

How the preparedness for TB Elimination has helped Kerala in fighting COVID-19?

Kerala TB Elimination Mission

Government of Kerala has launched “Kerala TB elimination mission” aligning with the Sustainable Development Goals, with objectives to achieve TB Elimination by 2025, zero deaths due to tuberculosis in the state and zero catastrophic expenditure for the families of tuberculosis patients. Strategy document for Kerala TB Elimination Mission was brought out with 10 principles and 48 activities. The document has been published by Government of Kerala as a Government Order [GO Rt No 246/2018/H&FWD dated 24.01.2018]. The Mission was formally launched during January 2018. The mission is envisaged as a peoples’ movement against TB under the leadership of local self-governments.

How Preparedness of TB Elimination Mission has helped Kerala for fighting COVID-19?

Activities done related to Kerala TB Elimination Mission has helped the state to tackle COVID-19 efficiently. A few such initiatives are highlighted as follows.

1. Vulnerability Mapping for TB has helped to reduce COVID mortality
2. ‘Airborne Infection Control Help Desks’ (Cough Corners) at every hospital helped to prevent disease transmission within health care institutions
3. STEPS (System for TB Elimination in Private Sector) has helped to engage private sector efficiently for COVID and ensure standards of care
4. ‘Handkerchief Revolution’ has helped in behaviour change communication of society regarding respiratory hygiene

5. Infrastructure for TB diagnostics (Xpert/ Truenat/ Biosafety cabinets) has helped to scale up COVID diagnostic facilities in public and private facilities.

1. Vulnerability Mapping: Kerala has evolved a novel surveillance model to maximize the number and minimize the delay in detection by identifying all individuals in the state with various degrees of risks to develop TB infection and disease. Thirteen potential risk factors (vulnerabilities) for TB infection and disease in the state were mapped. These vulnerabilities included elderly, Diabetes, Chronic Lung disease, Smoking, alcoholism liver/kidney disease, bedridden/palliative care, Coastal, tribal, mine/quarry worker, slum dweller. Trained community health volunteers conducted door to door survey from January to July 2018, collected data on paper, and compiled electronically. 7019794/ 8560731 (82%) of households in the state were visited by trained community volunteers for assessing vulnerability during the period. Individual Vulnerability data in electronic form was available for 2,20,42,168 individuals in the state. Of them 41,36,420 has been found to have at least one vulnerability [13,45,944 has reported diabetes, 41,07,34 reported Chronic Respiratory diseases, 5,61,468 reported current tobacco use]. Compiled vulnerability data has been made available to concerned Primary Health Centre in electronic format.

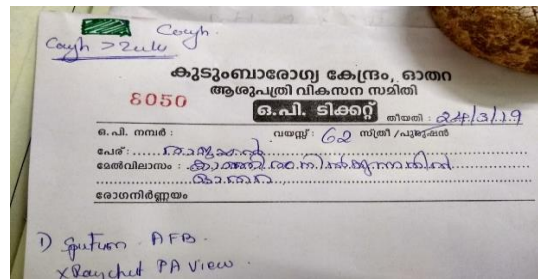


Vulnerability Risk Assessment at residence of Hon Health Minister

Proactive care of elderly and people with co-morbidity was one of the key strategies adopted by the state of Kerala for preventing COVID mortality. Vulnerability for TB overlaps with vulnerability for COVID especially elderly and people with chronic diseases. The availability of TB vulnerability data at Panchayat level has helped all primary health care team to easily identify the vulnerable individuals. Women Self Help Group members, Volunteers, Palliative Care team contacted all individuals & their family based on the line list for education on special precautions. ASHA with support of health system front line workers did regular surveillance of elderly & people with morbidity to address their medical needs. The state was successful till date in containing the infection among healthy individuals by protecting the vulnerable individuals. This could be one of the important reasons for low case fatality (0.8%) due to COVID in Kerala, despite high general morbidity in the community.

2. Airborne Infection Control help desk at all hospitals

75 Taluk/District hospitals in public sector have established AIC help desk [Cough Corners] by Jan 1 2020, where patients with respiratory symptoms are screened and provided with mask and education on cough hygiene. Further strengthening of AIC at hospitals were happening through establishment of AIC help desk at all hospitals including private with system for screening of respiratory symptomatic at reception, education on cough hygiene, separation, fast tracking and ensuring cross ventilations. Facility risk assessment of all major hospitals have been completed and appropriate corrective actions were in progress. AIC help desks have been successfully advocated with private sector hospitals also and by Jan 1, 2020 324 private hospitals in Kerala had AIC help desks.



AIC Help desk at One of the Primary Health Centres in Kerala during September 2019, with system for screening, providing masks and fast tracking respiratory symptomatic

During the time of COVID, AIC help desks became universal and get converted to IC help desk incorporating hand washing and temperature screening also. AIC help desks might have prevented transmission of many infectious diseases within hospital and to health care workers. It is worth mentioning that no hospital in Kerala including private was totally shutdown during COVID outbreak till date.

3. System for Private Sector Engagement

Government of Kerala has the STEPS (System for TB Elimination in Private Sector) mechanisms to engage private sector for ensuring standards of TB care to the patients reaching there and reducing their out of pocket expenditure.

STEPS centres which are single window mechanisms at private hospitals for all communications and ensuring public health actions to all patients were already established in 380 health facilities. Private hospital consortiums were existing in districts. District Collector & Magistrates reviews this every quarter. To

technically support State TB Elimination Board in formulating policy decisions on strategy and operations for Kerala TB Elimination Mission and to advocate for ensuring all public health services including contact tracing, TB prevention, Air Born Infection control and treatment adherence support to all patients, relatives, health care workers of the state and the community at large, a coalition of all professional Medical Associations has been formed at state level and at all district level. These structures helped the state to quickly engage the private sector for COVID. In may districts DTOs were in charge of engaging private sector.

STEPS (System for TB Elimination in Private Sector) has been transformed to System for Total Engagement of Private Sector (STEPS) for all public health related activities.



Dr Soumya Swaminathan, WHO Deputy Director General launching STEPS (System for TB Elimination in Private Sector)- February 2019

4. Handkerchief Revolution

A Behaviour Change Communication campaign named ‘Handkerchief Revolution’ was in place educating every school child on respiratory hygiene.

Though its impact has not been studied, these activities definitely would have helped in inculcating good respiratory hygiene practices and further designing BCC campaigns during COVID era.



Glimpses from 'Handkerchief Revolution' at Schools in Kerala, November 2019

5. Infrastructure for TB diagnostics (Xpert/ Truenat) has helped to scale up COVID diagnostic facilities in public and private facilities.

24 Xpert machines were available in public sector and 13 in private sector. Of these 9 started testing for COVID. 20 Truenat machines in Public sector and 4 in private sector also started testing for COVID. Xpert and Truenat were used particularly to test COVID in samples of emergency nature – before surgery, for suspected COVID deaths and for SARI cases requiring immediate results for clinical management.

Summary

Since inception, Kerala TB Elimination mission is envisioned as an activity to further strengthen the health system. Some of the initiatives undertaken for TB Elimination has helped the state in fighting COVID. Kerala TB Elimination is getting ready to be transformed to further strengthen the system in the context of COVID, also gaining major lessons from COVID pandemic.