

Some interesting observations regarding TB patient management from a rural area of Madhya Pradesh: TB case series

Akash Ranjan Singh¹, Abhijit Pakhare¹, Ashish Chauhan¹, Abhishek Singh¹

¹Department of Community and Family Medicine, All India Institute of Medical Sciences (AIIMS), Bhopal, Madhya Pradesh, India

ABSTRACT

Despite many serious efforts, tuberculosis (TB) is still a recognized public health problem. The Government of India has adopted the Directly Observed Treatment, Short-Course (DOTS) strategy for the entire country through the Revised National Tuberculosis Control Programme (RNTCP) for the treatment of TB. In this report, we have presented the trajectories for care seeking of two TB cases who suffered from either “patient level delays” or “health system-related delays” in seeking DOTS for the treatment of TB.

Keywords: Directly Observed Treatment, health system-related delays, patient level delays, tuberculosis (TB)

Introduction

Tuberculosis (TB) remains one of the world’s deadliest communicable diseases. In 2013, an estimated nine million people had developed TB, out of whom, India alone accounted for 2.1 million. Prevalence of TB in India is 211 per 100,000 in a population.^[1] The Directly Observed Treatment, Short-Course (DOTS) strategy has been rolled out throughout India under the Revised National Tuberculosis Control Programme (RNTCP) since March 2006. This program is implemented by public health authorities within each district through a network of peripheral health institutes. Medical officers (MOs), health supervisors, senior treatment supervisors (STSs), laboratory technicians, multipurpose workers, and accredited social health activists (ASHAs) are the key stakeholders of the program.^[2] DOTS is a core strategy and therefore, a DOTS provider is a key person in TB case management.

Address for correspondence: Dr. Akash Ranjan Singh, Department of Community and Family Medicine, All India Institute of Medical Sciences, Saket Nagar, Bhopal - 462 024, Madhya Pradesh, India.
E-mail: akash.srcfm14@aiimsbhopal.edu.in

Studies have documented various delays in seeking DOTS for the treatment of TB; it can be either “patient level delay” or “health system-related delay.” At the time of diagnosis, patient level delays are mainly due to disbelief in the diagnosis, change of behavior of the community, and shame of disclosing the disease.^[3-8] Most of the time, this TB-related stigma has a strong influence on the patient’s choice of seeking treatment from traditional healers, i.e., public or private providers (PP).^[6] PP’s Barriers for not completing the treatment are early improvement of symptoms and dissatisfaction with the DOTS provider. It was also found that most of the patients defaulted on the intensive phase rather than the continuation phase.^[7]

Health system-related delays are mainly due to not informing the patient about suspicion of TB at the time of diagnosis, improper/no pretreatment, default counseling, and a poor tracking system of the patients.^[7]

In this report, we have presented trajectories for care seeking of two TB cases from a primary health center (PHC) of Raisen district, Madhya Pradesh, India.

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: Singh AR, Pakhare A, Chauhan A, Singh A. Some interesting observations regarding TB patient management from a rural area of Madhya Pradesh: TB case series. J Family Med Prim Care 2015;4:591-3.

Access this article online

Quick Response Code:



Website:
www.jfmipc.com

DOI:
10.4103/2249-4863.174300

Case Report

Case report 1

A 36-year-old female came to the PHC with complaints of productive cough, weakness, and loss of appetite for 20 days. Her sputum was found to be positive for TB. The patient was registered for Category 1 DOTS and the ASHA of that village was designated as the DOTS provider. It took 2 weeks for the patient to start the treatment as the ASHA gave the treatment box to an Anganwadi worker (AWW), who in turn gave it to the patient. Afraid of the social stigma, the patient did not reveal the status of the disease to her family and started taking the medicines on her own. Eventually her husband, who had cough for an unknown duration, also started taking medicines from the same box with the belief that his cough would be taken care of by those medicines. This led to the exhaustion of the intensive phase medicines within 1 month. During an incidental meeting with the patient, the ASHA came to know about this and contacted the MO who visited the patient at her house, took proper history, made the panchnama of the remaining drugs, and returned the box to the TB unit. Thereafter, the patient was started afresh on Category 1 DOTS after proper counseling. Her family members were screened and came negative for TB. Aware of the correct regimen and side effects, the patient then committed to complete her treatment.

Case report 2

A 50-year-old male diagnosed with pulmonary TB at a primary health center (PHC) center was put on Category 1 DOTS in April 2014 with an ASHA being the DOTS provider. The patient was neither counseled nor was any default home visit made by the STS. Here also, the treatment box was given to the patient by an ASHA. Despite a disbelief in the diagnosis, fear of social stigma, and unawareness about the dosage schedule, the patient took the medicines for 4 months during which he was never subjected to any sputum examination. Eventually, he discontinued treatment due to persistence of the symptoms. No attempt was made by the STS to track the patient following discontinuation of treatment. Later, the patient visited two PPs but neither was his sputum examination done and nor his previous history elicited by them. He consumed various antibiotics but his symptoms still persisted.

