

ENGL 114: Acting Globally
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By submitting this essay, I attest that it is my own work, completed in accordance with University regulations. —Xiuqi Cao

Treat the Problem, Not the Disease: The Necessary Shift from Vertical Programs to Horizontal Programs for Treating HIV/AIDS in sub-Saharan Africa

by Xiuqi Cao

Acquired immune deficiency syndrome (AIDS), a relatively young disease, was first diagnosed in the early 1980s. Since then, it has become a global pandemic and the fifth leading cause of death worldwide, affecting 35.3 million people currently and resulting in 1.6 million deaths in 2012 (“AIDS by the numbers” 4). Although access to antiretroviral therapy (ART), the most effective treatment for combatting the progression of AIDS, has increased 40-fold since 2002 (“AIDS by the numbers” 2), there were still 2.3 million new human immunodeficiency virus (HIV) infections in 2012 (“AIDS by the numbers” 4). Even more striking, 95% of all new HIV infections a year occur in low- and middle-income countries. Many of these new infections occur in sub-Saharan Africa, which consists of over 66% of all people living with HIV in the world (“HIV/AIDS”). Without a doubt, HIV/AIDS is the largest malady in sub-Saharan Africa and urgently needs to be addressed. But, are current methods optimal for combatting HIV/AIDS?

For the past four decades, international non-governmental organizations (NGOs) such as the World Health Organization (WHO) and the Joint United Nations Program on HIV/AIDS (UNAIDS) have led campaigns in sub-Saharan Africa to distribute HIV/AIDS drugs, train HIV/AIDS staff in clinics, and establish infrastructure such as health centers and laboratories for specialized HIV/AIDS treatment. While these campaigns have reduced mortality rates due to HIV/AIDS, they are costly, inefficient, and unsustainable. Furthermore, they siphon funding and resources away from a developing region’s primary health care, the chief source for basic health

treatment and immunizations against prevalent communicable diseases. Nevertheless, donors of foreign aid continue to contribute billions of dollars to eradicating HIV/AIDS. Donors and NGOs need to be convinced to approach the HIV/AIDS problem not as a problem of access to treatment, but rather, as a problem of a lack of prevention and basic care. Funds need to be redirected towards strengthening primary health care in sub-Saharan Africa in order to barricade the developing nations from HIV/AIDS. In this essay, I will first define the current role and structure of disease-specific programs. Then, I will analyze the recent WHO “3 by 5” initiative against HIV/AIDS to demonstrate why disease-specific programs are insufficient in combatting the HIV/AIDS pandemic in sub-Saharan Africa. Finally, I will explain how strengthening primary health care can efficiently combat HIV/AIDS and why donors should fund these programs over disease-specific programs.

Donors fund disease-specific programs, also known as vertical programs, because the approach and structure of these programs suggest the most efficient method in conducting large scale disease treatment. They have invested trillions of dollars of aid into vertical programs, which maintain the paradigm of combatting HIV/AIDS in sub-Saharan Africa. The popularity for vertical programs interestingly arose from the WHO’s Alma-Ata Declaration in 1978, which urged the establishment of strong primary health care globally by the year 2000. Many critics of the declaration believed its goals were too broad, ranging from “immunization against the major infectious diseases...appropriate treatment of common diseases and injuries; and provision of essential drugs” to “promotion...of proper nutrition...supply of safe water and basic sanitation, [and] maternal and child health care” (“Declaration of Alma-Ata,” VII). Improving each of the variety of health sectors seemed unfeasible. Rather, many critics advocated vertical programs that deal with one disease at a time. Vertical programs seemed optimal to combat singular

diseases because of its multi-leveled organization. For example, the structure of the WHO's "3 by 5" initiative against HIV/AIDS in 2003 was divided into three levels, each with a unique role to propel the initiative. Leading the initiative was the program manager who was assisted by various directors in charge of procuring funds and resources such as ART drugs as well as monitoring the HIV/AIDS pandemic. These directors worked with Regional Offices such as the African Regional Office to plan the implementation of ART programs within countries of the region. The Regional Office allocated the funds and resources to Country Offices which implemented ART programs in clinics by training health workers and administering ART to HIV/AIDS patients. By allocating responsibilities by the strengths of each level, the programs should have performed large scale disease treatment with great efficiency. This distribution of efforts seemed promising in tackling the HIV/AIDS pandemic and attracted donors, the majority of whom were "concerned with getting a visible return on investment" ("Primary Care" 13) and "demanded 'big actions' to solve 'big problems'" (Easterly 5).

