AIR COMMAND AND STAFF COLLEGE

AIR UNIVERSITY

TRIPLE THREAT: HIV/AIDS, TUBERCULOSIS, MALARIA, AND THE IMPACT ON MILITARY FORCES IN SUB-SAHARAN AFRICA

by

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Introduction

“New and reemerging infectious diseases will pose a rising global health threat and will complicate U.S. and global security over the next 20 years. These diseases will endanger U.S. citizens at home and abroad, threaten U.S. armed forces deployed overseas, and exacerbate social and political instability in key countries and regions in which the United States has significant interests.”  

Military forces in Sub-Saharan Africa, including peacekeepers, rank among the highest population groups most affected by sexually transmitted infections (STIs), including HIV.¹ These individuals are called upon to protect national security from threats such as terrorism, crime, internal and external conflict; serving at home and across national borders. For armed forces personnel, several key factors make them vulnerable to STIs: the work environment, mobility, and age. These risk factors expose all the population to HIV/AIDS infection, military and civilians. According to the Joint UN Program on AIDS (UNAIDS), soldiers are two to five times more likely to contract STIs than the civilian population. In fact, during conflict, the rate of STI infection can increase significantly.² In some African countries, the rates of HIV infection among the military are estimated to be as high as 50 to 60 percent.³

HIV/AIDS in Sub-Saharan Africa represents an obvious danger to security; if left unchecked, could compromise military effectiveness, which could then lead to instability within the region. In fact, reports have shown that “the HIV/AIDS pandemic has already begun to diminish the effectiveness of many of Africa’s armed forces.”⁴

Military organizations, however, possess the most important assets (discipline, hierarchy, efficiency, and youth) that can be exploited to raise awareness regarding the threat of HIV/AIDS and military readiness⁵
National Security Threat

National security is traditionally defined as the protection of a state’s territory, population, and interests against external threats. Today, threats to national and international peace and security in Sub-Saharan Africa have essentially changed. Terrorism, organized crime, global environmental degradation, and disease are examples of security threats that have emerged slowly, sometimes without cause and effect being apparent. One such threat, crossing national boundaries is Human Immunodeficiency Virus (HIV)/Acquired Immunodeficiency Syndrome (AIDS) pandemic. Unlike other massive pandemics – 1918 Influenza - the HIV/AIDS pandemic is slowly moving across Sub-Saharan Africa causing destabilization, particularly in southern Africa.
Further complicating the security threat is the emergence of other diseases: Malaria and Tuberculosis. The concern for countries in Sub-Saharan Africa is the impact these opportunistic infections will have on armed forces during combat and in training. For countries that are already politically or socially unstable, the perceptions of a weakened military could make them susceptible to internal conflict or external attack.

**HIV/AIDS Epidemiology**

For decades, HIV/AIDS has existed as an epidemiological challenge on the continent of Africa. Human Immunodeficiency Virus (HIV) is a retrovirus that causes the disease Acquired Immunodeficiency Syndrome (AIDS). Unlike most viruses, HIV attacks the immune system, destroying the T-Cell or CD4 cells that the immune system uses to fight disease. Acquired Immunodeficiency Syndrome (AIDS) is the final stage of the HIV infection. Having AIDS means that the virus has weakened the immune system to a point where the body has a difficult time fighting infections. As a fatal infection, HIV is acquired by contact with the blood or body fluids of an infected person. The transmission rate of the disease through sexual contact ranges from 1 to 3 percent. Sexually transmitted diseases increase the risk of contracting HIV. Additionally, HIV positive individuals are also susceptible to opportunistic and infectious diseases, especially TB and malaria.\(^9\)

In 1994, AIDS was first acknowledged as a threat to US national security. During this period, Undersecretary of State for Global Affairs, Timothy Worth identified its risk to state stability in countries seriously affected by the disease.\(^10\) According to epidemiology data by UNAIDS, the extensive spread of HIV in Sub-Saharan Africa began in the late 1970’s. Through the early 1980’s, HIV had reached epidemic levels. The virus had gradually spread from West Africa, north of the Sahara then south; South Africa was the hardest hit by the epidemic.\(^11\)
By 1993 an estimated 9 million people living in Sub-Saharan Africa were infected with HIV out of a global 14 million people. In 1998, this region was home to 70% of all people who were infected with HIV, with an estimate one in seven of these new infections occurring in South Africa. South Africa, despite being the struck by the epidemic later than other countries, is now the hardest hit region, with prevalence rates above 35 percent in Botswana and Swaziland and above 20 percent in four countries (Figure 1.2).


