"Cough Supervisors"
– An innovative approach for finding the missing TB cases during Covid-19 pandemic
– Jorhat district, Assam

Government of Assam

National Health Mission, Assam

Background

The Emergence of Covid 19 pandemic has posed a grave challenge to the health care services worldwide. While ensuring uninterrupted service delivery for the existing TB patients remains our priority and a challenge, we have also seen a drastic decline in presumptive TB examination and TB notification owing to the Government orders on lock-down which is again very essential for curbing the spread of Covid 19. In our innovative approach to find the probable missing TB cases during this hour of crisis, we tried to engage volunteers from the community as engage them for finding the highly presumptive TB cases and help in sputum sample collection and transportation for TB diagnosis.

Methodology

Settings

4 Tea gardens and 1 urban slum under Bagchung TB Unit, which is a high burden TB unit in Jorhat district.

Procedure followed

Step 1:

Selection of high-risk areas

Tea Gardens selected:- Tukulai TE, Gatanga TE, Doklongiaa TE and Murmuria TE (Total population: 20,305)

Urban Slums selected:- Umbedkar Coloney under Mariani PHC (Total Population: 4438)

Step 2:

Selection of health workers and volunteers (COUGH SUPERVISORS) who were interested to work during the lock down period for the TB programme. They are mostly the Line chowkiders of Tea gardens, TB Champions (Cured TB patients and their relatives) along with paramedical staff under the Tea Gardens.

Step 3:

Motivated and capacity building of the volunteers with a hand on training to collect the sputum samples.

Additional measures

Along with sensitization on basics of NTEP, all the volunteers were sensitized on the current Covid-19 situation along with all "Dos & Dons" and also on the Infection Prevention Control measures to be undertaken both for TB and Covid-19 as per guidelines laid down by Govt of India. To increase the sensitivity of diagnosis in this "small sample group of presumptive TB patients" decision was taken to test the samples in CBNAAT only. Covid-19 was ruled out among the identified presumptive TB patients as per the GoI guidelines under the guidance of the Medical Officers concerned.

Human Resource involved

• "Cough Supervisors" are mostly line chowkiders of Tea Gardens, Cured TB patients (TB Champions) and para-medical staffs.

• Existing staffs of NTEP.

Cost

No additional cost were involved as all were part of continuous activities under NTEP.

Table: Result of the active case finding activity conducted by Cough Supervisors (Jorhat district, Assam).

Total no of sputum samples collected (A)	Of (A) no (%) tested in CBNAAT (B)	Of (B), no (%) diagnosed as MTB detected (C)	Of (B) no (%) detected as MDR TB	Of (C), no (%) initiated on Rx
20	20 (100%)	7 (35%)	0 (0%)	7 (100%)

Discussion

Though this study was done in a small population of 24,743, we found that with a simple innovative approach of engaging the community and TB Champions for screening and linking presumptive TB patients to NTEP, we could detect 7 TB patients out of 20 presumptive cases identified within a period of 15 days which translates to 35% positivity rates among these vulnerable population. During this Covid-19 pandemic and lock-down period, this approach gave us an opportunity for early diagnosis and treatment for the TB patients who otherwise would have continued to spread the infection in the household and community till they could avail diagnostic and treatment facilities for TB, waiting for the Covid-19 crisis to be over

Screening and sample collection by Cough supervisor in the Tea Gardens and villages

Conclusion

The concept of identifying and availing the services of "Cough Supervisors" in the community during unforeseen emergency situation such as the current Covid-19 pandemic, outbreaks, floods, earthquakes etc. can help us in a long way in early identification and treatment of TB patients