In April 2015, he visited a district hospital where his sputum was found to be positive for TB. The patient collected his reports after 15 days; during this time period, nobody contacted him despite him being positive for TB. The past history of the patient was not elicited and therefore, he was incorrectly put on Category 1 DOTS. The patient experienced a worsening of the symptoms due to which he visited a PHC. There, his history was taken and he was counseled regarding the drug regimen and side effects and his stigma alleviated. His family members were also screened and fortunately none were found positive for TB. The tuberculosis unit (TU) was contacted to correct the treatment category; simultaneously, the patient's sputum was examined for

multidrug-resistant TB (MDR-TB) that was found to be sensitive to rifampicin. The patient, then fully aware about the disease status, committed to complete the treatment regimen.

Discussion

Health care seeking trajectories of these two patients highlight the importance of a DOTS provider's key role and resilience among various stakeholders for RNTCP implementation at the field level.

Similar to our findings, "patient level delays" have been mentioned in many studies and these occur mainly due to disbelief in the diagnosis, shame of disclosing the disease, and social stigma, e.g., misperceptions regarding the causes of TB and change of behavior of the community.^[3-8]

"Health system-related delays" for the diagnosis and initiation of treatment have been reported by Dandona *et al.*; they reported that these occurred as the patients had "not been counseled by any health personnel regarding treatment regimen, side effects, duration of treatment and social stigma," and due to the patients' "dissatisfaction with the DOTS provider."^[7]

During the course of treatment, ensuring smooth "transfer in" and "transfer out" through proper referral slip and by contacting the key person are crucial for those who need it. However, in our study we found that the referral slip was given to patients and then the onus was on the patient to pursue treatment. In the long term it should be mutual but in the program, active tracking of the patient is expected through a web-enabled and case-based monitoring application "Nikshay."^[9,10]

Pathways of default in TB treatment with the background of social stigma starts from disbelief in the diagnosis that leads to delay in seeking treatment and subsequently default.^[8]

Conclusion

We reemphasize the implementation of RNTCP core strategy in general with special emphasis on 1. counseling of the patient, especially at the time of start of DOTS treatment to address the stigma, 2. regular assessment of training should be done to ensure quality training of human resources under RNTCP, 3. effective tracking of the patients should be ensured through web-enabled and case-based monitoring application "Nikshay" to reduce the number of dropouts, and 4. strengthening the involvement of private practitioners is essential for the proper implementation of RNTCP.

Finally, adherence to DOTS in RNTCP ensures proper and complete treatment with appropriate drugs in appropriate doses at an appropriate time, thereby playing an indispensable role in improving the outcome of the disease and the quality of life in patients.

Acknowledgement

1. Dr. P. S. Thakur, District Tuberculosis Officer, Raisen, Madhya Pradesh, India.
2. Mrs. Manuradha Dahiya, Medical Social Service Officer (MSSO), Department of Community and Family Medicine (CFM), All India Institute of Medical Sciences (AIIMS), Bhopal, Madhya Pradesh, India.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Global Tuberculosis Report 2014. Geneva, Switzerland: World Health Organization; 2014. Available from: http://apps.who.int/iris/bitstream/10665/137094/1/9789241564809_eng.pdf. [Last accessed on 2015 June 09].
2. TBC India. Directorate General of Health Services, Ministry of Health and Family Welfare. 2015. Available from: <http://www.tbcindia.nic.in/rntcp.html>. [Last accessed on 2015 May 23].
3. Sarpal SS, Goel NK, Kumar D, Janmeja AK. Reasons for interruption of anti-tubercular treatment among the retreatment patients in category II of RNTCP in Chandigarh, north India. *Indian J Tuberc* 2014;61:121-8.
4. Gupta S, Gupta S, Behera D. Reasons for interruption of anti-tubercular treatment as reported by patients with tuberculosis admitted in a tertiary care institute. *Indian J Tuberc* 2011;58:11-7.
5. Jaggarajamma K, Ramachandran R, Charles N, Chandrasekaran V, Muniyandi M, Ganapathy S. Psycho-social dysfunction: Perceived and enacted stigma among tuberculosis patients registered under revised national tuberculosis control programme. *Indian J Tuberc* 2008;55:179-87.
6. Chang SH, Cataldo JK. A systematic review of global cultural variations in knowledge, attitudes and health responses to tuberculosis stigma. *Int J Tuberc Lung Dis* 2014;18:168-73, i-iv.
7. Dandona R, Dandona L, Mishra A, Dhingra S, Venkatagopalakrishna K, Chauhan LS. Utilization of and barriers to public sector tuberculosis services in India. *Natl Med J India* 2004;17:292-9.
8. Anand T, Kumar DA, Sharma N, Saha R, Krishnamurthy L, Singh SV, *et al.* Perception of stigma towards TB among patients on DOTS & patients attending general OPD in Delhi. *Indian J Tuberc* 2014;61:35-42.
9. Reach the Unreached, Find, Treat, Cure TB, Save lives, TB India 2014, Annual Status Report. Central TB Division, Directorate General of Health Services, Ministry of Health and Family Welfare, Nirman Bhavan, New Delhi. 2014. Available from: <http://www.tbcindia.nic.in/pdfs/TB%20INDIA%202014.pdf>. [Last accessed on 2015 May 27].
10. Revised National Tuberculosis Control Programme (RNTCP). Directorate of Health Services, Madhya Pradesh. 2014. Available from: <http://www.health.mp.gov.in/tb.htm>. [Last accessed on 2015 May 18].