for strategies to link interventions in both sectors. For affected military and civilian populations alike, those strategies must address behaviour change as well as protection and care for those who are already infected. Because of the cultural sensitivities and social stigmas that are commonly attached to the major means of HIV transmission, these strategies and programmes must also be highly sensitive to the protection of human rights, values, and resources.

A minimum listing of programme features that call for close **civil-military collaboration** in HIV/AIDS prevention and management will contain at least these basic but essential streams of action:

- prevention education for HIV and other STIs;
- condom promotion and provision;
- HIV testing and counselling; and
- treatment, care and family/community support.

The organization of these lines of action may be usefully viewed in the context of:

- civil-military collaboration, and
- military-to-military cooperation.

**Prevention Education** When the goal is to transform behaviour in highly sensitive areas of human life, simple information transfer will not bring about those changes. Motivational learning does not result from episodic didactic lectures and briefings, but rather from on-going interactive relationships linking teachers and students at all levels, with peer education active in both groups providing constant reinforcement.<sup>vii</sup> Unfortunately, this is the most difficult and expensive form of learning to offer on a mass scale – but it is the only way to secure real impact.

In 2000, the CMA published the results of a global survey of military HIV/AIDS policies and practices.<sup>viii</sup> The survey found that, while most reporting militaries carried out STI/HIV prevention education; the majority relied on infrequent (yearly or less often) large-group briefings and on the passive distribution of written materials. Despite improvements in some countries, there is little evidence that STI/HIV prevention education has advanced on a wide scale since the CMA survey was published. One problem for low-income countries lies in finding financial resources to mount STI/HIV and sexuality education campaigns for the defence sector. The armed forces are often unable to pursue full scale STI/HIV prevention education during recruit and officer training and thereafter, including before and after deployment and at military discharge. Sufficient funding will have to be found to train large numbers of civilian and military STI/HIV prevention instructors and peer educators, using curricula and teaching methods that are already available.<sup>ix</sup>

**Condom Promotion, Provision, and Availability** "In a world with an HIV pandemic, the latex condom emerges as the only practical and responsible strategy."<sup>x</sup> This statement recognises that we are still a decade away from widespread application of an HIV vaccine, and that abstinence outside of a stable sexual partnership is not practicable for everyone. Ensuring the maximum consistent use of latex condoms through their widespread promotion, practical instruction and ready availability is essential to breaking the pattern of STI/HIV infection through sexual intercourse. This particular weapon in the war against AIDS has been joined now by the wider availability of an efficient and effective female condom.

Embodying highly organized command and control structures, militaries are relatively well placed to promote and distribute these crucial barrier devices.

Nevertheless, there are operational problems. Condom promotion in many countries is pursued only through group briefings and written materials.<sup>xi</sup> Second, there are not enough funds available to facilitate more proactive approaches to condom promotion, to distribute condoms free of charge and in sufficient numbers, and to monitor condom use in the armed forces. The explanation for this, in some countries, may be found in deeply rooted religious beliefs that prohibit condom promotion and use. Interfering with consistent condom use may be cultural practices that disparage condom use while encouraging multiple sex partners, the risk-taking propensities of young men and women, compounded by the resolve- and performance-weakening effects of alcohol and drug use.

Only after these operational problems are understood can informed action be taken. Such has been the case in Thailand, which suffered under very high HIV incidence and prevalence rates until a culturally sensitive safe sex campaign was mounted and the use of condoms became common.

The theme cannot be repeated often enough: PREVENTION WORKS, and the best tool to pursue prevention interventions at this time is a barrier to the sexual transmission of HIV – the condom.

**Testing and Counselling** Since the early 1990s, non-voluntary testing and screening have been used by an increasing number of countries to exclude HIV-positive individuals from recruitment and career advancement, and to preserve force readiness and deployment capacity. This new interest is spurred, in part, by the burgeoning costs of AIDS care, as well as the cost of retraining to fill the positions of people lost to AIDS. Compulsory testing and screening has also come under new examination due to attention recently given to the potential for HIV transmission involving troops on UN and other peacekeeping missions, and by a United Nations recommendation that these troops should test negative for HIV.<sup>xii</sup>

Universal testing is also defended as a deterrent to HIV infection in countries where military service offers an important employment option. It is further viewed as a means of yielding surveillance data for future efforts at HIV prevention and vaccine development. Periodic mandatory testing is also seen as an essential way to identify HIV-infected serving personnel, to offer them appropriate medical care, and sequentially to adjust duty assignments until such time as medical discharge is indicated.

Assuming that human rights are fully protected, universal-testing objectives may seem to be reasonable for well-funded and medically equipped militaries in countries with low HIV incidence and prevalence rates, i.e., militaries in industrialised countries.<sup>xiii</sup> In the militaries of less-developed higher-prevalence regions, these purposes cannot be served and some may actually be subverted by compulsory testing and screening. It must be said that most military and civilian organizations in resource-poor

countries have neither the medical capacities nor the financial means effectively and humanely to satisfy the protocols of *either* mandatory *or* voluntary testing programmes.