Sub-Saharan Africa remains the region most heavily affected by HIV/AIDS, accounting for over two-thirds (64%) of all people living with HIV worldwide. According to data from UNAIDS, an estimated 1.9 million [1.6 million – 2.2 million] people were newly infected with HIV in Sub-Saharan Africa in 2008, bringing the number of people living with HIV to 22.4 million [20.8 million-24.1 million]. These alarming trends reveal the magnitude of the pandemic on Sub-Sahara’s social, economic, and political structures.
## Sub-Saharan Africa

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of people living with HIV</strong></td>
<td>22.4 million [20.8 million–24.1 million]</td>
<td>19.7 million [18.3 million–21.2 million]</td>
</tr>
<tr>
<td><strong>Number of new infections</strong></td>
<td>1.9 million [1.6 million–2.2 million]</td>
<td>2.3 million [2.0 million–2.5 million]</td>
</tr>
<tr>
<td><strong>Number of children newly infected</strong></td>
<td>390 000 [210 000–570 000]</td>
<td>460 000 [260 000–640 000]</td>
</tr>
<tr>
<td><strong>Number of AIDS-related deaths</strong></td>
<td>1.4 million [1.1 million–1.7 million]</td>
<td>1.4 million [1.2 million–1.7 million]</td>
</tr>
</tbody>
</table>

**Source:** UNAIDS 2009

### Military Forces

An additional factor to consider is the mounting impact of HIV/AIDS on military forces in sub-Saharan Africa. This region, in the past several years, has witnessed massive amounts of conflicts: internal and across national borders. These conflicts have caused economic and social dislocation, which in turn has led to force movement of refugees, and internally displaced individuals across the region.\(^{15}\) The loss of livelihoods, separation of families, collapse of health and education services and dramatic increase in rape and prostitution are factors that have increased the risk of HIV/AIDS transmission within the conflict zone.\(^ {16}\) Soldiers have always been considered a high-risk population for STIs. Multiple risk factors place soldiers at risk for contracting HIV/AIDS: socioeconomic and political condition of the state, internal/external
conflict, deployments, rape, cultural practices, multiple sex partners, and the presence of other STIs (syphilis, gonorrhea).

In 1998, UNAIDS estimated that sexually transmitted disease rates among armed forces were generally 2 to 5 times higher than that of the civilian population. During operation deployment in conflict areas, the infection rates can rise as much as 50 times higher than the civilian population. U.S. National Intelligence Council in its report, *The Global Infectious Disease Threat*, estimates, “Sub-Saharan Africa will remain the region most affected by the global infectious disease phenomenon; accounting for nearly one-half of infectious disease-caused deaths worldwide.”

<table>
<thead>
<tr>
<th>Country</th>
<th>Estimated HIV/AIDS Prevalence Rates in Military</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>50 percent</td>
</tr>
<tr>
<td>Botswana</td>
<td>33 percent</td>
</tr>
<tr>
<td>Lesotho</td>
<td>40 percent</td>
</tr>
<tr>
<td>Malawi</td>
<td>50 percent</td>
</tr>
<tr>
<td>Namibia</td>
<td>16 percent</td>
</tr>
<tr>
<td>South Africa</td>
<td>15 to 20 percent</td>
</tr>
<tr>
<td>Swaziland</td>
<td>48 percent</td>
</tr>
<tr>
<td>Zambia</td>
<td>60 percent</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>55 percent</td>
</tr>
</tbody>
</table>

Sub-Saharan Africa’s, HIV/AIDS prevalence and mortality rates are greatest among the most productive population: 15-49 year olds.\(^{19}\)

![Adult (15–49) HIV prevalence (%)](image)

**Sub-Saharan Africa estimates 1990–2008**

This age bracket, according to Elbe, represents the bulk of Africa’s future labor and conscription pool for military recruitment.\(^{20}\) Sagala also argues that 15-49 year old age bracket includes a major segment of the most experienced military personnel: those in the ranks of Lt to Lt Colonel in the officer ranks and Sgt to Warrant Officer in the other ranks.\(^{21}\) The loss of these highly skilled soldiers could devastate the combat readiness of African militaries; diminishing its ability to protect national defense, deploy troops and carry out training missions. These factors pose a range of challenges for military organizations when they perform their missions – protecting national security, responding to internal/externally conflicts, peacekeeping operations and deterring terrorism.

