



World Bank Global
HIV/AIDS Program

HIV/AIDS - *Getting Results*

These reports describe activities, challenges and lessons learned during the World Bank's HIV/AIDS work with countries and other partners.

Mozambique's battle against HIV/AIDS and the DREAM project

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A partnership with the Catholic volunteer Community of Sant'Egidio in Mozambique is helping provide treatment, care and hope to thousands of people living with HIV and AIDS. Much is being learnt and shared, sparking similar initiatives in other countries, and spreading the benefits farther still.

Mozambique and the Challenge of HIV/AIDS

After a devastating civil war, Mozambique succeeded, as few other African countries have, in resettlement and reconciliation with speed and harmony. Although still one of the poorest countries in the world, Mozambique's economic performance is strong. But now there is a new, desperate struggle -- against HIV and AIDS.

During its long civil war, Mozambique's social and economic isolation ironically protected it, at least to some extent, from the AIDS epidemic raging in neighboring countries, mainly because the war impeded population movement. However, after the war's end in 1992, vulnerability to HIV increased dramatically, with the return of refugees from Malawi, Zimbabwe, and Tanzania, where HIV rates were much higher. Peacekeeping forces from high prevalence countries and a marked increase in cross border trade also contributed. Mozambique's deep poverty, low levels of literacy (adult literacy in 2001 was estimated at only 45 percent), and rural-urban and cross-border movements, fueled the rapid spread of the epidemic.

HIV escalated drastically between 1992 and 2000 in Mozambique. Currently, about 1.3 million people are infected. The number of people newly infected each year is rising fast -- 61,000 in 2000, projected to reach 170,000 in 2010. Youth aged 15-24 account for 60% of new infections, and twice as many girls and women in this group are being infected as men.

The most affected parts of the country are Maputo (20.7%) and the central provinces of Manica (19.7%), Tete (16.6%), and Sofala (26.5%),¹ particularly along the

¹ Ministry of Health, prevalence data for 2004, presentation at Regional Advisory Panel Meeting, Dec. 2005, Addis Ababa, accessed 4/21/06 at: <http://www.uneca.org/tap/>

transport routes to Malawi, Zambia and Zimbabwe. AIDS affects a high proportion of economically active persons, especially young workers, sapping the country's productive capacity. In the age group 15-49, HIV prevalence is estimated at 12.2% (UNAIDS, end 2003). Life expectancy is falling, and deaths from AIDS are leaving many thousands of orphaned children.



As in other severely affected countries, HIV in Mozambique presents difficult issues. Among the most intractable are stigma and discrimination; the lack or poor state of health infrastructure;

and weak legal and social protections for people living with HIV. The low literacy rate presents special challenges for designing and implementing effective HIV/AIDS education and behavior change campaigns. Women face huge social and economic disadvantages; poverty and the pattern of intergenerational sexual relationships make young women and girls particularly vulnerable. Other more specific, pragmatic issues include inadequate and unreliable supplies of drugs to treat opportunistic infections, low condom availability, and Mozambique's chronic shortage of doctors and nurses. Although costs of antiretroviral (ARV) drugs have dropped dramatically within the past few years, at around US\$300 a year they are still well beyond the means of most Mozambicans.

In recent years, the government of Mozambique has given steadily increasing priority to fighting HIV and AIDS. The first National Strategic Plan to combat sexually transmitted diseases and HIV/AIDS, 2000-2002 sought to make the HIV/AIDS fight a national priority. It put prevention at the heart of the strategy, and included interventions to provide information about HIV and AIDS widely, to develop voluntary counseling and testing programs, and specific activities geared to youth. The current National Strategic Plan covers the years 2005-2010.

Mozambique enjoys broad donor support for the HIV/AIDS response. USAID provided US\$6.6 million in 2001, the World Bank in 2003 approved \$55 million in grant

financing through the Multi-Country AIDS Program (MAP), and in 2004 the Global Fund to Fight AIDS, TB and Malaria signed grant agreements for a total of nearly \$30 million. UNAIDS and other UN agencies, the Clinton Foundation and the U.S. government's PEPFAR program are also active in Mozambique.