When resources are available, there is real value in periodic testing accompanied by confidential contact tracing and pre-test/post-test counselling of those found to be both HIV-positive and HIV-negative among their partners and families. In addition to its surveillance value, periodic testing for viral load and CD4 cell count enables military and civilian health agencies to assess the progression of infection for individual patients and thus to preserve their occupational fitness for as long as possible. Testing combined with counselling aimed toward employment and life-extending treatment and care has further been found to provide an effective strategy for stemming the onward flow of HIV infection.<sup>xiv</sup>

Whether testing and counselling are compulsory or voluntary, neither will create positive effects unless rules of confidentiality and informed consent are tightly defined and strictly followed to avert, as much as possible, the risk of stigmatisation and discrimination. The effects of not adhering to these principles can be devastating. Cases abound of social ostracism, rejection from insurance and other services, denial of job entry, and dismissal from employment simply because of an HIV diagnosis. These consequences merely drive the virus underground where it proliferates and mutates in fear and silence.

**Treatment, Care, and Support** In that AIDS is, or soon will be, a leading cause of death in the militaries of less-developed countries, questions inevitably arise as to the competing values of national security versus equal treatment, care, and support for all patients suffering from AIDS-related illness. Defence ministries must also seek a viable balance between military readiness and public health for their own personnel and their dependents.

In the CMA survey, militaries were asked whether career-related consequences for their soldiers followed diagnoses of diseases suspected to be HIV-related. African "yes" responses averaged 6 percent, as opposed to a range of from 43 to 89 percent for non-African militaries. No African militaries reported discharge from service solely on the basis of an AIDS diagnosis, while 88 to 100 percent of militaries in Asia and other regions reported discharge from service.<sup>xv</sup> Almost all responding militaries offered care in military hospitals, 44 percent also referred military patients to civilian hospitals, and 71 percent noted provision for some form of home care and family support.<sup>xvi</sup>

It is well established that AIDS has the capacity to overwhelm rural and urban treatment, care, and support facilities.<sup>xvii</sup> Financial and technical assistance is urgently needed to enable both civilian and military sectors to find equitable solutions to several critical problems that also apply to the police and other security services. Should military AIDS patients receive priority free care and drug therapies? Should long-term, home-based medical benefits be extended to discharged military AIDS patients and their dependents, which may be controversial if they are greater than benefits made available to those

around them? Should military widows and orphans likewise receive favoured treatment in the provision of financial, legal, educational, and other protective benefits? Whatever their specifics, workable answers to these questions will have to involve close, capacity-building collaboration between civilian and military health services, made possible by external assistance to each.

**Civil-Military Collaboration** Especially in less-developed countries, nation-wide success in the prevention and management of HIV and AIDS requires close linkages between military organizations and civilian agencies. As the CMA survey concluded:

Civil-military cooperation can make available to civilian practitioners relatively sophisticated military epidemiological databases. It can also ease the financial burden placed on military resources and broaden the ability of militaries to offer long-term care through referral to civilian medical facilities. In all countries, the most effective overall goal may be the adoption of long-term, multi-sectoral approaches to the control of HIV/AIDS, which treat the disease not only as an immediate threat to public health but also as a challenge to social, economic, and political stability and thus to national security in the broadest possible sense.<sup>xviii</sup>

Throughout the world, realization is growing that militaries are central to the war against the HIV/AIDS pandemic. High-prevalence countries that pursue vigorous HIV/AIDS prevention programmes in the defence sector tend also to show results in restraining the pandemic across all segments of society. There is growing, albeit less well-established, evidence that when the military is represented on national AIDS councils, HIV prevention progresses more rapidly in both the armed services and civil society.

This kind of civil-military collaboration may include combined programme planning, direct sharing of training materials, trainers and prevention campaigns, joint access to laboratory facilities and HIV testing and counselling services, and joint responsibility for AIDS hospitalisation and care. Nationally and/or locally, countries whose militaries and civilian agencies collaborate freely are likely to be those where incidence curves are flattening out and where prevalence rates may actually be declining. Countries such as Cambodia, Morocco, Senegal, Tanzania, Thailand, Uganda, and Zambia offer valuable insights into best practices and lessons learned for adaptation and application on a wider scale.

**Military-to-Military Cooperation** Sharing of data and lessons learned is essential to the prevention and management of HIV/AIDS in the armed services of less-developed countries, which are among the most vulnerable to infection. Between 1995 and 2003, this premise has guided the work of the CMA through 11 regional technical and policy workshops convened in Africa, Asia, the Caribbean, Eastern Europe, and Latin America.<sup>xix</sup> In the spirit of civil-military collaboration, workshop participants have included not

only military officers, but also representatives of ministries of health, national AIDS committees, international agencies and non-governmental organizations (NGOs). One important purpose of these workshops has been to facilitate military-to-military communication across state boundaries, aimed toward information sharing on HIV/AIDS prevention and management.