Although the structure of vertical programs seemed promising in proposals, it hinders the extent and efficiency of the programs in practice because there is a lack of planning and communication among the levels. William Easterly, an economist with a focus on foreign aid at New York University, believes that bureaucratic aid programs fail to effectively implement plans because "having multiple agents creates the obvious problems of collective action and free riders. If everyone is to blame when something goes wrong, then nobody is to blame" (10). Within large aid programs, bureaucratic setbacks seem small, but they quickly accumulate, inhibiting the program's efficiency. In the "3 by 5" initiative, the program manager failed to finalize major funding decisions before actuating the program. This lack of preparation significantly delayed the implementation of ART programs. Also, by the end of the initiative, the

“overall disbursement rate ...in the Regional Office for Africa was only 47%” despite its priority in the program (Nemes et al. 66). The lack of funding, resources (The Lancet 475), and leadership (Nemes et al. 61) at the Regional Office for Africa translated to “[insufficient] preparation, strategic orientation or planned follow-up” for and conflicting demands on Country Offices (Nemes et al. 39). Altogether, these bureaucratic setbacks caused the initiative to achieve less than 50% of its goal to treat three million people with \$5.5 billion in three years. Only 1,330,000 people of all selected regions received ART at the end of the program. The results were even worse in sub-Saharan Africa, as only 810,000 of the 2,200,000 targeted people received ART by the end of the initiative (Nemes et al. 12). Despite observing these setbacks, the WHO “have not yet taken responsibility to adequately address” these aforementioned faults (Nemes et al. 61) and most likely, as Easterly explained, they never will. In vertical programs of this magnitude, no one is truly accountable for their actions and as a result, money is squandered and many people do not receive aid.

In addition to inefficient structure, any positive results of targeting HIV/AIDS with vertical programs are transient because ART costs are unaffordable after the termination of the program. Elizabeth Lule, the Population and Reproductive Health Advisor for the World Bank, explains that vertical programs focus on “short term results rather than a long-term perspective,” which can cause “major disruptions” without a “clear exit strategy” (10-11). Vertical programs are limited in time and funding, and without continued subsidy, the costs of disease treatment return to unaffordable rates. Without affordable access to treatment, many patients will relapse, especially in the case of HIV/AIDS, which demands continuous treatment. During the “3 by 5” initiative, the WHO subsidized ART to an average of \$268 per patient per year in 2005 (“Progress” 8) from the typical rate of \$500-\$900 (Morin). As the gross national income per

capita for most of Sub-Saharan Africa ranged from under \$250 to \$765 (“Africa’s Income”), unsubsidized ART costs over 65% of the average income in Sub-Saharan Africa. Even though unsubsidized ART is unaffordable, patients receive limited aid from the government. The average amount of aid per person was only \$94.70 in sub-Saharan Africa in 2011 (“Health Expenditure Per Capita”) and it has not improved since. Many patients had no choice but to end their ART once the “3 by 5” initiative ended, but there is a strong consensus among doctors that ART needs to be continuous. Interruption of ART leads to “viral rebound” (“Discontinuation or Interruption”) and increases the risk of death from opportunistic diseases (The Strategies 2293-2294). This risk of HIV/AIDS relapse compromises any positive results from the “3 by 5” initiative and the state of HIV/AIDS slowly regresses back to its original condition. Vertical programs lack both the foresight and sustainable treatment necessary for treating HIV/AIDS in sub-Saharan Africa.