The Treatment Acceleration Project (TAP)

In 2003–2004, the balance between prevention and treatment of people living with HIV came increasingly under scrutiny in Mozambique as in other countries. With continued increases in prevalence rates, plummeting costs for generic ART drugs, some expansion in the capacity to deliver them, and strong advocacy from a number of groups, many countries in Africa were reconsidering the feasibility of widespread access to lifesaving ART programs. In March 2004, only 3,228 people in Mozambique were receiving antiretroviral treatment; less than one percent of people clinically eligible for drug therapy. Government plans aim for a sharp increase in this number to 132,000 by 2008, as outlined in the Ministry of Health Strategic Plan to Combat STIs and HIV/AIDS. Until recently, few developing countries were providing public funding for antiretroviral treatment, deterred by high

drug prices, inadequate budgets, weak health delivery systems, and few trained health personnel with experience in ARV. Only a small percentage of funding under the World Bank's Multi-Country HIV/AIDS projects has gone toward treatment. A protracted dialogue among the Mozambique government, the World Bank, and the Community of Sant'Egidio considered funding treatment under the Mozambique MAP project, but this ultimately proved unworkable. This dialogue, however, helped open the way for a World Bank grant for the Treatment Acceleration Project (TAP), an innovative three-year multi-country project, aimed specifically at testing and scaling up different models of non-government delivery systems for holistic treatment programs. The three countries included in the project are Burkina Faso, Ghana, and Mozambique, all of whom had promising non-government treatment programs underway.

The TAP builds on on-going NGO-managed public/NGO partnerships, and offers the three governments a mechanism for testing and refining existing guidelines and treatment protocols, for establishing reliable monitoring and evaluation programs, ensuring compliance, minimizing resistance, increasing equitable access for the poor, and, in keeping with the spirit of the TAP, for learning and disseminating the important lessons from this experience.

The Community of Sant'Egidio and Mozambique



The Community of Sant'Egidio began as a student movement in the 1960's in Rome, committed to serving the poor and working for peace. Sant'Egidio's 40,000 member volunteers now work in more than 70 countries, on a wide array of community level interventions to alleviate poverty, provide social services, and foster peace and reconciliation. The Community's work touches many categories of the poor, the vulnerable, and the marginalized, including children, elderly, the handicapped, refugees, immigrants including the Roma people, people living with HIV/AIDS, prisoners, and the homeless.

The Community of Sant'Egidio first became involved in Mozambique in 1976 through its work with very poor communities, and became more deeply engaged in drought relief efforts and the consequences of war. In 1984, responding to an appeal by the Catholic Archbishop of Beira, Sant'Edigio sent and distributed humanitarian relief aid, coordinated and monitored by volunteers, together with missionaries and Caritas Mozambique (a Catholic relief organization). As it became increasingly obvious that the problems of poverty could not be disentangled from the long, brutal civil war in Mozambique, the Community began to explore possible avenues to help bring peace. Persistent and creative efforts mobilized a network of political, religious and civil society actors, and promoted dialogue between the government and different factions -- a "two track" diplomacy approach of official negotiations and informal unofficial processes based on friendship, dialogue, patience, pluralism and inclusiveness. After 27 months of negotiations, a Peace Agreement was signed in Rome On October 4, 1992, ending 16 years of civil war.

Through its work in many African countries, but particularly Mozambique where it has such strong roots, Sant'Egidio has come to view the HIV pandemic as the most serious threat to Africa's future. It has pressed hard first, to demonstrate through a practical program on the ground that a program of care can be implemented, and second, to advocate for the rapid scaling-up of such programs. At a meeting in Rome on May 12, 2004, involving many leaders including 13 African ministers of health, the right to treatment and care for people with HIV was presented as a fundamental human right. This was reflected in a joint declaration signed on May 13 by the Community of Sant'Egidio and the African ministers.

