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Elizabeth Glaser Pediatric AIDS Foundation

Unitaid
Innovation in Global Health

Catalyzing Pediatric Tuberculosis Innovations (CaP TB):

Integrating Pediatric TB Services into Child Health Care Services in Africa study (INPUT Study)

The Elizabeth Glaser Pediatric AIDS Foundation's CaP TB Project, funded by Unitaid, will introduce and use innovative diagnostics, drugs, and models of care to diagnose and treat pediatric TB and save children's lives. In addition to generating and sharing novel evidence and cost-effectiveness data, the project will also conduct a cluster-randomized trial in Kenya and Cameroon. The *Integrating Pediatric TB Services into Child Health Care Services in Africa* (INPUT) study aims to assess whether integrating pediatric TB services into general child health services at health facilities will improve identification of children with TB and subsequent linkage to care. The research will evaluate the effect of new interventions and tools on identifying and treating children with TB and the results will address key gaps in the pediatric TB diagnosis, care, and treatment cascade, while providing programs with new tools and care models to better address pediatric TB.

INPUT Study

In many sub-Saharan African countries, TB diagnostic and treatment services for children are often only offered once a child is presenting with symptoms, within TB-specific clinic settings. Integrating comprehensive TB prevention, diagnostic and treatment services into existing child health services in not common in areas burdened by high TB prevalence rates.

Mounting evidence indicates that integrating TB/HIV/ health services for adults improves the quality of care and results in higher retention.[1] However, little data is available on the feasibility and impact of integrating TB care into child health care services or on the effect of this integration on pediatric TB case detection, care, and treatment. The INPUT Study will address these critical evidence gaps in Kenya and Cameroon, while generating evidence to inform strong integrative approaches in other countries.

Methodology

In a stepwise approach, randomly selected sites in these countries will integrate pediatric TB services within key child health care services, such as maternal, newborn, and child health services; under-five clinics; pediatric outpatient services; nutrition or antiretroviral therapy (ART) clinics; antiretroviral therapy (ART) clinics; and other primary health care entry points. To improve TB diagnostic capacity at these various service points, health workers will receive new tools and training on a user-friendly child TB diagnosis algorithm, TB specimen collection, and testing with GeneXpert (using the more sensitive diagnostic Xpert Ultra cartridges). To improve symptom screening in these facilities, lay health workers will also be trained to screen patients for TB in waiting rooms, and refer those potentially infected to designated clinicians for further clinical evaluation and diagnostics.

TB service delivery data from the current standard of care, wherein TB services are mostly, if not only, available in TB service points, will be compared to data from the intervention, wherein pediatric TB services will be made available in other child health services. It is expected that the intervention will streamline access to TB services among caregivers and children, while also exposing clients to more accurate and sensitive diagnostics and palatable treatment formulations.

References

1. Gandhi N, Moll AP, Lalloo U, et al 2009. Successful Integration of Tuberculosis and HIV Treatment in Rural South Africa: The Sizonq'oba Study. J Acquir Immune Defic Syndr vol: 50 pp: 37–43.

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