

Title: Intensified TB case finding activity among indoor patients in public sector hospitals of Himachal Pradesh, India.

Background: Patients admitted in hospitals have higher risk of acquiring TB due to multiple factors like debilitated condition, immunocompromised state, and risk of nosocomial TB infection. Intensified case finding being one of key strategies under India's National Strategic Plan, the state of Himachal Pradesh carried out screening of all indoor ward patients in public sector hospitals.

Objective: To study attempts to analyse the impact of intensified case finding (ICF) initiative like indoor screening on TB case notifications for the state.

Methods: Since 2022, all admitted patients in public sector hospitals of the state have been screened by a specially designed "6S-TB symptom stamp" (cough, fever, blood in sputum, chest pain, weight loss and night sweats) used on the patient's record file. Health care staff screened all patients immediately after admission and marked their findings on the stamp. All TB presumptive patients were offered microscopy, Chest X-ray and NAAT testing as per the diagnostic algorithm of the TB program and were initiated on appropriate TB treatment regimen along with the treatment for primary complaint of admission.

Results: The indoor screening activity was carried out across 132 public sector hospitals. In 2022, of the 4,68,220 admitted patients in different hospital wards, 366268 (78%) were screened. In them 22652 (6.2%) were presumptive TB (which contributed to 8% of state presumptive TB examination rate) and 1468 (6.4%) were diagnosed as TB (which contributed to 9.1% of state total case notification). Moreover in 2023, 5,56,490 admitted patients in different hospital wards, 502128 (90.2%) were screened. In them 34903 (7%) were presumptive TB (which contributed to 9% of state presumptive TB examination rate) and 2497 (9.4%) were diagnosed as TB (which contributed to 10.1% of state total case

notification). Percentage increase of 10.4% ($p < 0.05$) was observed in state TB case notification in 2022, 2023 & 2024 each vis-à-vis 2021.

Conclusions: Stamp based ICF activity among admitted patients in public hospitals has proven to be an effective intervention for early diagnosis and treatment of TB and contributes significantly to TB case notification in the state. This activity is scalable at all levels including the private sector and is crucial for expediting TB elimination.