The \$60 million IDA grant for the TAP, approved in June 2004, supports three components in each country:

- **Testing alternative approaches to scaling up delivery of the full continuum of HIV/AIDS care and treatment:** This includes all five areas of treatment – voluntary counseling and testing, home based patient care and family support, treatment of opportunistic infections, antiretroviral drug therapy, and prevention of mother to child transmission.
- **Strengthening public institutional capacity for HIV/AIDS care and treatment:** this includes building the capacity of each country's National Treatment Committee to refine national policies and adapt WHO protocols to their respective circumstances and evaluate and monitor non-governmental delivery programs; and building capacity in the Ministries of Health to coordinate program expansion, and, in partnership with WHO, to monitor the quality and disseminate the results and lessons of treatment programs.
- **Facilitating regional learning from the three-country experience under the TAP.** WHO, through its headquarters and regional offices agreed to support in-country learning, helping refine and implement treatment guidelines, developing national standards and assessment tools for accrediting treatment programs, establishing quality control systems for drug procurement, strengthening monitoring and evaluation, training of health workers, devising methods for ensuring patient compliance and evaluating outcomes and potential drug resistance.

The primary focus of the TAP is learning by doing, through comparing and sharing experiences among the different kinds of programs delivering treatment in different settings. To facilitate this, a regional advisory panel meets one or twice a year, bringing together country TAP coordinators and National AIDS program staff, implementing partners and the other key partners: WHO, the World Bank and United Nations Economic Commission for Africa (UNECA provides the Secretariat). The meetings cover technical issues as well as managerial and administrative issues.

Mozambique received a grant of \$21.7 under the TAP, and was the first of the three countries to get underway. The first component of the Mozambique project — scaling up HIV/AIDS care and treatment — has thus far been on or ahead of schedule. Three non-profit organizations -- the Community of Sant'Egidio, Health Alliance International, and Pathfinder International, all with on-going treatment projects deemed worth expanding, signed on as implementing partners. The program being implemented by the Community of Sant'Egidio under the TAP is part of a larger program, the Drug Resources Enhancement against AIDS and Malnutrition (DREAM) project, which

began in Mozambique, and is now operating in Malawi, Tanzania, Kenya, Guinea Conakry, Guinea Bissau and soon in Angola, Democratic Republic of Congo, Nigeria and Cameroon.

The DREAM Project

With the collaboration and support of the Ministry of Health, Sant'Egidio launched its broadly based HIV/AIDS treatment program in August, 2001, and began providing treatment early in 2002. The program is called "Drug Resources Enhancement against AIDS and Malnutrition", or DREAM, a name echoed in the appeal of young Africans for access to treatment and care at a conference in Mozambique in 2003.

"We turn to you, leaders of Africa who are gathered in Maputo. We are young Africans. An heir of this continent, Martin Luther King Jr, forty years ago has said: 'I have a dream.' We too have dreams. Often only those. But dreams can become reality. . . Our dream is that soon medical care may be accessible to all the children of Africa, that AIDS may no more be a death sentence but an illness that can be treated and prevented."

Youth Leaders Declaration, presented at the African Union Conference, Maputo, Mozambique, July 10–12, 2003.

The program began in Maputo Province, southern Mozambique, and expanded to two additional areas: Sofala in the central region and Nampula (laboratory facilities) in the North.

The program provides broad-based support for people affected by HIV in the context of a comprehensive treatment approach. In addition to providing drugs free of charge to eligible patients, treatment also involves diagnostics, strategies to assure adherence to treatment, monitoring for potential drug resistance, trained personnel, and treatment of opportunistic infections and conditions that co-exist with HIV infection, including malaria, tuberculosis, other sexually transmitted diseases and malnutrition.