African armies and UN peacekeepers are grappling with how to halt the spread of AIDS within their ranks.

*Photo: AIM / Santos Finiosse*

Triple Burden of Disease: HIV, TB, and Malaria

The last decade has seen a growing resurgence of malaria and tuberculosis among individuals with HIV/AIDS in the world’s poorest and vulnerable countries. According to the World Health Organization, HIV/AIDS, malaria, and TB account for more than 5 million deaths each year. In some countries in Sub-Saharan Africa, it accounts for more than half of all deaths.

What is the impact of these opportunistic infections on the armed forces while they are in combat or in training? Co-infections of HIV/AIDS, malaria and TB rates in Sub-Saharan Africa, reduces its most valuable resource: people. In exploring the link between HIV/AIDS on military effectiveness, Sagala argues that in Sub-Saharan Africa, human resources play a “greater role in developing military capabilities than material resources.” He goes on to suggest that military organizations, as anchors of national security and nation building, are indispensable in national
and international operations: peacekeeping missions, humanitarian relief efforts, border protections, and deterring internal/external conflict. Today, in Sub-Saharan Africa, HIV/AIDS together with other opportunistic infections, TB and Malaria, pose a significant threat to military effectiveness.

**HIV/TB: Dual Epidemic**

Mycobacterium Tuberculosis (TB), a bacterial disease is the second leading cause of death in the world. The disease is spread through the air, affects the tissues and organs of the body, particularly the lungs. According to UNAIDS, TB is the most common opportunistic infection that occurs in HIV infected people; most deaths occur in people living with AIDS.

In 2007, the sub-Saharan region accounted for 70% of all HIV-TB co-infections, and nearly 2 million AIDS deaths. According to reports from the World Health Organization (WHO), the co-epidemic of HIV/TB is rapidly spreading in sub-Saharan Africa and causing serious life threatening illness, even death. In 2008, an estimated 1.8 million people died of TB worldwide; of these, at least 500,000 were infected with HIV. Escalating TB rates over the past decade in sub-Sahara Africa is mainly due to the HIV/AIDS pandemic. Unless these two diseases are addressed jointly, HIV/TB epidemic will continue to undermine sub-Saharan Africa’s already weak healthcare system.

### Estimated TB incidence, prevalence and mortality, 2008

<table>
<thead>
<tr>
<th>WHO region</th>
<th>Incidence</th>
<th>Prevalence</th>
<th>Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>no. in thousands</td>
<td>% of global total</td>
<td>rate per 100 000 pop</td>
</tr>
<tr>
<td>Africa</td>
<td>2 828</td>
<td>30%</td>
<td>351</td>
</tr>
<tr>
<td>The Americas</td>
<td>282</td>
<td>3%</td>
<td>31</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>675</td>
<td>7%</td>
<td>115</td>
</tr>
<tr>
<td>Europe</td>
<td>425</td>
<td>5%</td>
<td>48</td>
</tr>
<tr>
<td>South-East Asia</td>
<td>3 213</td>
<td>34%</td>
<td>183</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>1 946</td>
<td>21%</td>
<td>109</td>
</tr>
<tr>
<td>Global total</td>
<td>9 369</td>
<td>100%</td>
<td>139</td>
</tr>
</tbody>
</table>

1. Incidence is the number of new cases arising during a defined period.
2. Prevalence is the number of cases (new and previously occurring) that exists at a given point in time.
3. Pop indicates population.
**HIV/Malaria: Dual Epidemic**

Malaria is emerging as a significant factor in the progression of the HIV/AIDS pandemic in sub-Saharan Africa. Malaria, a vector borne disease, is caused by a single cell parasite of the genus Plasmodium that is spread to humans by mosquitoes. Four different species cause the disease; however, Plasmodium *falciparum* is the most deadly. More than 1 million malaria deaths occur each year; 90% occur in Africa. Together, HIV/AIDS and malaria cause more than 4 million deaths per year. Similar to the HIV/TB epidemic, the HIV/Malaria epidemic could potentially challenge sub-Saharan’s healthcare system as well.