The greatest drawback of vertical programs is that they divert priorities and resources away from primary health care. Even though HIV/AIDS is the greatest malady in sub-Saharan Africa, other prominent diseases and health concerns are present and threaten the everyday lives of the people of sub-Saharan Africa. Primary health care is the only protection from these threats, so weakening it could put the entire population in a health crisis. Melissa Lee, of the Department of Political Science at Stanford University, explains that vertical programs “distort recipient country priorities...promote brain drain, and weaken state capacity more generally” (26). While vertical programs may temporarily reduce HIV/AIDS infections and deaths, they produce a larger health problem by weakening primary health care and jeopardizing the general health of the community. For example, many vertical programs require full commitment from developing nations before distributing funds. To demonstrate commitment, nations can invest

money into treatment for a certain disease. This however shifts funds away from primary health care. The “3 by 5” initiative required countries highly burdened with HIV/AIDS to give high priority to combatting HIV/AIDS through financial contributions. For the initiative, Senegal and Burkina Faso reallocated money from primary health care and increased funding for HIV/AIDS treatment between 2003 and 2004 from \$12 million to \$19 million and \$24 million to \$35 million respectively. South Africa alone committed \$1 billion to combating HIV/AIDS during the “3 by 5” initiative (“Progress” 9). The uneven allocation of funding leaves primary care under-resourced and reduces basic care and treatment available to the entire population.

In addition, vertical programs divert high quantities of health workers away from primary health care. The high demand for staff to operate vertical programs, along with high pay and reputation, draws many health workers from primary health care. For example, a vertical program funded by the Global Fund to Fight AIDS, Tuberculosis and Malaria (GF) in Ethiopia paid its medical staff “salaries...triple of the salaries of regular employees with similar qualifications and duties.” Even “high-level medical professionals” asked to leave their jobs to work on behalf of the program because the work with GF was “heralded” (Banteyerga et al. 35). Many health workers permanently switch vocations from primary health care to vertical programs because of status and pay. An estimated 1,670 doctors and over 3,000 nurses emigrated from Kenya in the last 10 years in search of better work conditions after exposure to vertical programs (Adwok et al. 3). The resulting brain drain depletes the number of primary health care workers and produces an over-qualified pool of staff working for vertical programs. Because of vertical programs, primary health care lacks funding, resources, and workers and is unable to service the basic health needs of the population.

As vertical programs are far from optimal in treating HIV/AIDS, donors should consider the alternative method of establishing a foundation of primary health care in sub-Saharan Africa through “horizontal” programs. Horizontal programs start at primary health care and focus on improving basic necessities as explained in the Alma-Ata Declaration. Rather than with the intent of resolving a pandemic, horizontal programs target the precarious primary health care found in countries of sub-Saharan Africa, which rank as the lowest in the world in health care (Tandon et al. 18-21). Through a careful analysis of ART delivery and primary healthcare, Joyce Msuya of the World Bank discovered that “in the long-term, horizontal programs are cost-effective” by promoting HIV/AIDS prevention and offering affordable ART. Furthermore, the structure of NGOs such as the WHO is more suited for long-term development endeavors because there is less of a need for communication among levels (Nemes et al. 61) and more work done at the clinical level. The method and the institution for actuating a new approach to HIV/AIDS in sub-Saharan Africa are available, but the majority of donors want immediate results. “Grand gestures and utopian promises” found with vertical programs hinder the gradual process of establishing a strong primary health care (Easterly 11; Streefland and Chabot 19). These donors need to be convinced to contribute long term funds to three critical aspects of primary health care which will allow for sustainable HIV/AIDS treatment.

First, NGOs and donors need to increase the dangerously low ratio of doctors to patients in primary health care through funding. By 2003, the average ratio of patients to doctors was around 27,000 to 1 (“Report” 40) and it has not improved in recent years (“Worldwide Doctor-Patient Ratio”). The lack of health workers is not due to the lack of educated doctors but moreover the rapid brain drain of doctors from primary health care to vertical programs. NGOs need to fund primary health care so it can reestablish secure jobs with higher wages in order to

reverse the brain drain. Furthermore, The American Public Health Association explains the correlation between the dearth of health workers to the “lack of preventative and curative health care services and health promotion programs” (“Policy Statement Database”). Before further improvements of “preventative,” “curative,” and “health promotion programs” can occur in primary health care, the low level of health workers needs to be addressed. If NGOs reverse the brain drain, further aspects of primary health care can be improved to target HIV/AIDS.