A particular concern, shared by the Mozambican Parliament, is the need to define criteria that will ensure equitable access to publicly funded treatment programs. The TAP and the DREAM project emphasize targeting the poor in both urban and rural areas.

Women receive special focus both through the mother-child transmission prevention program, and also in Sant'Egidio's work with households. DREAM aims to protect the health of mothers and their children, providing drugs to pregnant women, both for prevention of mother-to-child transmission (nevirapine), and also more broadly based full ARV therapy, starting from the second trimester of pregnancy. The program indicates that this reduces

transmission of the virus to about 3%, far below that of nevirapine monotherapy alone, and also saves the mother and thus protects her family. Other target subpopulations of Sant'Egidio's program are health personnel and teachers.

The staff focuses on people whose viral loads are extremely high and are in need of immediate intervention. Other people who seek help from the centers, and whose viral load is lower, receive assistance ranging from home care and medication for opportunistic infections to food parcels to meet nutritional needs.

Specifically, the DREAM program provides the following:

- Voluntary counseling and testing for HIV status
- Training of local staff (doctors, nurses, laboratory technicians, health workers, and training staff)
- Health education, especially for at-risk populations, with mothers with HIV playing a key role as peer educators
- Highly Active Antiretroviral (HAART) therapy for preventing mother-to-child transmission of HIV infection during pregnancy, birth, and breastfeeding
- ARV drug therapy for people living with AIDS
- Expanded laboratory facilities to monitor patients receiving ARV drug therapy
- Monitoring of blood donations
- Prevention and care of diseases linked to AIDS (opportunistic infections, sexually transmitted diseases)
- Nutritional education and supplements for people living with AIDS
- Home care for the seriously ill.

Working within and strengthening the health system

The program is implemented entirely within the framework of the Mozambican health system and is complementary to other on-going program interventions. Indeed, an early and valid concern expressed by some in the donor community in Maputo was to avoid creating any new structures or vertical programs outside the Government's existing Strategic Plan. A cornerstone of the TAP project, which is reflected in the Sant'Egidio project, is to address a broad range of constraints on the performance of the health care system, including training, remuneration, facilities and logistics. Solutions for these systemic problems will greatly enhance the chances of success of efforts to expand access to treatment. The challenge of AIDS offers the opportunity to reform and strengthen health infrastructure in Sub-Saharan Africa.

Training courses have been held for groups of doctors, nurses, laboratory technicians, chemists, biologists, computer programmers and coordinators from Mozambique, and also from many other countries in Africa. The courses combine theoretical training with practical experience through short internships in DREAM centers. Staff training includes a focus on the quality of relationships with patients and stresses that patients must be welcomed at all times, politely, openly, and with respect. Sant'Egidio relies heavily on volunteers who maintain a relay of people coming to Mozambique as well as members of communities in Mozambique. The core program staff are qualified Mozambicans and are, of course, paid.

Although the TAP project has only a three year duration, under a 10 year agreement with the government of Mozambique, the DREAM project is providing health care training (a top priority), personnel, laboratory equipment and supplies, and is importing, storing, and delivering ARVs for patients under its program. ARV therapy is provided at no cost to the patient, and it is a central premise of the approach and program that all services are fully in line with WHO protocols as well as with western-level quality and standards.

The DREAM project is housed within existing public hospitals and maternity wards, reflecting the fact that the government of Mozambique is the central partner. Other partners include universities in Italy and Mozambique, pharmaceutical companies, communities, other nongovernmental organizations, and international development agencies. Reaching out to other institutions and populations – business, local NGOs, religious organizations – helps further expand the network for HIV/AIDS services.

An innovative approach to support adherence

Patients on treatment have become one of DREAM's best resources. Often, they form self-help groups to support one another. In the case of 'Mulheres para o DREAM', women have set up an association to support patients receiving treatment to adhere to treatment protocols. They do so by sharing their own positive experiences with ARV treatment. This peer education and emotional support is profoundly encouraging and a crucial element of support for new patients, particularly in the first period of treatment, and has contributed to very high adherence.