Individual countries have also undertaken such initiatives. Thailand, for example, is one of the most active states in Asia engaged in military-to-military cooperation, albeit more in giving than in receiving assistance. The Thai military has freely offered its best practices and lessons learned in several regional conferences organized by the CMA and likewise in bilateral exchanges with other Asian militaries. The RTA, working with Thai public health specialists, have been engaged by the United Nations Children's Fund (UNICEF) to carry out several missions in China to help local authorities in the development of plans for HIV/AIDS prevention and care. In 1995, officers of the RTA and the Armed Forces Research Institute of Medical Sciences (AFRIMS) participated in a UN Department of Peacekeeping Operations (DPKO) mission to Cambodia with subsequent follow-up visits. The overall goal was to help the Cambodian Ministry of National Defence devise and implement an AIDS control plan. The RTA and AFRIMS are also active participants with the U.S. military and other foreign partners in the advanced stages of vaccine trials programmes that will ultimately benefit the entire Asian region.

## **MILITARY POLICY ISSUES**

The preceding discussion of HIV/AIDS programme imperatives applies in similar ways to both military and civilian populations, and to their interaction. A number of other policy issues are more specific to military and security forces. These issues become particularly critical when peace breaks down and soldiers are thrown together with civilians into conflict and immediate post-conflict situations. When public order has disintegrated, the military is often the only institution capable of restoring it and managing the transition to a more permanent stability. Under these circumstances, prevention and control of infection form two of the most difficult and yet essential aspects of socio-economic and political recovery. But even as the military assists society in this manner, it must be able to help itself by addressing serious questions of HIV risk and risk management within its own ranks.

**The Military Work Place** The armed forces recruit young men and women at a time of their greatest risk to HIV, in the 15 to 25 year age group where more than half of all new infections occurs. The senior officer corps may also be highly susceptible to HIV infection. In many countries, military officers are very much a part of the educated elite whose patterns of behaviour and travel may have already caused it, as a class, to be "hollowed out"<sup>xxx</sup> by AIDS. Military personnel are especially vulnerable in that they are

regularly away from home and family for extended periods, are often in need of recreation to relieve stress and boredom, and are subject to risk-enhancing alcohol and drug use. They may have feelings of invincibility, in a profession and as members of peer groups that often excuse and even encourage risk-taking. Military installations and nearby bars and entertainment facilities attract sex workers and drug dealers, enticing off-duty soldiers who are sure to have cash, but not necessarily condoms or sterile syringes, in their pockets.

The peacekeeping and humanitarian aid missions that Asian and other militaries are called upon to carry out further enhance the military risk environment. The circumstances into which these missions are deployed may include internal and cross-border armed conflicts, marked by massive displacements of civilian populations, combining to produce complex humanitarian emergencies. As members of regional and international peacekeeping forces, troops may be deployed to regions in which infectious disease, including HIV, are present in higher prevalence levels than these soldiers face in their home environment.

The military workplace is prone to HIV transmission just as are other workplaces that can be characterised as high-risk. Foremost among these are long-distance transportation workers, migrant labourers, international refugees and internally displaced persons (IDPs), commercial sex workers, and even middle-class bureaucrats and entrepreneurs. And yet, in spite of the realisation that HIV poses special risks for the armed forces, militaries are still significantly (although no longer totally) excluded from the targeted bilateral and multilateral assistance that is needed to slow the transmission of HIV. In the past, such exclusion might have been justified by the argument that militaries, which receive their own support, were not proper recipients of humanitarian and development assistance. Now, however, these militaries are manifestly part of a global humanitarian and developmental crisis. At this point, a very critical issue is how to convince donors to eliminate this deadly bias in their foreign assistance that targets AIDS prevention, and how to convince the commanders and political supervisors of militaries that receive foreign aid to place HIV/AIDS prevention and management at the top of their wish lists.

**Military Command and Control Structures** Command and control structures are especially visible and important in the armed forces. These structures incorporate both advantages and disadvantages for HIV/AIDS prevention and management. The military's well-developed span of control and chain of command hierarchies provide the means to induce change over a wide range of behaviours. Changes in sexual behaviour, difficult to bring about in the best of circumstances, may be especially difficult to achieve for off-duty soldiers and sailors and for troops who are deployed in operational areas. In these circumstances, it is naïve simply to rely on written codes of conduct. More proactive supplementary approaches are needed to mobilize discipline and behavioural regulation on behalf of HIV prevention.

Two factors have further weakened the capacity of military organizations to control the spread of HIV. First, military commanders and medical officers respond to rather different mandates. Commanders are clearly more interested in maintaining deployable force strength, while medical officers must be more concerned with maintaining a healthy fighting force.

Second, HIV is indeed a "slow plague". Particularly in Asia, its long asymptomatic phase initially lulled force commanders and civilian leaders into the belief that the virus did not seriously endanger their countries. This false sense of security is beginning to evaporate, as some of the largest countries of the region are now facing, and admitting to, an epidemic spread that is accelerating. Yet, in spite of a growing understanding of the impact of the epidemic on the security sector, military command commitment to HIV control remains heavily oriented toward an illusory "quick-fix" through pre-recruitment HIV screening.

