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A People-Centered Approach to Tuberculosis Care and Control

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Fragile States [3]
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HIV & AIDS [5]

Seven-year-old Makasi, an HIV-positive orphan in Tanzania, was diagnosed with advanced tuberculosis (TB) and started on curative treatment. Clinicians at a local health center used standardized TB guidelines to overcome the difficulty of identifying TB in children co-infected with other diseases. In Afghanistan, sixteen-year-old Hamida provides for her family while trying to complete school. Hamida was visited by a community health worker, who identified

her TB symptoms, and helped her access appropriate diagnosis and treatment.

Steady Progress Against Daunting Challenges

Tuberculosis mortality has fallen by a third since 1990. Yet TB is still the second leading cause of death from infectious disease worldwide [6]. The vast majority of new cases (8.8 million in 2010) and deaths (1.1 million in 2010) occur in poorer countries. TB's effects are often most devastating among people in fragile circumstances. Poverty and conflict push people into crowded, unsanitary conditions without appropriate nutrition and health care.

Even more, TB is fast spreading, easy to misdiagnose, often co-morbid with other diseases, and, increasingly, highly drug-resistant.

Against these challenges, today more and more people, including children like Makasi and Hamida, are being successfully diagnosed and treated because of dedicated, empowered people working at all levels of the health system.

An Ancient Solution for an Ancient Disease

To stop TB now and stop TB sustainably we must understand the biological manifestations of the disease, develop new diagnostic tools, and search for a TB vaccine. We must also recognize the complex ways human systems determine the spread and devastation of the disease. TB has been affecting humans since prehistoric times and the key to effective TB control may be just as old: people themselves. Putting people at the center of TB control efforts—building people's capacity to manage TB efficiently and reaching people who are most vulnerable to TB—can make all the difference.

When, despite being on antiretrovials, Makasi became very ill with fever, diarrhea, shortness of breath, and a cough, he would likely have been given the wrong treatment were it not for the clinic's new TB protocols. The clinicians used a pediatric TB score chart and standard operating procedures to quickly diagnose him. He was severely emaciated at the time of his health exam, but six months later Makasi had doubled his weight and was well again. *Building the capacity of the health workers who helped Makasi made all the difference.*

Hamida, whose whole family suffered from TB, became responsible for caring for herself and her younger siblings after losing her parents and older sister. She would have died from her advancing TB if she had not been visited by Fatima, a community health worker trained to identify the disease. Fatima took Hamida to a clinic that could accurately diagnose her and then visited her daily to monitor her treatment. Hamida is now well again, attending school and working. *Reaching Hamida in her home made all the difference.*

A People-Centered Approach Is a Health Systems Approach

When we focus on the role of people in controlling TB, we focus on people at all levels of the health system: **individuals** who make decisions about their health, **community health workers** who bring services close to the home, **facility health workers** who administer essential health services, and **government officials** who set standards and allocate resources.

Hamida is an individual who is responsible for making decisions about her health and the health of her family. Her circumstances made it difficult for her to access appropriate care. But

after successfully completing TB treatment she has been empowered to help her younger siblings do the same. **Makasi's grandmother** took him to the local health center; her success will likely empower her to continue seeking appropriate health care for herself and her family as needed.

Fatima is a community health worker who is responsible for reaching the most vulnerable populations. Afghanistan, one of the most fragile states in the world, <u>ranks</u> [7] last out of 22 high-burden TB countries. With <u>support from USAID and MSH</u> [8], Afghanistan trained more than 8,800 community health workers in identifying possible symptoms of TB and carrying out community-based DOTS (Directly Observed Treatment, Short course) --- a strategy to control TB through monitoring patients' treatment. This initiative, which saved Hamida's life, was partly responsible for increasing the TB notification rate by 19% in program areas (compared to a 4% decline in non-program areas) and the TB treatment success rate from 88% to 91% between 2009 and 2011.

The clinicians who treated Makasi are part of a team of facility health workers responsible for providing effective and efficient primary health care services. They participated in an initiative of Tanzania's National TB and Leprosy Program that trained them in easy-to-use, low-cost TB management tools. They adopted standard operating procedures that include asking all patients if they are experiencing TB symptoms. In less than two years, the initiative has <u>increased TB detection</u> [9] by 81% in the 12 implementing facilities.

The Tanzanian government officials who implemented the health facility initiative are responsible for providing the standards and resources necessary for effective and efficient TB control. They <u>partnered with MSH and PATH</u> [10] to assess the TB needs in the country and develop a solution. Governments around the world are investing in health management tools that build the capacity of health workers and integrate TB services with other health services, such as HIV (<u>TB is the leading cause of death among people with HIV</u> [11]) and diabetes (<u>about 10% of TB cases are linked to diabetes</u> [12]).

The ministry of health in Ethiopia <u>increased TB case detection</u> [13] by 26% in less than a year in select areas, in part by leveraging its HIV & AIDS care infrastructure. With <u>support from USAID and MSH</u> [14], it developed national TB-HIV guidelines and training materials and trained HIV & AIDS community health workers in TB detection.

Our success with people-centered TB control initiatives shows us that TB is more than just the tuberculosis bacilli. It is a problem of poverty and weaknesses in health systems. With a people-centered, health systems approach, we can better understand TB's effects on people and how people can best control TB.

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Related Reading

<u>WHO Global Tuberculosis Control 2011</u> [15]

<u>Afghanistan</u> [16], <u>Africa</u> [17], <u>capacity building</u> [18], <u>community health workers</u> [19], <u>DOTS</u> [20], <u>Ethiopia</u> [21], <u>fragile states</u> [22], <u>Jonathan Quick</u> [23], <u>Tanzania</u> [24], <u>TB</u> [25], <u>tuberculosis</u> [26], <u>USAID</u> [27]

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