

## COPD 2018: Impact of project Axshya on tuberculosis indicators in Punjab state, India-Sukhwinder Singh-The Union

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**Background:** Project Axshya is a flagship program of The Union South-East Asia Office using the strategy of advocacy communication and social mobilization and active case finding to enhance the visibility and reach of India NTP services among vulnerable and marginalized populations across 300 districts (21 states) of India. We wanted to assess the impact of the project over 2013-15 on the TB indicators under the NTP in the state of Punjab, India. **Methods:** Punjab, a state in north India, had 15 districts in 2013 which were further divided into 50 sub-district administrative units called as Tuberculosis unit (TU). Of these 50, project Axshya was implemented in 35 TUs. We collected TU level TB indicators (per lac population), quarter-wise during 2013-15. The indicators were presumptive TB smear examination rate (PTSER), new smear positive TB case notification rate (NSPTCNR) and all forms TB CNR (AFTCNR). **Results:** The trends of TU level TB indicators during 2013-15 are provided in figure. With an average TU level PTSER of 137 per lac population in the absence of project Axshya, implementation of project Axshya resulted in a significant increase of PTSER by 44 (0.95 CI: 9, 78) per lac population every quarter. With an average TU level NSPTCNR of 14 per lac population in the absence of project Axshya, implementation of project Axshya resulted in an increase of NSPTCNR by 1.5 (0.95 CI: - 0.5, 3) per lac population every quarter, however this increase was not statistically significant. With an average TU level AFTCNR of 27 per lac population in the absence of project Axshya, implementation of project Axshya resulted in a significant increase of AFTCNR by 9 (0.95 CI: 3, 15) per lac population every quarter. **Conclusion:** Project Axshya had an impact on TB indicators in the state of Punjab, India.

Tuberculosis (TB) is the leading cause of death among infectious diseases. In 2016, approximately 10.4 million people developed tuberculosis and 1.7 million died of it. Although tuberculosis diagnosis and treatment services are free of charge under national tuberculosis programs, patients bear significant direct, non-direct and indirect medical costs due to tuberculosis treatment. Cost measurement, especially during the diagnosis of tuberculosis, is important because it is the most uncertain period during the disease and most social protection measures do not cover the costs incurred during the diagnosis. A systematic review reported that the total cost of tuberculosis treatment was equivalent to 39% (range: 4–148%) of annual family income (AHI). Half of the total cost was incurred before TB treatment.

The high costs of diagnosing tuberculosis may be due to the way tuberculosis care services are organized. Patients must visit health services alone for diagnosis [passive case research (PCF)], and only after the diagnosis of tuberculosis does the program take active responsibility for taking care of them. The process of reaching healthcare facilities could be time consuming, cumbersome and expensive. Since tuberculosis services are integrated with the general health system, the geographical, financial and social barriers to accessing TB treatment are similar to those for access to the general health system. Patients become trapped in a vicious circle of repeated visits to the same health care provider (HCP) or visits to multiple healthcare professionals, including private and traditional healthcare professionals.

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