Practical responses to all of the civil-military programmatic imperatives raised in the first section of this paper are absolutely vital to military commanders and to the troops under their command. The UN Department of Peacekeeping Operations (DPKO) has acknowledged the pressing need to sensitise senior officers to the top priority of HIV prevention in the conduct of peacekeeping missions.<sup>xxi</sup> In late October 2002, the AIDS Control Organization of the Indian Armed Forces released its own *Commander's Handbook, Fighting AIDS on a War Footing*.<sup>xxii</sup> A greater effort is still required, of necessity externally supported, to convey the same sense of urgency and capacity for change to the command and control structures of other Asian national militaries, which are also primary troop contributors to UN peacekeeping missions.

**Military Training, Service, and Conversion to AIDS** In certain African countries, pre-recruitment screening out of all those already HIV-positive has been justified partly on the grounds that strenuous military training and service under harsh conditions weaken the human immune system and accelerate the progression of HIV infection to symptomatic AIDS. According to some ministry of defence officials, this thesis considers that military training itself can thus be a co-factor of HIV infection.

One study in Zimbabwe compared the effects of training on HIV-positive and HIV-negative army recruits. It found that after only three weeks of strenuous activity, HIV-positive recruits had smaller abdominal, waist, thigh, and calf circumferences, altered blood values, abdominal disorders, upper respiratory infections, and the like, compared to their HIV-negative mates.<sup>xxiii</sup> Aside from the all too brief time frame allocated to this examination, the study failed to consider the point at which each HIV-positive subject was located along the continuum from initial infection to the appearance of AIDS symptoms. An accurate determination is possible, if still expensive, through blood tests for viral load and CD4 cell count. In the absence of these diagnostic benchmarks, any investigation of the singular impact of military training and service on the progression of HIV is seriously flawed.

Clearly this is an avenue of research that must be pursued, since evidence available is largely anecdotal, but it suggests that the impact of strenuous and rigorous training may differ from one region to another. Research on these matters will call for careful attention to controls, the stage of infection in test subjects and measures that reveal the extent to which the immune system has already been affected by the infection in each research subject. The conclusions from such research studies will be critical for recruitment and retention policies of the armed forces around the globe.

**Length of Deployment and Risk of HIV Infection** Notwithstanding the preventive successes of the Royal Thai Army and a few other militaries, evidence from studies with long-distance truck drivers and migrant worker populations suggest that length of travel and living away from home but in HIV-endemic operational areas is independently and directly associated with risk of HIV infection. Here again, little empirical evidence is available to confirm this hypothesis. At least one recent case study is available from Africa, which may be sufficient to make length of deployment an important policy issue for military and peacekeeping commanders to consider and resolve.

During the 1990s, Nigerian ground forces were deployed as the major component of the sub-regional Economic Community of West African States Ceasefire Monitoring Group (ECOMOG) in Liberia and Sierra Leone. Brigadier General A. Adefolalu, Commandant and Chief Consulting Surgeon at the Nigerian Army Medical Command School Headquarters conducted an epidemiological study of troops participating in this campaign. The Adefolalu study included a comparative analysis linking HIV incidence with the lengths of soldiers' duty tours in the turbulent Operation Sandstorm of Sierra Leone. Incidence rates among these troops increased from 7 percent after one year in the operational area to 10 percent after two years, and to more than 15 percent after three years of deployment, for a cumulative annual risk factor of about 2 percent.<sup>xxiv</sup>

Effective responses to the length-of-deployment issue depends on whether militaries can acquire the necessary tools to lessen their soldiers' exposure to war zones, made additionally dangerous by HIV, and to lower their risk of infection while serving in these places. In most cases, this will call for command decisions to deploy personnel on shorter tours of duty in conflict and post-conflict theatres of operation. To be effective, new policies of this type should be linked with systematic reinforcement of pre-deployment HIV prevention education through squad-level peer education, together with proactive condom promotion and distribution extending well into the post-deployment period. These are not technically complicated or even necessarily expensive responses, but at present they seem to be beyond the means of most militaries in Africa and Asia.

**Complex Humanitarian Emergencies and Peacekeeping** Once HIV has become firmly established in a given region, it can spread rapidly -- even in societies that are at peace and where free movement of people and trade is the norm. But HIV thrives in the complex humanitarian emergencies that are created and sustained by socio-economic and political disintegration, communal strife and conflict. Fighting generates cross-border refugees and internally displaced persons (IDPs), on the move in search of safety and better security, only to find themselves in situations of extreme vulnerability to HIV. By the end of 2000, the UN High Commissioner for Refugees (UNHCR) reported nearly 5.5 million refugees and IDPs in Africa and more than 7 million in Asia.<sup>xxv</sup> What has become a culture of violence, in part perhaps because of HIV and AIDS, also helps to extend the chances of acquiring the virus. This reflects the structural nature of the HIV risk environment for all population groups present in complex humanitarian emergencies, a risk environment that continues even after hostilities have ended.