Special attention is devoted to supporting the treatment of mothers with children and to helping them administer drugs, monitor their children's health conditions and provide nutritional supplements. The 'Mulheres' in the association also provide health education to patients while they are waiting to be seen at centers.

The holistic approach and strong focus on nutrition also contributes to high adherence and enhances the positive effects of ARV treatment. During pregnancy and for six

months afterwards, women receive beans, rice or maize, oil, sugar and nuts as well as multi-vitamins and iron supplements. The program also offers treatment for tuberculosis, malaria, and sexually transmitted diseases.

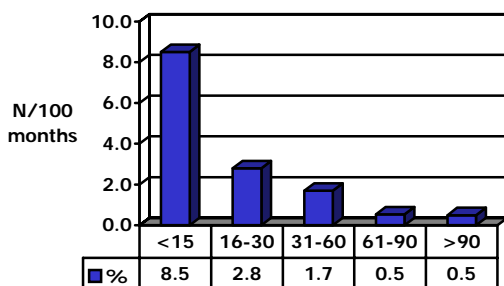
Results

By the end of 2005, the DREAM project had provided voluntary counseling and testing (VCT) to 19,580 people in eight centers. The number of HIV-positive people in care had reached 13,517, a significant increase from the 2,731 reported in September, and a very significant scaling up from the 412 in April 2003. There were 7,073 people receiving ARV treatment through eight sites operated by Sant'Egidio, of whom 4,746 are women. Most fall into the 25-49 age cohort, while 972 children under the age of four were also being treated. The Community operates three laboratories for diagnostic monitoring of ARV recipients.

The ARV therapy results are excellent, with over 90 percent adherence to treatment programs and a remarkable "Lazarus" effect of people recovering from near death to happy and productive lives when on the ARV therapy. No increase in drug resistance has been found under the program. Careful monitoring has shown a limited rate of liver toxicity, which has been able to be controlled by changing or stopping treatment in all but one case (Liotta et al, 2005).

Of more than 1,500 babies born to HIV-positive mothers in the program, 97 percent have tested negative for the virus. Results are especially good for women who stay on treatment for the full duration of the protocol: the vertical transmission rate was just 1.9% a year after delivery for women who received more than 60 days of HAART treatment before delivery, as well as nutritional supplementation, multivitamins and who fed their babies on formula (Liotta et al, 2005). Figure 1 shows that birth outcomes are significantly better for women who start ARV therapy more than 15 days before their babies are born, with nearly 90% fewer stillbirths and abortions.

Figure 1: Abortion and Stillbirth (cumulative number per 100 observation months) by length of pre-delivery HAART



Source: Liotta et al, 2005.

Children born to mothers in the program had a somewhat lower rate of low birth-weight than the general population and comparable infant mortality rate during the first year. These are important indications of the positive impact of the intervention. A pilot study that compared 40 women treated under the DREAM project for three months before and after they gave birth, with 40 other (untreated) women found a dramatically lower viral load in breastmilk of the treated women, and a significantly higher proportion of women with undetectable breastmilk viral loads. This raises the hope that ARV treatment may allow HIV-positive women to breastfeed their babies with little risk of HIV transmission, but this hypothesis needs to be tested in future clinical studies (Giuliano et al, 2006).

The results from the DREAM program have been widely reported at leading medical conferences and in peer reviewed journals. Detailed monitoring and program evaluation is an integral and important part of the work.

Sant'Egidio puts considerable emphasis on cost efficiency. The annual cost of caring for an HIV/AIDS patient in 2005 averaged \$600, including drugs, diagnostic work, and nutritional supplements, plus all costs for personnel; construction and depreciation of facilities. To lower costs, Sant'Egidio is engaging with large pharmaceutical companies such as GlaxoSmithKline, Merck, and Boehringer Ingelheim, seeking better deals on drugs and test kits.