After a sufficient number of health workers return to primary health care, NGOs should fund curative care and preventative care in primary health care in order to integrate the delivery of ART. Primary health care can integrate HIV/AIDS specific treatment into its regimen once basic needs for medications and vaccinations are met. The WHO revealed that only one third of 45 surveyed countries had comprehensive medicine availability in the public sector (Creese et al. 62). Furthermore, the latest update on immunization coverage in sub-Saharan Africa indicated that only 60% of all people were vaccinated against major infectious diseases (“Report” 33). Funding for comprehensive medical and immunization coverage of major diseases within primary health care is desperately needed. Also through this funding, NGOs strengthen primary health care which allows clinics to integrate ART effectively into primary health care because the integration of ART, like vertical programs, may damage weak health system (Nigatu 2). An example of this integration in Cambodia began in 2001, after 15 years of strengthening and reconstructing the health care system in Cambodia. The Cambodian Ministry of Health and numerous NGOs, prompted by the lack of disease-specific medication and long term care, felt prepared to integrate ART into primary health care (Janssens et al. 880). After two years of integration, Cambodia observed a significant increase of HIV/AIDS patients and an unprecedentedly low rate of death due to the lack of health care at 3% (Janssens et al. 882). More

importantly, because ART was integrated into Cambodia's primary health care, patients were able to start lifelong treatments without interruption (Janssens et al. 883). The HIV/AIDS epidemic in Cambodia improved dramatically after only two years of implementing ART into primary health care. It is clear that integration of ART and its delivery through primary health care is an effective and sustainable method to combat HIV/AIDS. NGOs need to utilize the same method of integrating ART after strengthening primary health care in sub-Saharan Africa.

Furthermore, NGOs and donors need to support health promotion programs in primary health care to reduce the number of HIV/AIDS cases in future generations. These programs range from educating patients on prevalent diseases to providing preventative measures such as condoms. In 2000, out of 37 surveyed countries in Africa, the WHO found that none had a comprehensive program to inform patients about diseases and preventative methods ("Report" 30). Thirteen years later, "Africa is still lagging behind in the adoption of health promotion principles and approaches" (Dixey 7). However, HIV/AIDS education and access to preventative measures have been found to be cost-effective in developing countries (Marseille et al.). The AIDS, Population, and Health Integration Assistance (APHIA II) project in Kenya by USAIDS displays the effectiveness of health promotion in preventing HIV/AIDS. This program supported Kenya's primary health care, which multiplied contraceptive implants by 20-fold, informed students about HIV/AIDS through age appropriate channels, and expanded access to reproductive health, family planning and HIV/AIDS information and services for married adolescent girls (Askew et al.). These methods significantly reduced the rate of high-risk sexual behaviors from 41.7% to 18.2% while increasing ART from 12.7% to 34.3% as well as knowledge of HIV infection (Sarna et al. 60, 62). This program prepared the youth and people without HIV/AIDS with information and preventative measures which drastically decreased their

risk of contracting HIV/AIDS. By funding health promotion programs in primary health care across sub-Saharan Africa, NGOs can establish an effective and long term investment in lowering the rate of HIV/AIDS of future generations.

Strong primary health care is more effective in combatting HIV/AIDS in sub-Saharan Africa than vertical programs. Horizontal programs equip primary health care to sustainably treat and prevent HIV/AIDS while improving the overall health system. In all likelihood, the presence of stronger primary health care will eradicate the need for disease-focused vertical programs because the former is more cost-effective and sustainable than the latter. However, horizontal programs can only be implemented if HIV/AIDS experts, national policy makers, and advocates for global health promote the utilization of horizontal programs and display the drawbacks of vertical programs to NGOs and donors of foreign aid. Sub-Saharan Africa needs donors and NGOs to target HIV/AIDS as a fundamental problem in primary health care. The switch from the four decade old method of vertical programs to horizontal programs in sub-Saharan Africa will be a slow process, but it is the only way sub-Saharan Africa stands a chance against HIV/AIDS.

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