Dual burden seen especially in: Southern Africa (Zimbabwe, Zambia, Malawi, Mozambique, Tanzania), West central Africa (Nigeria, Cameroon, Central African Republic).

Collaboration and coordination of resources among regional, national, and international partners are vital to ensuring people have access to appropriate HIV services and treatment programs for coinfected individuals. Military leaders should be concerned about the rate of co-infections of HIV/AIDS, malaria and tuberculosis among troops, particularly as these individuals are highly mobile and could spread the diseases. Dual infections of HIV/AIDS and Malaria; HIV/AIDS and Tuberculosis, pose great challenges to stability and security in Sub-Saharan Africa.

Source: Malaria and coinfections: Challenges for disease control in Sub-Saharan Africa
Benson Omweri Nyanchongi- Presentation at UNICAM, Camerio, Italy 2008.
HIV/AIDS, Sub-Saharan Africa, and AFRICOM

In October 2007, United States Military established U.S. Africa Command (AFRICOM), a Unified Combatant Command, to support Africa in maintaining stability and security on the continent. An important issue facing AFRICOM is the impact of HIV/AIDS on the effectiveness of southern African military and their ability to conduct combat, non-combat operations and participate in military training exercises.

Although the data presented in this paper are estimates, the information raises concerns about the impact of HIV/AIDS on operational efficiency of many African armies. For years, researchers have examined the link between HIV/AIDS and its affect on militaries, especially the militaries of sub-Saharan Africa. In fact, an analysis by the South African Institute of Strategic Studies pointed out “unless the spread of HIV/AIDS among African armies is stopped, it is possible that many countries, including sub-Saharan Africa will be unable to conduct peacekeeping operations.”

Currently, AFRICOM’s strategy to counter the spread of HIV/AIDS pandemic includes support of African military’s HIV/AIDS Prevention Program through its Partner Military HIV/AIDS Program (PMHAP). PMHAP is part of U.S. DoD HIV/AIDS Prevention Program (DHAPP), a segment of the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR). PEPFAR, a healthcare initiative aimed at combating regional and global HIV/AIDS. Additionally, the PEPFAR initiative helps to improve readiness levels of African military forces and increases their capacity conduct military and peacekeeping operations.

Although these programs have been successful in countering the spread of HIV/AIDS, these initiatives often fail to comprehend the realities of rural environment affecting the delivery of HIV/AIDS services: culture, sustainability, logistics, and service delivery.
The United Nations Joint Programme on HIV/AIDS (UNAIDS) and the World Health Organization (WHO) estimate that in low and middle class countries, only 10% of individuals who need HIV counseling and testing have access to these services. Testing and counseling are the basis of a robust and comprehensive prevention program. In addition, many of these programs fail to reach the capacity needed to carry out effective prevention and treatment program. The greatest challenge for African militaries: the ability to conduct HIV testing on their soldiers and collect data on the number infected with HIV/AIDS. Many of these militaries cannot afford to test their soldiers nor can they provide the appropriate counseling that goes along with testing.

The UNAIDS conducted a survey of HIV testing policies of 64 countries participating in peacekeeping operations: 9 out of 44 countries allow recruits to be HIV positive into the military; 39 of 49 countries do either or both pre and post deployment HIV testing; 11 of 34 countries deploy troops known to be HIV positive. Reports have shown that military forces perceive themselves to be at no risk of contracting HIV. In fact, the opposite is true. Military soldiers often have significantly higher rate of HIV/AIDS than the civilian population. Risk factors: soldiers range in age from 15 to 49 that places them in an age demographic that is sexually active; often away from home for extended periods of time; engage in risky sexual behavior; and added opportunity for sexual contact with prostitutes and the local population, increases their risk of contracting the HIV virus.

With its unique mission, AFRICOM must consider the impact of the HIV/AIDS pandemic on military operations and force readiness. The pandemic poses a threat to force protection, combat operations and training as well as peacekeeping operations; factors that are critical to security and stability in the region.
The command should strengthen its HIV/AIDS prevention strategy, collaborate with major African organizations such as the African Union, USAID, UN to institute a comprehensive testing, education, prevention, care and support program aimed at encouraging voluntary testing and behavioral change among military personnel.