The nature of this HIV risk environment is an important factor to consider when peacekeeping forces are sent in to separate contending parties and to help restore public order. Countries that contribute and countries that host peacekeepers have both recognized that HIV transmission is a two-way street. Troops can bring the virus home with them, and they can transmit it to comrades-in-arms and civilians in the field. These are particular concerns for ministries of defence that are increasingly asked to provide peacekeepers for deployment in their own regions and beyond.

The UN Security Council confirmed these realities at its opening session on January 10, 2000. For the first time in UN history, the Council recognized a public-health problem, HIV/AIDS in Africa, as a threat to international peace and security.<sup>xxvi</sup> Following similar alarms raised by the General Assembly, attempts were made to strengthen HIV prevention activities in the DPKO at pre-deployment training sites and for peacekeepers already in the field.<sup>xxvii</sup> Yet again, rhetoric has not been matched by actual commitment. HIV/AIDS prevention remains under-funded in the DPKO, which is forced largely to rely on troop-contributing states to provide the necessary levels of HIV prevention education, testing and counselling, condom promotion and monitoring of use, and STI treatment. This obligation is impossible for most contributing militaries to fulfil without substantial external assistance. Bilateral cooperation to relieve the problem is specifically called for in Security Council Resolution 1308 of July 2000,<sup>xxviii</sup> but the more affluent UN members have yet to respond in a significant way.<sup>xxix</sup>

In April 2000, the U.S. National Intelligence Council (NIC) released a declassified version of the Central Intelligence Agency's (CIA's) own first-ever intelligence estimate related to public health, an examination of the global impact of infectious diseases. This report described the HIV/AIDS pandemic as a direct threat to U.S. national security.<sup>xxx</sup> In late 2002, a further report issued by the NIC/CIA and a paper prepared for the independent Center for Strategic and International Studies (CSIS) focused immediate security attention on the next wave of the HIV/AIDS pandemic in the populous states of China,

Ethiopia, India, Nigeria, and Russia.<sup>xxxii</sup> Further justification should not be necessary for a substantial commitment of bilateral and multilateral support toward the creation and maintenance of an HIV-free international peacekeeping force. In Africa, the most pressing case in point, not moving in this direction will result in a catastrophic loss of regional force strength, "effectively shifting the burden of peacekeeping operations . . . to non-African countries (including the United States)."<sup>xxxii</sup>

**Demobilization, Reinsertion, and Reintegration into Civil Society** The Chinese and Russian armed forces have demobilized the world's largest number of troops in recent years. But, from the standpoint of HIV/AIDS prevention and management, the human stakes of military demobilization are still highest in Sub-Saharan Africa. Following decades of relentless poverty and economic downturn, socio-political instability and outright warfare, Africa now faces the challenging issue of how to retire thousands of soldiers from duty and to reintroduce them into civilian society. The problem is further complicated by the fact that HIV incidence and prevalence rates are generally much higher in military than in civilian populations, and African civilian as well as military populations are already inundated by HIV/AIDS. Nevertheless, "if demobilisation programmes do not include prevention and peer counselling, the reintegration of HIV-Positive soldiers into new communities and the return of combatants to their original villages may result in a major proliferation of the virus."<sup>xxxiii</sup>

In a way similar to military service itself, demobilization and its aftermath present not only a problem for HIV/AIDS prevention and control but also an advantage. Regular troops are readily identifiable and subject to cantonment, where HIV prevention education and counselling can be administered and where voluntary testing, care, and transitional support can be provided before they are sent home. It may also be possible to convert former combatants into fighters in the war against HIV and AIDS. According to Mendelson Forman and Carballo:

In Sub-Saharan Africa, where the resources for HIV prevention are limited at best and non-existent at worst, the structured and externally financed demobilisation of military personnel presents a number of opportunities for innovative and creative solutions. Many of the region's armies are capable of delivering healthcare and providing community education and logistical support to villages. With sound training and follow-up supervision, some demobilised military personnel could work with active duty forces to become 'agents of change', specifically in regard to HIV prevention. They could be trained in the organisation of discussion groups, the provision of counselling and the marketing and distribution of condoms, and they could assist in carrying out urgently needed community-based surveillance of changing attitudes and behaviour regarding HIV/AIDS.<sup>xxxiv</sup>

These new functions, which might also well apply in Asia, would help to change local attitudes toward returning war veterans from perceptions of foreboding to expressions of support. They would likewise improve the governments' standing with bilateral and multilateral loan and aid partners that regularly demand military downsizing as a condition of recovery and development assistance, but which may also fear the spread of HIV/AIDS that can result from rapid and massive reductions in force. The quandary is that large amounts of foreign assistance are needed to activate this constructive linkage between demobilization, public health and development, and here the record to date is spotty.

