

Lesotho

Baylor College of Medicine

Tuberculosis is common in children, a population for which there are challenges in diagnosing and confirming disease. Sputum examination remains the primary means of laboratory diagnosis, but infants and young children suffer from paucibacillary disease and are not able to produce sputum. Because of this, child tuberculosis cases accounted for only 6% of all new cases notified in Lesotho in 2012, much less than the approximated 15% of disease burden expected.

Fumana TB Baneng is a Stop TB Partnership TB REACH wave 3 initiative of Baylor College of Medicine Children's Foundation – Lesotho (BCMCFL) with the goal of improving the diagnosis and treatment of children with tuberculosis. In fact, the project name literally means "Find TB in children!" Fumana TB Baneng has three objectives: 1) diagnose and treat children with tuberculosis through active case finding and sputum induction, 2) screen children with household exposure to tuberculosis and 3) provide isoniazid to children when needed to prevent development of tuberculosis.

In July 2013, village health workers and other trained community personnel began contact tracing by visiting the homes of individuals with tuberculosis. Family members and all others living in the household are given information and education regarding tuberculosis. Everyone is screened using simple questions regarding cough, fever, weight loss and night sweats. Those who are ill and those who answer 'yes' to screening questions are referred to clinics for further evaluation. Individuals who are under five years of age or who are HIV-infected are also referred to clinics for isoniazid preventive therapy. Lesotho has high rates of TB/HIV co-infection, and anyone who does not know their HIV status is encouraged to be tested. The project has a goal of visiting 10,000 households and screening 30,000 individuals in one year. Over 1,000 village health workers have been provided the knowledge and skills to conduct screening and to support increased detection of tuberculosis in the community. Incorporating village health workers into the project will lead to long-term sustainability of the initiative within the country. During initial implementation involving five BCMCFL facilities, 130 homes have been visited and over 500 individuals have been screened.

Sputum induction is being established at five facilities including the national referral hospital and four district hospitals. Sputum induction is a procedure enabling children to produce sputum, which can then be sent to the laboratory for investigation. The National TB Reference Laboratory in Lesotho is equipped with molecular testing to further increase the diagnostic yield of sputum in children. An experienced team from Botswana-Baylor Children's Clinical Centre of Excellence visited Lesotho to provide training in, and practical demonstration of, sputum induction. Since January 2014, children of all ages with clinical symptoms of tuberculosis have access to the procedure and are able to be referred from health facilities throughout Lesotho. More than 110 children have already benefitted from access to the procedure. Through these efforts, BCMCFL hopes to improve the prevention, diagnosis, and treatment of tuberculosis in children.

