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DECLINING THE T.B CASES IN NIZAMABAD DISTRICT: A CRITICAL VIEW

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Abstract

TB is the second biggest cause of death from an infectious disease, trailing only the human immunodeficiency virus (HIV). TB remains a serious infectious disease, killing more people than any other. Given the substantial illness burden on society, TB was included in Millennium Development Goal six at the turn of the twenty-first century. Tuberculosis (TB) is an infectious illness caused by *Mycobacterium tuberculosis* (*M. tuberculosis*) that affects the lungs and can be either quiet and latent or progressive and aggressive. If untreated or incorrectly treated, tuberculosis causes gradual tissue deterioration and, eventually death. *M. tuberculosis* is spread from person to person through coughing or sneezing, which releases "droplet nuclei" in the air that can contain one to three organisms. In healthy humans, *M. tuberculosis* infection frequently results in no symptoms because the immune system works to "wall off" the bacterium. Coughing, occasionally with blood in the sputum in the late stages, chest pain, weakness, weight loss, fever, and night sweats are indications of active tuberculosis affecting the lungs. This article examines the district's TB programme and analyses the case decline and present status of TB patients in Nizamabad.

Keywords: T.B Cases, TB Programme.

1. Introduction

Tuberculosis (TB) has been around for almost as long as humanity. Bony tuberculosis has been found in the skeletons of Egyptian mummies. The first observed records of tuberculosis can be found in ancient India and China. TB is referred to in the Vedas as 'Rajyakshma,' which means 'to waste away' in Sanskrit. TB has influenced every continent. For decades, the 'King's touch' was practised in Europe. During the middle Ages, extra pulmonary tuberculosis was recognized, a histological description of lesions including tubercles and abscesses was produced, and surgical excision of the diseased gland, the scrofula, was advocated. When it was discovered that forces that stayed indoors in barracks had TB more than those who spent more time on the battlefields, commendable epidemiological linkages were made. As a result, a connection was discovered between overcrowding and disease transmission. Later, TB has referred "consumption," "phthisis," and "white plague" because the disease appeared to consume the patient, leaving them emaciated and anaemic. These descriptions are identical to the earliest TB description, 'Rajyakshma.' Our understanding of TB was revolutionized by the isolation of the TB mycobacteria by Robert Koch on 24 March 1882. As a result, 24 March is celebrated as World TB Day. Robert Koch not only identified but also cultivated *M. TB*, and demonstrated its growth on re-inoculation. Years later, streptomycin was the first anti-tubercular drug to be developed, followed by Isoniazid and several other drugs. Later, the Bacillus Calmette-Guerin (BCG) vaccine was developed, which protected severe types of tuberculosis. TB was considered a treatable condition after the introduction of therapy and immunizations. However, the World Health Organization (WHO) announced a global emergency in 1993 due to an increase in cases caused by an HIV outbreak and a rise in multi-drug resistance cases. TB continues to pose a threat to the world. The mycobacterium tends to lie dormant within macrophages and resists death by preventing the formation of the phagosome-lysosome complex. The disease runs a chronic course and requires prolonged treatment. Due to the increased propensity of the TB mycobacterium to become drug-resistant, the WHO recommends multidrug therapy (MDT).

2. Objectives of the Study

The main objective of this study is to understand National T.B. Elimination Programme and its activities in Nizamabad district. Furthermore, the objective is also to understand and analyse declining the TB Cases in the district.

3. Research Methodology

The present study is theoretical and makes use of secondary data. The relevant secondary data has been collected from journals, books, various previous studies and nikshay website. This is an exploratory research design and it is used to seek insights into TB elimination activities and the decline of TB cases in the Nizamabad district.

4. Brief History of the TB Programme in India

NTP: National Tuberculosis Control Program 1962: Reviewed in 1992: NTP had not achieved its aims or targets.

RNTCP: Revised National Tuberculosis Control Program 1992: Incorporating 'Directly Observed Treatment Short-course (DOTS) strategy.