A key variable linked to the success of an HIV/AIDS education, prevention, care and support program within the military is the commitment of senior military leaders. Many African militaries have established training programs for their senior military officers. In fact, Senegal senior military officers receive training on HIV/AIDS from military doctors and in turn educate and train troops under their command on HIV/AIDS. Other African military organizations have incorporated HIV/AIDS education and prevention programs into their training. For example, Kenya’s military initiated an HIV/AIDS prevention and education program, which helped to lower the HIV prevalence rate of its soldiers from 14 percent in 2002 to 9.3 percent in 2005.

While posing a risk of transmitting HIV, the military environment has proven to be a unique area to provide HIV/AIDS prevention and education for its members; soldiers are highly disciplined and most work in an organized setting. Take into consideration two factors that enhance the effectiveness of HIV/AIDS education within the military. First is leadership (Command and Control). The hierarchy structure seen in the military provides an optimum way to transfer information and influence behavior. Because of strong ties associated with the hierarchy structure, soldiers are more likely to make behavioral changes, which are critical to a strong HIV/AIDS education, prevention, care and support program. Secondly is the military member; these individuals can serve as excellent change agents for a comprehensive HIV/AIDS prevention program. If given the right tools and knowledge, they can be very effective in raising the awareness of HIV/AIDS among the ranks as well as the pandemic’s threat to their readiness.
and ability to carry out the mission. Studies have shown that commitment from the highest level of command, coupled with comprehensive action, can reduce the spread of HIV within military forces. The ultimate goal is behavioral change.

The risk of HIV/AIDS causing instability in sub-Saharan Africa calls for a concerted effort to initiate a strong program directed towards behavioral change to reduce the surge of HIV transmission within the African military forces.

In 2001, the United Nations published a case study on Eritrea and its HIV/AIDS prevention program aimed at halting the transmission of HIV/AIDS among their forces pre and post-conflict with Ethiopia. The UN Mission in Ethiopia and Eritrea (UNMEE) organized a two-week course for HIV/AIDS educators. These individuals served in the Ethiopian National Defence Force. UNMEE’s goal for the educators: develop a five-year strategic plan for HIV/AIDS control in the armed forces. The organization established a task force on HIV/AIDS to develop prevention and control activities to use in locations where the UN sent peacekeeping forces. Eritrea developed a strategy based on military-to-military training: Training of Trainers (ToT) program. (ToT) is based on the principle of service members (trainer) training other members (peer leaders) on HIV/AIDS prevention and treatment strategies. Peer leaders in turn provided comprehensive HIV/AID training to fellow soldiers serving in their units.

The initial trainers were medical staff who trained peer leaders. Peer leaders were selected from among the division or battalion at different level within the command. The strategy required peers to embrace new information, attitudes, and behavior aimed at change their minds about their sexual behavior and their relationship with the population. The success of the program was based on several factors: peers were in a position to influence change in the organization; they had the trust and support of senior leaders; they were supported by and supportive to other ToT
peers. Eritrea’s ToT training program required a Peer Coordinator to assist in monitoring the group of peer leaders and conducting weekly meeting to discuss issues surrounding HIV/AIDS. Eritrea Defence Force included cultural sensitivity into the training curriculum as well. In this program, trainers identified the key to behavioral change: understanding culture and its influence of behavior. By 2001, Eritrea Defense Force had trained 36 trainers (medical personnel), more than 300 peer leaders, and 100 peer coordinators (34 per division). ToT was successful in spreading information on HIV/AIDS, which reached a significant number of Eritrea’s defense forces. This program enlisted the help of Eritrea’s troops; made them activists and advocates in the effort to halt the spread of HIV/AIDS. Peer leaders were held accountable for their actions, especially as it related to the way they handled relationships at home and with the population in their mission area. Eritrea Defense Force (EDF) Task Force on HIV/AIDS provided overall guidance and monitoring of Eritrea’s ToT program. This task force was a critical bridge for demobilized soldiers to ensure they were able to continue HIV/AIDS prevention activities upon their return to their perspective communities.