Broader perspectives

Scaling up access to treatment

The governments and partners working together in the TAP program are helping develop more effective strategies for fighting the HIV pandemic, demonstrating that it is feasible to provide high quality care for HIV positive people, including life-prolonging ARV drug therapy, even in resource-constrained settings, and to scale up access to that care through effective private/public partnerships.

Sant'Egidio – and others who advocate and are working to expand access to treatment – argue that first, no disease in history has been fought successfully with prevention alone; second, the fact that drug therapy is successfully used in richer countries makes it morally imperative to apply similar standards of care in poorer countries; and third, that prevention will only succeed if there is hope held out for HIV-positive people. This applies above all for testing, where the possibility of treatment and care is a powerful incentive to being tested.

The experience in Mozambique is a testament to how the perspectives, energies, and dedication of a community motivated by their faith and their commitment to equity and friendship with the poor, and working together with the government and other development partners, has pioneered new approaches to caring for people with HIV in

places where many, until very recently, argued that care was impossible to provide at reasonable cost.

The partnerships have transferred technology and skills to Mozambique, and the DREAM project prides itself on the very high quality of the services it provides. While this is one of the strengths of the program, it raises the question whether it would be possible to replicate the same approach in other resource-constrained settings without the involvement of a partner like Sant'Egidio.

HIV/AIDS and the Catholic Church

There is another broad perspective within which to view the project. Sant'Egidio is an important movement within the Catholic Church and thus the dialogue, deliberations and actions can be viewed as part of the Catholic Church's response to the AIDS crisis and, still more broadly, of faith communities.

The Catholic Church has considerable influence through a large network of communities across the world, as well as an extensive health system infrastructure, and is a strong voice on many core issues around the prevention, care and treatment of HIV and AIDS. There has been much prominence given to the Church's opposition to the use of condoms, even as a means to prevent the spread of HIV, and the related stigmatization that results when HIV is linked, implicitly or explicitly, to sin. The Sant'Egidio experience highlights additional dimensions.

The Catholic Church is emerging as an increasingly dynamic actor on AIDS. Within the Vatican as well as within Catholic based relief and development organizations (like Caritas), there is growing recognition of the urgency of addressing the complex issues around HIV and AIDS. The DREAM project, for example, has helped to draw out the links between care and treatment and prevention, thereby increasing the scope and the depth of the dialogue on prevention strategies. The program has strong support from many in Vatican circles and is widely publicized and praised in Italy.

Complementing the work of implementing and expanding the DREAM program, Sant'Egidio is a forceful advocate—sometimes beyond the faith communities, as for example, convening African health ministers. At every international event where they are present, Sant'Egidio puts a spotlight on AIDS. The most prominent example is a major annual interfaith event, the "Prayer for Peace" that the Community runs on behalf of the Catholic Church. Each year, there is a major panel on HIV and AIDS and all plenary sessions stress the importance of responding to HIV and AIDS.

About the authors: Katherine Marshall (Director) and Lucy Keough (Senior Operations Officer), of the World Bank Development Dialogue on Values and Ethics unit, engage with faith institutions around development issues. This note draws on "A DREAM? Sant'Egidio Fighting HIV/AIDS in Mozambique", Chapter 10 in K. Marshall and L. Keough (eds), *Mind, Heart and Soul in the Fight Against Poverty*, World Bank, Washington DC, 2004.

Meeting global commitments

Sant'Egidio describes its greatest challenge now as mobilizing sustainable sources of funding to scale up the present scope of the project while ensuring that those receiving ARV have the assurance of a reliable and continuing source of care and drugs. This reflects the broader global challenge of realizing the commitment by world leaders at the G8 Meeting in Gleneagles in July 2005, reiterated by the United Nations General Assembly in September 2005, to scale up HIV prevention, treatment, care and support, with the aim of coming as close as possible to the goal of universal access to treatment by 2010 for all those who need it.

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