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Stop TB Strategy 2006: Announced by WHO in 2006 and endorsed by RNTCP, this strategy contains the following components: Continue and extend DOTS, TB/HIV treatment, MDR-TB treatment Strengthening the healthcare system Engaging private and alternative practitioners, empowering patients, promoting research (Diagnostics, Treatment, and Vaccine), National Airborne Infection Control Guidelines, and a Practical Approach to Lung Health are all part of the programme.

Stop TB Strategy 2006: Announced in 2006 by WHO and adopted by RNTCP which includes: Continuing and expanding DOTS, Addressing TB/HIV, Addressing MDR-TB, Health system strengthening Engaging private and alternative practitioners, empowering patients, Promoting research (Diagnostics, Treatment and Vaccine), National Airborne Infection Control Guidelines and Practical Approach to Lung Health.

End TB Strategy 2014: Approved by WHO in 2014, as tuberculosis remained the world's worst infectious illness. Patient-centered care and prevention, strong policies and patient support, and increased research and innovation are all part of the End-TB Strategy.

National Tuberculosis Elimination Program 2020: The Government of India (MoHFW) has committed to eliminating tuberculosis (TB) by 2025, five years ahead of the global aim under the SDGs. The National Tuberculosis Elimination Program (NTEP) is an essential public health programme that provides quality TB diagnosis and treatment. The initiative provides free, high-quality tuberculosis diagnostic and treatment services, as well as Rs.500/- in extra financial support, directly to TB patients' bank accounts through the Nikshay Poshan Yojana during their treatment duration.

5. The profile of the TB Programme in Nizamabad

The Nizamabad district is implementing the RNTCP (Revised National Tuberculosis Control Programme) since March 17th, 2003 the programme is being run under the supervision of the District Health & Family Welfare Society under the chairmanship of Collector and Dist. Magistrate, Nizamabad.

The total District is divided into 8 Treatment Units they are 1. Nizamabad 2. Armoor3. Varni 4. Dharpally 5. Balkonda 6. Mudakpally7. Morthad 8. Navipet with One Senior Treatment Supervisor (STS), and one Senior Treatment Laboratory Supervisor (STLS) to each TU & Cluster level Sub-district Tuberculosis Monitoring Officer (STMO/SPHO). One TU will cover about 1.5 to 2.0 Lakhs population in its jurisdiction. Moreover Dist.T.B.Centre, Nizamabad is having one Senior DOTS plus Supervisor and District Private Public Mix/ ACSM Coordinator.

There are 21 DMCs (Designated Microscopic Centre) in the district for providing effective sputum examination Services for chest symptomatic patients who have had a cough for more than two weeks. The DMC will cover about one lakh population with the help of referrals from nearby feeding centers. DTC Nizamabad, Medical College, Malapally, C.S.Colony,S.R.Nagar,Dubba,Armoor,Nandipet,Kalladi,Varni,Bodhan,Kotagiri,Rudrur,DharpalyBalkonda,Kishan Nagar, Bheemgal, Velpur, Navipet, Yedpally and Dichpally.

In Revised National Tuberculosis Control Programme TB patients will take medicine from a DOTS (Directly observed Treatment Short course) centre under the direct supervision of DOTS providers. The A.W.W, ASHA, and other local persons are discharging their services as DOT providers. The TB Patients will get 6 to 8 months of TB treatments. They will have to undergo regular follow-up sputum examinations as per schedule (2 Months, 4 Months and at the end of Treatment) to progress and cure. At TU Level the Revised National Tuberculosis Control Programme will be supervised by the medical officer of the Treatment Unit (TU).

The Senior Treatment Supervisor (STS) will look after the case registration, smear conversion and treatment outcome of TB Patients in his TU area and supply TB medicine regularly to PHCs in his TU area. He/she also retrieves the defaulters of TB Cases for the continuation of the regular course he/she will also be responsible to submit monthly reports to DTC Nizamabad and quarterly reports to STO Hyderabad regularly. There are 4 posts of TBHVs 4 in Nizamabad urban-02, Nizamabad Medical College-01 & Urban Bodhan-01. They will take care of case detection, treatment outcome, DOTS retrieval of defaulter, sputum conversion & patient home visits etc. The Senior Treatment Laboratory Supervisor (STLS) will look after all DMCs in his TU Jurisdiction. He/she will supervise all kinds of laboratory quality assurance at DMC lab-level and submit a report to DTCO every month. The whole district level Revised National Tuberculosis Control Programme will be looked after by DTCO Nizamabad. The CB-NAAT/ TRUNAAT test diagnoses Primary TB, Pediatrics TB, TB-HIV, MDR-TB and EP-TB by conducting Sputum, Gastric Lavage, Ascetic Fluid, C.S.F, Pus and EP-Samples tests and the result will declare within 2 hours on free of cost. Moreover, private practitioners were also referring to the suspected case for this test.