One of Africa's largest demobilization and reinsertion exercises occurred in Nigeria. Although the U.S. Agency for International Development (USAID) and the British Department for International Development (DFID) provided assistance in this effort, little funding was assigned to HIV prevention and control.<sup>xxxv</sup> On the other hand, USAID and the U.S. Department of Defense are now including HIV activities in their demobilization support for African defence ministries and health-care agencies. Similar initiatives are being planned and implemented by the DFID, the Canadian International Development Agency (CIDA), the German Gesellschaft für Technische Zusammenarbeit (GTZ), the Swedish International Development Authority (SIDA), the Netherlands and Norway.<sup>xxxvi</sup>

## CONCLUSIONS

HIV is a threat to the military, at home, during wartime and in operations other than war. In particular, it is a serious threat in post-conflict peacekeeping and humanitarian relief operations. The countries of Asia and the Pacific, and particularly their ministries of defence, are clearly at a crossroads. Many countries in these and other regions are unevenly emerging from decades of political instability and authoritarianism, socio-cultural ferment, economic stagnation and mass poverty, and international dependency. A new era of reform has begun and security sector reform is very much a part of the process, and yet all of these nascent advances are threatened by the unrelenting crisis of HIV/AIDS.

The good news is that at long last HIV/AIDS prevention and mitigation have become priorities of both the defence and development communities. The less happy news is that, while the civil-military programmatic and policy requirements to break the circle are well understood, the political and financial resolve to do so remains woefully inadequate. The accelerating pace of HIV transmission in Asia threatens to become an enormous human tragedy and a threat to peace and security in this region as well as in Africa.

In responding to this threat, prevention is the key, and behaviour change must be a central focus for prevention interventions. All armed forces can confront this challenge by undertaking HIV prevention programmes adapted to the military. For the uniformed services at home, and for contingents being

deployed on peacekeeping operations, intensive training in HIV prevention and behavioural issues are essential, starting with recruit training, reinforced prior to – and continued during – deployment. The approach will, of course, vary considerably from culture to culture grounded, as it must be, in deeply held attitudes, values, and beliefs. The magnitude of the task at hand means that traditional inter-territorial and inter-sectoral distinctions must give way to creative and adaptive civil-military collaboration.

The pandemic presents a clear and present danger not only to public health and socio-economic growth, but also to basic human security no matter how it is defined. And it poses a looming threat to the national security of even the least-affected affluent countries that control most of the world's wealth and power. This realization should prompt a well-founded sense of urgency in the war against HIV and AIDS.

## ENDNOTES AND REFERENCES

- <sup>i</sup> Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO), 2002, *AIDS epidemic update: December 2002*. Geneva: UNAIDS/WHO, pp. 7-11
- <sup>ii</sup> *Ibid.*, p. 5
- <sup>iii</sup> Yeager, R., 2000, "AIDS Brief Military Populations". Sectoral AIDS Briefs Series. Washington: U.S. Agency for International Development.
- <sup>iv</sup> United Nations Department of Peacekeeping Operations (DPKO) Monthly Summary of Military and Civilian Police, May 2003 – see <http://www.un.org/Depts/dpko/dpko/contributors/index.htm>
- <sup>v</sup> Ognibene, A. J., 1987, "Medical and infectious diseases in the theater of operations, *Military Medicine*, 152(1):14.
- <sup>vi</sup> From Yeager, R., op. cit. During the 12<sup>th</sup> Century Crusades, bubonic plague and famine reduced one Christian army from 100,000 to 5,000 troops. In 1741, the Austrian army surrendered Prague to the French because 30,000 defenders had fallen victim to typhus. During the Napoleonic wars, four French soldiers died of disease to every one killed in action. In the first month of the Russian campaign alone, dysentery and typhus reduced Napoleon's Grand Armée by an estimated 80,000 men. Between 1853 and 1856, about 2,000 Crimean War combatants died of wounds but more than 50,000 succumbed to disease. Similarly, in the Spanish-American War of 1898, 469 American troops were killed or mortally wounded in action, while nearly 2,000 fell ill and died. As armies streamed home in post-World War I Europe, a typhus epidemic resulted in 30 million infections and caused at least three million deaths in European Russia. During World War II, the case rate of dysentery in the U.S. armed forces rose from about 20,000 to over 500,000, of dengue infections from fewer than 700 to more than 84,000, and of malaria from about 8,000 to nearly 461,000 (Source: Entomological Society of America).
- <sup>vii</sup> Jenkins, P.R., Nannis, E., Johnson, A., et al., "STD behavioural interventions in the military: a study of short term efficiency," presented at the U.S. Centers for Disease Control and Prevention National STD Conference, Atlanta, GA, 1996. This study determined that, in addition to small-group learning interactions, the most effective means of inducing behaviour change in STI prevention are through individual risk assessments combined with situational practice sessions in risk reduction.
- <sup>viii</sup> Yeager, R., Hendrix, C.W., and Kingma, S.J., 2000, "International military human immunodeficiency virus/acquired immunodeficiency syndrome policies and programs: strengths and limitations in current practice," *Military Medicine*, 165:87-92.
- <sup>ix</sup> For example, Ruscavage, D. and Purnell, P., 1999, *HIV prevention and behaviour change in international military populations*. This training-of-trainers curriculum for international peacekeepers was developed and field-tested in Europe, Africa and Asia by the CMA for the UN Department of Peacekeeping Operations (DPKO), with support from the Henry M. Jackson Foundation for the Advancement of Military Medicine and the Ford Foundation. The full curriculum is available, with PowerPoint presentations, at [www.certi.org/cma](http://www.certi.org/cma) in English, French, Russian, Spanish, and Bahasa-Indonesian. Another more specialized training module was developed and field tested in Africa addressing *HIV prevention in conflict and crisis settings*, in collaboration with the USAID/Tulane University Complex Emergency Response and Transition Initiative (CERTI). English and French versions of yet another CMA module, *HIV prevention and behaviour change - the basics*, were produced and field tested in 2002 with the support of UNAIDS, specifically tailored to serve the needs of uniformed services personnel and their families at lower literacy levels. Both of these additional modules are available at [www.certi.org/cma](http://www.certi.org/cma).
- <sup>x</sup> Gould, loc. cit.
- <sup>xi</sup> Yeager, Hendrix, and Kingma, op. cit., pp. 88-90.
- <sup>xii</sup> There is an economic incentive for engaging troops as UN peacekeepers. Some defence ministries tend to rely on the financial proceeds of UN peacekeeping missions, which are currently remitted at a monthly rate of about USD

