Helen Ouyang
February 9, 2006

# Scaling Up ARV Treatment Among Women of the Migrant Labor System in Rural Mozambique: A Grassroots Approach

## A Collaboration with the Harvard School of Public Health in Boston, the Real Medicine Foundation and The African Millenium Foundation in Los Angeles and Mozambique (www.1amf.org)

## Introduction

Recovering from both a devastating civil war and recent floods, Mozambique remains a country in delicate balance. Besides facing both war and natural disaster, Mozambique is also in the midst of a serious and expanding HIV epidemic with a high adult prevalence of 14.9% in 2004 and an estimated 500 people becoming infected every day, with HIV rates rising since year 2002. According to the Ministry of Health, 1.4 million people were estimated to be living with HIV/AIDS in 2004. Presently, 57% of all adults affected are women. Gender inequality, cultural conditions, and high labor mobility contribute to these statistics. Fortunately, there is a strong political commitment to scaling up antiretroviral therapy, as the Ministry of Health has established treatment criteria that are in accordance with WHO recommendations, with the hope of increasing ARV treatment coverage to 132,000 out of the 200,000 who need it by the end of year 2008. Presently, delivery of ARV therapy is facility-based and is initiated by physicians in Mozambique, with 90% still not receiving treatment.[1,2,3]

The health sector capacity in Mozambique is relatively small, compared to many other countries of similar size and population. Remarkably, it only has 461 physicians, which is one of the lowest medical doctor to person ratios in all of Africa.[4] In addition, most of its physicians are concentrated in the capital of Maputo, leaving the more remote rural regions completely marginalized. Because of the low ratio of one doctor to 30,000 people in the country with most of these physicians located in the cities, in addition to the reality that ARV treatment is facility-based and physician-initiated, only one outcome is likely: those who do not have routine access to formal healthcare will simultaneously not have access to ARV treatment. In fact, the brain drain phenomenon is manifesting itself quite clearly in Mozambique, as policy-makers no longer regard financial resources as the main obstacle to scaling up ARV treatment but cite a small health workforce as the single biggest constraint. Sadly, increased donor commitments have put ARV treatment within financial reach but they are, in reality, still inaccessible due to lack of human resources.[5]

## Proposal

While a resolution to this brain drain issue would require much long-term planning, in the meantime people living with HIV/AIDS in Mozambique need immediate access to ARV treatment. Thus, a more urgent solution is needed. Given the fact that medical doctors are so limited in the country and that those living in rural regions have virtually no access to them, it seems logical to train community healthcare workers to administer ARV treatment to these marginalized patients under strict observation, which would not only increase access to treatment but also help prevent potential drug resistance. When patients miss even a single dose of ARV medication, it becomes a significant individual and public health issue. As supported by evidence-based medicine, the public health community agrees that strict ARV compliance is one

of the most fundamental means of achieving maximum effective ARV therapy in addition to curb-tailing emerging drug resistance.[6]

A template for this model of community healthcare workers is the Directly Observed Therapy method for tuberculosis, in particular the successful use of *accompagnateurs*, or community health workers, in rural Haiti, which would be transferable to the rural communities of Mozambique and HIV/AIDS. The success of the rural Haiti model of using accompagnateurs from the community itself to increase treatment adherence to TB multi-drug regimens is well-known and has been so powerful that these Haitian communities have themselves extended this model to include ARV treatment for its HIV-infected people. Briefly, the accompagnateurs who are the structural backbone of the program, for they are often from the community itself , are well-respected, and serve as the essential link between the villages and the clinic. When a patient from a community is diagnosed with advanced HIV disease requiring ARV therapy, an accompagnateur is either selected from the current clinic staff or hired from the community at the patient's request. Accompagnateurs are specially trained on the importance of confidentiality and emotional support for the patients, as well as the clinical presentation and management of HIV infection, including proper use of medications and its side effects. During daily visits to the patients' homes, accompagnateurs are asked to directly observe the ingestion of the proper dose of the proper medications. The innovative effectiveness of the system is manifested in the "virtuous social cycle" of many of the accompagnateurs themselves receiving antiretrovirals from their own accompagnateurs, which often also provides tremendous emotional support and empathy.[7]

This unique system in Haiti has not only made an impact in both rural and central Haiti, but it has also been extended with success to Peru. A comprehensive study of 1050 participants in the Haitian model has already established that not only was adherence to ARV therapy very high, but that clinical outcomes were excellent: all patients responded with weight gain and improved functional capacity, with 86% having undetectable viral loads.[8] By adopting the Haitian model of the accompagnateur network, a grassroots approach can be used to ensure ARV treatment effectiveness in rural Mozambique, and ultimately lead to sustainable development and change.

**Project Site**

Because of the high rates of HIV infectivity among populations involved in the migrant labor system, Xai Xai, a city along one of the major migration routes, will be chosen as the initial project site. Xai Xai, in the Gaza province, lies on the coast about 150 miles east of Maputo on the main road that miners travel on from their home villages to the South African mines.[9]

**Target Population**

Initially, the project will target women who are the wives of migrant laborers. This will facilitate the use of the local women's microfinance organization that will be participating in this project. In addition, by training all female community healthcare workers to target female HIV patients, this will avoid gender issues in counseling, as well as contribute to women's empowerment in Mozambique. If the piloting of the project proves to be successful, the model can be extended to include males of the households as well.

**Collaborators**

Helen Ouyang
February 9, 2006

Collaboration for this program will be with the Harvard School of Public Health in Boston, MA, Real Medicine Foundation in Los Angeles, CA, and the African Millenium Foundation in Mozambique.

---

[1] Mozambique 3x5 Fact Sheet. World Health Organization. WHO Country Office for Mozambique and the WHO Regional Office for Africa. June 2005.
[2] Mozambique. Country Success Stories. 3 by 5 Progress Report. World Health Organization. Jan 2005.
[3] Sub-Saharan Africa Fact Sheet. UNAIDS Epidemic Update 2005. UNAIDS Geneva. 2005.
[4] Gimbel-Sherr, Kenneth. "Rapid Scale-Up of HIV Care in Mozambique." MOH/Clinton Initiative. Health Alliance International. 13 July 2004.
[5] Kober, Katharina and Wim Van Damme. "Scaling up access to antiretroviral treatment in southern Africa: who will do the job?" Lancet. 2004. 364: 103-7.
[6] Paterson DL, et al. "Adherence to protease inhibitor therapy and outcomes in patients with HIV infection. Annals of Internal Medicine. 2000;133:21-30.
[7] Behforouz, H, et al. "From Directly Observed Therapy to Accompagnateurs: Enhancing AIDS Treatment Outcomes in Haiti and in Boston." Clinical Infectious Diseases. 2004;38:S429-S436.
[8] Koenig, SP, et al. "Scaling up HIV treatment programmes in resource-limited settings: the rural Haiti experience." AIDS. 2004 Jun; 18 Suppl3:S21-5.
[9] Epstein, Helen. The Hidden Cause of AIDS. The NY Review of Books. 49(8): May 2002.