As a major player in protecting the strategic interest of the United States in Africa, AFRICOM should be concerned with military effectiveness of African militaries, especially in sub-Saharan Africa region. If AFRICOM fails to take an aggressive approach to dealing with HIV transmission within the military forces in Sub-Saharan Africa, the command will ultimately have to deal with AIDS. The quote at the beginning of this paper highlights the effect of disease if military leadership chooses to ignore the importance of HIV prevention.
Recommend Solutions

The following are recommended strategies AFRICOM should consider in its joint effort to assist African militaries combat the HIV/AIDS pandemic.

1. **Develop HIV/AIDS Task Force** – First, the task force should assist in strengthen cooperative efforts between the USG, Sub-Saharan African countries and their militaries, international organizations and local communities to combat HIV/AIDS in the military. This will entail collaborating with organizations such as the Department of State, Global AIDS Program (GAP), Joint United Nations Programme on HIV/AIDS, US Agency for International Development, and other nongovernmental organizations to expand HIV/AIDS education, prevention, and care and support programs for military personnel. Next, organize and establish pre-mission surveys to areas where military training exercises and combat, non-combat operations will be conducted to evaluate the impact of HIV/AIDS on operations. Lastly, guide and monitor HIV/AIDS education and training programs of host countries in Sub-Saharan Africa and their militaries.

2. **Command Support** – Leadership is essential in the battle against HIV/AIDS in the military. The real effort needed to reduce HIV transmission within the ranks comes as a result of change in the attitudes of soldiers that lead to unsafe sexual behavior. The most effective ally in changing these attitudes is the commander. Senior commanders should present HIV/AIDS education and prevention as part of the military mission: to save the lives of its troops, to ensure combat readiness, and to protect national security. Senior commanders must make HIV/AIDS education, prevention, care, and support programs a priority.
• **Education and Prevention Program** - Training of Trainer (ToT) Workshops facilitated by Peer Education Trainers (PET) to conduct HIV/AIDS prevention training to Peer Educators (PE) selected at the battalion level. ToT, designed to strengthen HIV-related life skills for military personnel, via well-managed peer structures, will help soldiers avoid STI’s and the possibility contracting HIV during deployment by providing them with the knowledge and skills to make informed and healthy choices concerning their sexual behavior.  

Elements of ToT Program

- Core Trainers (CTs) selected and taught at the national level;
- CTs train Peer Educator Trainers (PETs);
- PETs train Peer Educators (PEs); and
- PEs conduct multiple sessions to educate and influence their fellow soldiers in the same unit/group using informal yet comprehensive risk reduction communication strategies in order to change risk behaviors.

Encourage the Ministry of National Defense to develop a long-term strategy to integrate HIV/AIDS education into existing military training activities, which will enhance the Peer Education Program and contribute to its sustainability. 
Peer educators from the Malian military received HIV/AIDS prevention training.

Source: Naval Health Research Center/ DoD HIV/AIDS Prevention Program- Media

Peer educators assessed HIV/AIDS knowledge of Zambian Defense Force personnel following a presentation by a drama troop.

Source: Naval Health Research Center/ DoD HIV/AIDS Prevention Program- Media
• **Voluntary Counseling and Testing (VCT)** - A successful HIV/AIDS education, prevention, care, and support program is built on the belief that people who know their HIV status are willing to change their behavior. According to the World Health Organization (WHO), the VCT strategy has proven to be effective in Uganda, Senegal and Kenya’s HIV/AIDS education and prevention programs. HIV infection rates are generally higher among men serving in the military than those of similar age in the civilian community. These individuals are at high risk of transmitting HIV to their partners at home and in host countries while deployed. Therefore, an effective strategy, VCT, is recommended for military personnel deployed/participating in combat and non-combat operations, as well as military training exercises. VCT, a vital part of an HIV education, prevention, and care program and should be promoted by the militaries of sub-Saharan Africa.

