

Pondicherry Institute of Medical Sciences (A Unit of the Madras Medical Mission) Department of Community Medicine Active Case Finding for Tuberculosis



Period of Survey: 6 months (27.1.23 to 18.7.23)

Active case finding is a proactive strategy designed to identify individuals with TB who may otherwise go undetected in routine healthcare settings. The National Tuberculosis Elimination Program (NTEP) Division, Government of Puducherry, and Department of Community Medicine at Pondicherry Institute of Medical Sciences, in partnership with the World Health Organization Tuberculosis, has undertaken an ambitious active case finding activity in their field practice areas, targeted an impressive 46,670 community members with a 100% coverage rate in tuberculosis screening. Community members were assessed using a presumptive tuberculosis symptom complex, and vulnerability scoring was introduced as an additional layer of evaluation. This scoring system not only identified potential cases but also prioritized individuals based on their vulnerability, ensuring a targeted and efficient screening process.

The screening incorporating Cartridge-Based Nucleic Acid Amplification Test (CBNAAT) and chest X-ray examinations using a unique community camp-based approach at the doorsteps of the participants. This innovative strategy aimed to overcome barriers to healthcare access, ensuring that even those in remote areas could benefit from advanced diagnostic technologies.

To further enhance efficiency, artificial intelligence (AI) technology was deployed in the screening of chest X-rays and was later counter-verified by specialists in pulmonary medicine. This combination of technology and medical expertise not only expedited the screening process but also ensured the reliability of the results. From the 46,669 community members screened for tuberculosis, 116 participants exhibited symptoms indicative of presumptive tuberculosis and CBNAAT testing was conducted in their sputum samples. Additionally, 5023 participants with a high vulnerability score of 3 and above underwent screening for tuberculosis using portable chest X-rays. Among the 116 participants tested using CBNAAT, one participant was diagnosed with tuberculosis.

The details of the survey according to field practice areas are listed below

SI. No	Field Practice areas	No of Anganwadi's surveyed	Total Population Covered	Total Cases Referred CBNAAT	Total Cases Referred Chest Xray
1	Kalapet	16	16,685	72	1859
2	Muthialpet	46	26,832	32	2973
3	Aalankuppam	4	3,151	12	191
Total			46,669	116	5023



Picture 1: Inauguration of Active Case Finding in the field practice areas of PHC - Muthialpet



Picture 2: Inauguration of Active Case Finding in the field practice areas of PHC -Kalapet



Picture 3: Interns actively involved in vulnerability mapping, identification of presumptive TB patients and collected specimen for CBNAAT Examination.

Thanking you

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