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1,000 per peacekeeper. UN Department of Peacekeeping Operations (DPKO), 2002, available at [www.un.org/depts/dpko/ques.htm%23shortages](http://www.un.org/depts/dpko/ques.htm%23shortages).

- <sup>xiii</sup>In the U.S. armed forces, which practice mandatory screening and periodic testing, HIV incidence and prevalence were stabilized at low levels by the mid-1990s. At this time, a study of the U.S. Army estimated that the average test cost per soldier was only USD\$2.52, mainly because of the Army's advanced testing and analytical capabilities and its infrequent need for confirmatory testing requiring the comparatively expensive Western blot test. Brown, A.E., Brundage, J.F., Tomlinson, J.P. et al., 1996, "The U.S. Army HIV testing program: the first decade," *Military Medicine*, 161:117-22.
- <sup>xiv</sup>Valdiserri, R.O., 1997, "HIV counselling and testing is evolving its role in HIV prevention," *AIDS Education and Prevention*, 9 (supplement 2):2-13.
- <sup>xv</sup>Yeager, Hendrix, and Kingma, op. cit., pp. 90-91.
- <sup>xvi</sup>Ibid., p. 90.
- <sup>xvii</sup>See Yeager, R., 2002, *HIV/AIDS: implications for development and security in Sub-Saharan Africa*. Rolle, Switzerland and Morgantown, WV: CMA, pp. 3-4, available at [www.certt.org/cma](http://www.certt.org/cma).
- <sup>xviii</sup>Yeager, Hendrix, and Kingma, op. cit., p. 92. See also Aiken, L.H., Smith, H.L., and Lake, E.T., 1997, "Using existing health care systems to respond to the AIDS epidemic: research and recommendations for Chile," *International Journal of Health Services*, 27:177-99.
- <sup>xix</sup>See Leonard, L., 2001, *An external evaluation of activities, accomplished events, and achievements of the Civil-Military Alliance to Combat HIV and AIDS (CMA), January 1995-March 2001*. Conducted on behalf of the Ford Foundation. Annex 1. Rolle, Switzerland and Morgantown, WV: CMA, pp. 27-28.
- <sup>xx</sup>Gould was among the first observers to note this elite hollowing-out phenomenon. Gould, op. cit., p. 83.
- <sup>xxi</sup>DPKO and CMA, 2000, *Aide mémoires: policy guidelines on HIV/AIDS prevention and control for UN military planners and commanders*. Prepared by R. Yeager, CMA. New York: DPKO.
- <sup>xxii</sup>*The Times of India News Service* and *The Times of India Cities: Pune*, October 28, 2002, cited in Gupta, R., 2002, *Communicable diseases, risky sex and alcohol and drug abuse in India: implications for health, development and security*. Los Alamos Report No. ALUR-02-5305. Los Alamos, NM: Los Alamos National Laboratory.
- <sup>xxiii</sup>Mudambo, Dr., 1999, "The effects of strenuous exercise on HIV positive individuals," unpublished paper.
- <sup>xxiv</sup>Adefolalu, A., 1999, "HIV/AIDS as an occupational hazard to soldiers - ECOMOG experience," paper presented at the 3<sup>rd</sup> All Africa Congress of Armed Forces and Police Medical Services, Pretoria, South Africa, October 1999. See also, Yeager, R., and Kingma, S., 2000, "A civil-military response to the HIV/AIDS epidemic in Nigeria," paper prepared for the U.S. Agency for International Development (USAID)/Washington. Rolle, Switzerland and Morgantown, WV: CMA.
- <sup>xxv</sup>Population Data Unit, PGDS/DOS, UNHCR, Geneva, June 2002, available at [www.unhcr.ch/](http://www.unhcr.ch/). At Uganda's 3<sup>rd</sup> National AIDS Conference, a UNHCR officer reported that women and girls in IDP camps consider soldiers to be their only source of livelihood. "Kulubya, S.C., 2002, *The Monitor*, Kampala, Uganda, October 29, 2002.
- <sup>xxvi</sup>UN Security Council, press release SC/6781, New York, January 10, 2000.
- <sup>xxvii</sup>In Africa and Asia, UN peacekeeping, observer, as support missions are currently deployed in the Central African Republic (MINURCA), Côte d'Ivoire (MINUCI), Ethiopia/Eritrea (UNMEE), Democratic Republic of Congo

