TB and HIV
An Old Disease Takes on a New Partner

Catholic Relief Services
TB AND HIV: AN OLD DISEASE TAKES ON A NEW PARTNER

Tuberculosis (TB) and Human Immunodeficiency Virus (HIV) are among the leading infectious disease killers in the developing world. These diseases are life threatening when contracted on their own, but the threat is becoming more severe as an increasing number of people infected with HIV are also contracting TB. These diseases are combining to create what many fear is a global health catastrophe.

TB killed one out of four HIV-positive people in 2007, according to the World Health Organization (WHO). An estimated one third of the 33.2 million people living with HIV (PLHIV) are co-infected with TB, more than double the number estimated in previous years.

Treatment for each of these illnesses is not easy, but treating both simultaneously is even more difficult. While more PLHIV now have access to lifesaving antiretroviral therapy, the therapy’s effectiveness declines dramatically if TB is left untreated. The centuries-old scourge of TB cannot be stopped without controlling its spread among PLHIV.

Collaborative TB/HIV interventions are essential to ensure that HIV-positive TB clients are identified and treated appropriately, and to ensure TB among PLHIV is prevented, diagnosed and treated. Considerable progress has been made in recent years, but interventions to reduce the TB burden among PLHIV are still lacking. Scaling up collaborative TB/HIV activities — particularly intensified case finding, infection control and Isoniazid Preventive Therapy (IPT) (known as the 3 I’s) — falls short of the targets set by the Global Plan to Stop TB.

Yet researchers and the medical community have developed strategies to curb the spread of TB/HIV co-infection. Taking the lead in implementing some of these strategies are agencies like Catholic Relief Services (CRS).

2 Ibid.
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CRS Spearheads Strategies to Integrate TB and HIV Care

A principal challenge in fighting co-infection lies in the integration of services that have traditionally treated one illness or the other. With more than 60 years of experience in improving primary healthcare services in nearly 100 countries, CRS has been at the forefront of care for both TB and HIV infected clients — and now for those co-infected with TB and HIV.

CRS works with communities, governments, research institutions, and religious leaders to identify the biggest obstacles — and most effective strategies — to stem co-infection rates. Some of the most successful strategies implemented in communities in sub-Saharan Africa and Southeast Asia are outlined below.

**CHALLENGE**

In most rural areas, PLHIV often live too far-away from health clinics to receive the recommended screenings for TB infection. Yet PLHIV in high-burden TB areas frequently develop tuberculosis.

**CRS RESPONSE: Harness the power of the community to care for one another.**

**EXAMPLE:** In Rwanda, the CRS-led consortium, AIDSRelief⁴, is using a checklist to screen all HIV-positive clients for TB. Community volunteers are trained to use the checklist, a standardized tool adopted by the Rwanda Ministry of Health. The checklist is based on five WHO-recommended TB screening questions and translated into the local language. A positive answer to any of the questions means the client is suspected of having active TB. The community volunteer then provides a written referral for the client to be screened at a qualified clinic.

**RESULTS:** From June 1 to November 30, 2008, community volunteers referred 410 HIV-positive clients who were on antiretroviral therapy to seven Ministry

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⁴ The AIDSRelief consortium brings together industry leaders to support rapid scale-up and delivery of lifesaving antiretroviral therapy for patients in ten countries in Africa, Latin America, and the Caribbean. Led by Catholic Relief Services, consortium partners include the University Of Maryland School Of Medicine Institute Of Human Virology, Futures Group International, and IMA World Health, the Children's AIDS Fund, and the Catholic Medical Mission Board.
of Health clinics for follow-up screening. All of them visited the clinics for screening. Of those, nearly one-quarter were diagnosed with TB and began lifesaving treatment.

**EXAMPLE:** In South Africa, using a similar TB screening tool, CRS and the U.S. Centers for Disease Control and Prevention trained home-based care workers - the backbone of rural healthcare systems — to conduct TB symptom screening among people living with HIV.

**RESULTS:** Among the home-based care workers trained, confidence in their ability to screen for TB increased from 53 percent to 78 percent measured by pre and post-training assessments. Over an eight month period 22 percent of the HIV-positive clients at one site were diagnosed with TB and subsequently treated.

**CHALLENGE**

In high-prevalence TB regions like Southeast Asia, many are reluctant to test for HIV infection. Neither TB nor HIV-positive clients are even aware of the importance of screening, much less encouraged to do so.
**CRS RESPONSE:** Educate the community as well as healthcare workers to build support for HIV testing among clients with TB.

**EXAMPLE:** In Cambodia, the TB strategy relied only on passive case finding. Community structures, including home-based care teams, were not encouraged to refer suspected cases to health clinics. Thus, CRS and its partners began an education and training program that reached a cross-section of stakeholders, including clinic healthcare workers, village volunteers, and community-based homecare teams. TB clients then received encouragement and support — from clinics and health workers as well as neighbors and families — to be screened for HIV.

**RESULTS:** More than 70 percent of TB clients were tested for HIV infection. Of those tested, about 4 percent tested positive — a higher HIV prevalence than the national 0.8 percent adult HIV prevalence. In one district, HIV testing among TB clients jumped from 21 percent to 86 percent over a period of one year. CRS and its partners have a 98 percent success rate in routine screening for TB among people living with HIV, as well as an established system for follow-up screenings.

**CHALLENGE**

Many HIV programs excel in their ability to treat and care for people living with HIV, but few have the ability to detect TB infection among their clients, much less provide appropriate care through the community and local health centers.

**CRS RESPONSE:** Augment existing HIV and AIDS programs with equipment to screen for TB, as well as build capacity to care for TB co-infected clients through the HIV counseling and testing processes, home-based care programs, and treatment support groups.