6. NTEP Activities of Nizamabad in declining TB cases

- Receiving 5%-10% of outpatients from each PHC for TB diagnosis through CBNAAT/TrueNaat.
- Screening for ADP (ASHA Dieses Profile) and finding new tuberculosis patients.
- Ashas, PHC, and TB field staff visit patients' homes regularly to screen family members and neighbours.
- Bi-directional screening is a regular activity (Diabetics, B.P, HIV, Tobacco, Covid, Leprosy, dialysis, paediatric and gynaecology dept etc.).
- Regular follow-up on previously completed and cured cases.
- Every detected TB case sample has been sent to SLLPA/FLLPA for Resistant pattern analysis, which can assist patients to get better treatment.
- Conducting three ACF activities each week, the field staff has been conducting house-to-house surveys before ACF activities since 2019.
- CBNAAT/TRUENAAT are widely used for TB diagnosis in private, public, and other referral settings.
- Private practitioners actively participate in notifying TB cases with the cooperation of the IMA district.
- ATT Drugs selling Chemist shops are notifying TB cases regularly with the support of the District Drug Department.
- To raise awareness among the general public, awareness campaigns are being held at Night Shelters, Stone crushing areas, Brick making industries, Beedi Karkanas, Paper mills, Rice Mills, Schools, Colleges, Youth clubs, Prisons, SHG, Kala Jathas, Goods Hamalees, Transgender, Drivers associations, Bus depot workers. NTEP staff has been actively participating in Tom-Tom activities, Wall painting writings, Grama sabhas, VHNDs, TB Clubs and TB Forum.
- Involving TB Champions in every meeting to inspire other patients and educate higher-level authorities about the NTEP.
- Conducting frequent meetings and sensitising TB Nodal officials to actively participate in the TB programme.
- Making public representatives aware of the problem (M.Ps, MLAs, MLCs, and PRIs).
- Sensitization of RMPs and PMPs to TB programme advancements.
- Continuous Sensitization of Print and Electronic Media (TV, You tube, and Radio) on the TB programme.
- Active Social Media Platforms (Twitter and FaceBook)

7. The decline of TB Cases in Nizamabad district

Year	Population	Target	Achievement	Per cent	Deaths	Per cent
2018	1684213	3655	2487	68	104	4
2019	1695612	3554	3290	93	106	3
2020	1725243	3459	2679	76	81	3
2021	1736763	3640	2034	56	72	4
2022(Till Oct)	1688178	2856	1014	57	47	3

Source: Nikshay Portal.

The table shows that TB cases have been declining since 2018; however, in 2019 the cases have climbed although overall the cases in the district have been gradually decreasing. Surprisingly, the death rate has indeed dropped.

8. The Achievements

The Government of India has set a target of reducing new TB cases by 80 per cent by 2025 in order to eradicate TB. The prevalence of tuberculosis (TB) and attempts to eradicate it differ by state/district. As a result, the government declared that it will motivate and reward states and districts for meeting specified goals. Nizamabad district was nominated for the bronze medal (20% reduction) in 2020 in Sub National Certification (SNC) and was awarded. In 2021, the district was nominated for a silver medal (40 % reduction) and was selected. This year, the district has been nominated for a gold medal (60% reduction), and a survey will be conducted in the district.

9. Conclusion

It is the responsibility of every citizen to take part in the activities directed to eliminate TB by 2025 in our country. Nizamabad district has been performing well in all aspects. Although the awareness of symptoms, causative agents, mode of transmission, and services offered through NTEP was reasonably good. Still, there is a need for proper health education and awareness, especially in rural communities.



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