**Elements of VCT**

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**Voluntary counselling and testing (VCT)**

Voluntary counselling and testing (VCT) is founded on the principle that an HIV-positive diagnosis can lead to significant psychological problems, which may be compounded by rejection and discrimination if others learn of the diagnosis. It is therefore essential that testing be accompanied by all of the following:

- Pre-test counselling to enable people to make an informed choice about whether or not to take the test;
- Post-test counselling to help those whose result is positive to cope and live positively, and to advise those whose result is negative on how to prevent infection;
- Informed consent to ensure that the person agrees to be tested and has a clear understanding of its implications; and
- Confidentiality to guarantee that no information about a person is passed on to anyone without that person's permission.
Conclusion

Regional combat and non-combat operations pose a unique challenge to the United States and Africa. In sub-Saharan Africa, one of these challenges is the battle against HIV/AIDS. The HIV/AIDS pandemic presents a clear and present danger to the region’s social, economic, and political structures; most important to the military personnel who have been entrusted to protect national security, deter internal and external aggressors, counter terrorism, and protect territorial borders. 45

This paper outlined a set of initiatives to minimize the potential impact of HIV/AIDS, co-infections of TB and Malaria on African militaries.

Due to the nature of combat and non-combat operations in Africa, AFRICOM should take the lead and commit resources to training personnel in the host country’s defence force on the Training of Trainer (ToT) strategy. Secondly, the command should establish a joint task force to survey the impact of the pandemic on current and future operations. Lastly, involve the military commanders; ensure they understand the significance of their role in an HIV/AIDS education and prevention program for their troops. Having an appropriate program in place, which offers medical, psychological, and social support, creates a better environment for African military forces to carry out their mission.

U.S. leadership through AFRICOM can make a crucial difference in the fight against HIV/AIDS at many levels and on many fronts.
Appendix A

STDS AS A MARKER FOR HIV

STDs are linked to HIV in a number of ways. First, HIV is itself a sexually transmitted disease: it is passed on in exactly the same way that most STDs are – through penetrative sex with an infected partner when a condom is not being used. STDs are indicators of the same sexual behavior that transmits HIV, and therefore they can serve as indirect indicators of HIV. Although there are 20 diseases that normally fall under the heading of “STD,” the ones usually used as markers are gonorrhea, syphilis, chlamydia, chancroid, and trichomoniasis, each of which can be prevented by using condoms and barriers.

Second, most militaries already have information on STD infections. The five principal STDs produce symptoms in most men, which prompt them to seek medical treatment and unlinked data from these consultations can be gathered into statistical form. In this way, STD data are used as surrogate indicators or markers for HIV.

For hundreds of years, militaries have been addressing venereal diseases, and keeping records. While it is often true that a military might not have reliable current figures due to problems in record keeping and central reporting, it will be much easier to make improvements in these areas than to conduct force-wide random-sample surveys for HIV.

Third, in countries where there is a longer-established epidemic, STD data can be used to generate estimates of HIV rates.

Fourth, where HIV is not heavily present in the population, both a high rate and a rising rate of STDs are early warning signals that an HIV epidemic is coming. A high or rising rate means that the population has a habit of engaging in unprotected sex. Once HIV prevalence reaches a certain point, there will be an explosion of new cases, and, based on historical experience, the point can be reached in just a few years.

Source: Civil-Military Alliance to Combat HIV and AIDS, 1999
Notes

3 Heinecken, “Facing A Merciless Enemy: HIV/AIDS and the South African Armed Forces, pp. 281-300
4 Elbe, HIV/AIDS and the Changing Landscape of War in Africa, pp. 159-177.
5 Ibid., 2
7 Ibid., 3
8 Ibid., 7
9 National Intelligence Council Report 2002
12 Ibid., 6
15 Ibid., 4
16 Ibid., 2
17 Fleshman, AIDS prevention in the ranks. UN targets peacekeeper, combatants in war against the disease, pp. 16-18.
18 Ibid., 1
19 Ibid., 13
20 Ibid., 4
22 Sagala., 20
25 Ibid., 12


Ibid., 10

Ibid., 21

Elbe, *HIV/AIDS and the Changing Landscape of War in Africa*, pp. 159-177.

Sagala., 20

Sagala., 20

Sagala., 20

Ibid., 2


Ibid., 2

Ibid., 2


Civil-Military Alliance to Combat HIV and AIDS, pp. 63.


Ibid., 7
Bibliography


UNAIDS Series 2003; HIV/AIDS prevention and care among armed forces and UN peacekeeper: The Case of Eritrea
http://data.unaids.org

World Health Organization. The roll back malaria partnership. 
http://rbm.who.int/publications.html.