

AKANKSHA - आकाङ्क्ष / Twindemic Response Via Social Health Activism

EXECUTIVE SUMMARY

Overview

AKANKSHA - आकाङ्क्ष supports the bidirectional Diabetes Mellitus (DM) and Tuberculosis (TB) efforts of the Ministry of Health and Family Welfare in meeting the 2030 goal of eliminating Tuberculosis in India. By implementing a novel Tuberculosis Skin Test and healthcare worker empowerment project to target latent TB diagnosis and treatment in individuals with diabetes in the the city of Guntur, Andhra Pradesh, we will support the goal in eliminating TB.

The Problem

Increasing rates of Diabetes in India due to the effect of urbanization threaten India's plan to eliminate Tuberculosis by 2030. There is currently a lack of reliable and affordable methods to address latent TB (2). Diabetics with undiagnosed latent TB are at increased risk of seroconversion to active TB. Andhra Pradesh has the nation's highest diabetes prevalence at 12.6% and ranks eighth for highest prevalence of TB out of India's 28 states (3). The city of Guntur is the 3rd largest city in the state and is home to 940,000 people (4). A significant amount of TB-Diabetes work is done by Accredited Social Health Activist (ASHA) workers, a group historically disinvested in, yet integral to primary healthcare across India and Andhra Pradesh.

The Solution

Private clinics which treat diabetic patients in Guntur are prevalent. Government-funded Dr. YSR Urban Health Clinics with strengthened primary care services are expanding across Andhra Pradesh. ASHA workers are trusted community health workers and are dedicated to sustaining their service. AKANKSHA - आकाङ्क्ष has created a plan to implement use of a novel antigen- specific Tuberculosis Skin Test (Cy-Tb) to proactively, affordably and accurately detect cases of latent TB among diabetic patients at private and government clinics in Guntur, Andhra Pradesh over 5 years. It will support the work of ASHAs by supplementing their income and available resources to improve TB test follow-up, treatment initiation and adherence, as well as increase patient enrollment in the Ni-Kshay-Setu TB monitoring app. Treatment will be delivered in the form of the newest CDC-recommended therapy for latent TB – a once-a-week regimen of a combined isoniazid and rifapentine (INH-RPT) therapy over 12 weeks that replaces the former daily regimens of latent TB prophylaxis. Patients will be reimbursed for participation in our latent TB elimination program to promote adherence. Measurable outcomes will include changes in LTBI prevalence in diabetics, self-reported knowledge of LTBI and TB risk, and percent of diabetics receiving advanced TB screening at clinics.

Conclusions

Diagnosing and treating Latent TB in Diabetics using the reliable and novel Cy-Tb TB test and treating with INH-RPT therapy will improve TB-Diabetes outcomes in Guntur, Andhra Pradesh and will serve as a model for expansion across the state. Additional training and supplemental income for ASHA workers responds to the professional and socio-demographic needs of this population, a pillar of primary healthcare delivery in India.