**EXAMPLE:** In Zambia, CRS and its AIDSRelief partners are equipping 19 AIDSRelief-supported HIV treatment centers facility laboratories with the means to collect sputum and test for acid-fast bacilli to ensure routine screening and more accurate TB diagnosis for all HIV-positive clients. In addition, clients with a negative sputum test suspected of having TB are

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referred for a chest X-ray. In addition, a wide support network was formed for co-infected clients by recruiting and training community health workers, treatment support specialists and other community groups and volunteers to help clients adhere to both antiretroviral and anti-TB drug therapies, as well as to provide other needed care. The network has also strengthened the referral system between AIDSRelief-supported HIV treatment centers and home-based care workers caring for co-infected clients.

RESULTS: By February 2010, an estimated 4,000 HIV-positive people will have been treated for tuberculosis with drugs from the national TB program. All those diagnosed and treated for TB are being entered in the Government of Zambia’s register that links medical records between National Tuberculosis and National AIDS Control Programs. Family case finding and contact tracing have become routine for any TB case. These efforts are supported by educational campaigns designed to raise community awareness about TB/HIV co-infection.

EXAMPLE: In Nigeria, CRS and its AIDSRelief partners established TB screening and treatment centers in 31 AIDSRelief-supported HIV treatment
centers, while providing HIV counseling and testing in 31 stand alone TB treatment sites across 16 states. Coordinating with the Catholic Church, one of the primary healthcare providers in the country, CRS and its partners established quality assurance support, upgraded lab infrastructure, and bolstered capacity and pharmacy services. Equally important, CRS developed referral networks that work with HIV-positive pregnant women to ensure access to both TB and HIV services.

RESULTS: A total of 20,000 HIV-positive clients receiving care in AIDSRelief-supported HIV treatment centers will be rescreened for signs of TB, and when appropriate, provided with follow-up laboratory screening as part of the anticipated roll out of the 3 T’s program of TB/HIV management in Nigeria. In addition, 1,500 clients served at TB screening and treatment centers were offered HIV counseling and testing.

LIVES AT STAKE: TB/HIV CO-INFECTION AT A GLANCE

TB and HIV have formed a deadly synergy that threatens the fragile gains made in the fight against both epidemics. Each disease speeds up the development of the other. HIV activates latent TB, and left untreated, someone with active TB has the potential to infect 10 to 15 people per year. According to the World Health Organization\(^6\) and the Center for Global Health Policy\(^8\):

- An HIV-positive person with latent TB has a 5 to 10 percent chance of developing TB disease annually and is 20 to 30 times more likely to develop TB than those without HIV over the course of his or her lifetime.
- Increasing cases of TB in many countries in sub-Saharan Africa and parts of Southeast Asia are largely attributable to the HIV epidemic.
- In the last two decades, the number of new TB cases has tripled in high HIV prevalence countries.
- 80 percent of co-infected clients live in sub-Saharan Africa where TB is the leading cause of death among PLHIV.

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• Only 630,000 PLHIV (or 2.2 percent) were screened for TB in 2007, but the target was 14 million PLHIV.

• People with HIV can be protected from TB for about two years if given IPT, but this therapy has only been given to one-tenth of 1 percent of those who need it.

NURSING A DREAM: THE STORY OF SANNI MUSI

In March 2003, Sanni Musi was just 25 when she tested positive for HIV. Over the two years that followed, Sanni struggled with ailments that took advantage of her compromised immune system. Eventually, illness forced her to quit her studies in electrical engineering in Pretoria, South Africa.

Two years after her HIV diagnosis, Sanni started getting even sicker. Weakened and losing weight, she turned to the Holy Cross Home. She was diagnosed with tuberculosis. The hospital, supported by Catholic Relief Services, started her on a nine-month treatment for TB. But like many who are infected with both TB and HIV, Sanni’s condition continued to deteriorate as her HIV infection threatened to undo any good that the TB treatment had promised.

Fortunately, Holy Cross Home was able to provide Sanni with antiretroviral medications.
"I thought, 'Wow, I have been given a second chance to live,'" Sanni said.

Indeed, without treatment for both diseases, Sanni would never have been able to resume her studies. Instead of engineering, she is now halfway through her practical exams in nursing — at Holy Cross Home.

"I like to work with HIV patients," Sanni said. "Because I am positive I will encourage them that they must not give up. My passion is here."

**WHO WE ARE**

Catholic Relief Services is the official international humanitarian agency of the U.S. Catholic community. The agency alleviates suffering and assists people in need in more than 100 countries without regard to race, religion or nationality.

CRS has worked more than 60 years to improve primary healthcare services in developing countries. It is through these efforts that CRS is uniquely positioned to address TB/HIV-related challenges. The agency works with healthcare providers, religious leaders, research institutions, governments, and perhaps most importantly, with communities themselves to address TB and HIV and now, co-infection with both illnesses.

**CRS efforts in TB and HIV include:**

- Brokering partnerships between faith-based and government health services for more effective and sustainable programming, including mobilizing health services, community volunteers and workers to educate and promote testing and treatment of TB.

- Building community capacity and awareness through support of home-based care, the foundation of many CRS programs. CRS and its AIDSRelief partners have provided antiretroviral treatment to 159,228 people and provided HIV care and treatment to 437,092 people in 10 countries. The agency is augmenting these programs to support TB detection and referral through community workers and volunteers.

- Raising awareness and support at the policy level, testifying before the U.S. Congress, joining the Stop TB partnership and other international platforms to urge support for TB- and HIV-related funding.
The photographs in this publication are used for illustrative purposes only; they do not imply any particular health status (such as HIV, AIDS or TB) on the part of any person who appears in the photographs.
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