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(MONUC), Sierra Leone (UNAMSIL), Western Sahara (MINURSO), East Timor (UNMISSET), and India/Pakistan (UNMOGIP). [www.un.org/Depts/dpko/dpko/home.shtml](http://www.un.org/Depts/dpko/dpko/home.shtml).

<sup>xxviii</sup> UN Security Council, 2000, *UN Security Council resolution 1308 (2000) on the responsibility of the Security Council in the maintenance of international peacekeeping and security: HIV/AIDS and international peacekeeping operations*, available at [www.un.org/docs/scinfo.htm](http://www.un.org/docs/scinfo.htm) and [www.reliefweb.int](http://www.reliefweb.int). From a recent investigation of the UNAMSIL peacekeeping mission to Sierra Leone, Bazergan produced important findings and recommendations in this regard. Bazergan, R., 2002, *HIV/AIDS & peacekeeping: a field study of the policies of the United Nations Mission in Sierra Leone*. London: The International Policy Institute, King's College London, University of London. See also Bazergan, R., 2003, "Intervention and intercourse: HIV/AIDS and peacekeepers," *Conflict, Security and Development*, 3:28-51.

<sup>xxix</sup> Herein lies a true impasse. DPKO policy guidelines strongly suggest that HIV-positive troops should not be deployed on peacekeeping missions, and stipulate that AIDS-symptomatic troops must not be deployed. Lacking the means to fulfill this mandate (and in spite of demands from the United States and host countries that UN peacekeepers must be HIV-negative), the DPKO "has been less restrictive in the application of these guidelines" and indeed, "information regarding HIV-positive individuals deployed has never been requested or volunteered on any mission . . . ." Bazergan, *HIV and peacekeeping*, op. cit., p. 14.

<sup>xxx</sup> CIA, 2000, *The global infectious disease threat and its implications for the United States*. NIE 99-17D. Washington: NIC.

<sup>xxxi</sup> The Director of Central Intelligence (DCI) Intelligence Strategic Warning Committee, 2002, *The next wave of HIV/AIDS: Nigeria, Ethiopia, Russia, India, and China*. ICA 2002-04-D. Washington: National Intelligence Council (NIC), and Schneider, M. and Moodie, M., 2002, *The destabilizing impacts of HIV/AIDS*. Washington: Center for Strategic and International Studies (CSIS).

<sup>xxxii</sup> Price-Smith, A. T., 2002, *Pretoria's shadow: the HIV/AIDS pandemic and national security in South Africa*. Health and Security Series, Special Report. Washington: Chemical and Biological Arms Control Institute (CBACI), p. 22.

<sup>xxxiii</sup> Mendelson Forman, J. and Carballo, M., 2002, "A policy critique of HIV/AIDS and demobilisation," *Conflict, Security and Development*, 1:73-92, p. 79. Focusing on Ethiopia, the CIA's most recent estimate on the security implications of HIV/AIDS supports this conclusion:

"... unlike conditions in other next-wave countries, war has significantly contributed to the spread of the disease in Ethiopia. Many soldiers contracted HIV/AIDS during the civil war in the 1980s by having contact with multiple sex partners. When the war ended in 1991, thousands of infected soldiers and prostitutes returned home, spreading HIV/AIDS to their villages and towns.

"Another surge of infections may be underway. Ethiopia has demobilized 15,000 soldiers over the last two years as the conflict with Eritrea has wound down. More troops will be sent home as the border dispute is settled.

"As soldiers demobilize, prostitutes - who have even higher rates of infection - will disperse around the country as well.

"Looking ahead, we expect 7 to 10 million Ethiopians [up from a December 2001 UNAIDS estimate of 2.1million] probably will be infected by 2010 because of the high current rate of adult prevalence, widespread poverty, low educational levels, and the government's limited capacity to respond more actively."

DCI Strategic Warning Committee, op. cit., p. 11.

<sup>xxxiv</sup> Mendelson Forman and Carballo, op. cit., p. 85.

<sup>xxxv</sup> See Yeager, R. and Kingma, S., 2000, "A civil-military response to the HIV/AIDS epidemic in Nigeria," paper prepared for the U.S. Agency for International Development (USAID)/Washington. Rolle, Switzerland and Morgantown, WV: CMA.

<sup>xxxvi</sup> Mendelson Forman and Carballo, op. cit., p. 83.