ORIGINAL RESEARCH ARTICLE
pISSN 0976 3325 | eISSN 2229 6816
Open Access Article
www.njcmindia.org
DOI: 10.5455/njcm.20211223103344

Perceived Barriers of Tuberculosis Case Notification among Private Practitioners in Central Karnataka

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ABSTRACT

Background: India is the highest tuberculosis (TB) burden country in the world accounting for almost one-fourth of the global cases and deaths as per the global TB report 2021. There are evidences suggesting that private practitioners (PPs) in India are not equipped with sufficient knowledge to carry out proper management of TB patients and certain barriers in TB case notification. So the present study is under taken to explore the perceived barriers for TB case notification from private practitioners.

Methodology: In-depth interview, qualitative research was done with the PPs who diagnosed and treated TB patients in 2018 but not notified to district TB centre. PPs were selected for in-depth interview by simple random sampling method. In-depth interview were stopped based on the saturation of data. Study was conducted from July-December 2018.

Results: In-depth interview were conducted with 28 private practitioners. Perceived barriers for notification of TB cases by private practitioners were few misconceptions, patient's confidentiality and stigma, lack of co-ordination between public and private sector and lack of simplified mechanism for TB notification.

Conclusion: Private practitioners are the main stake holders in moving the country toward TB elimination so addressing their challenges is the need of the hour. Trust building and reorientation of private practitioners will address the major misconceptions about the TB case notification.

Key Words: Tuberculosis, Private Practitioner, Case Notification, Diagnosis

INTRODUCTION

India is the highest tuberculosis (TB) burden country in the world accounting for almost one-fourth of the global cases and deaths as per the global TB report 2021.[1] India notifies around 159cases/lakh population, which turns to around 24lakhs notified patients and 0.96lakh people died due to TB in 2019.[1] Out of the total notification in 2019, 28% of the TB cases are from private sector. Sustainable development goals (SDG) have set up a target of ending TB epidemic by 2030.[2] Tuberculosis can be effectively controlled if individuals with the disease receive adequate and timely treatment. The tuberculosis epidemic in India is complicated by the fragmented healthcare delivery system that includes practitioners in the public and private sectors. Even though the Government of India provides free healthcare services through National Tuberculosis Elimination Program (NTEP), up to 90% of patients experiencing tuberculosis-related symptoms in urban Indian settings first seek healthcare from private practitioners.[3]

In India, among the patients treated with TB, only 34% to 57% of the tuberculosis patients are inappropriately diagnosed and treated.[4-7] Poor diagnosis and treatment of TB is the leading cause for acquired

How to cite this article: Ghatage S, Anurupa MS, Aithal S. Perceived Barriers of Tuberculosis Case Notification among Private Practitioners in Central Karnataka. Natl J Community Med 2021;12(12):427-431. DOI: 10.5455/njcm.20211223103344

Financial Support: None declared **Conflict of Interest:** None declared

Date of Submission: 13-12-2021; **Date of Acceptance**: 29-12-2021; **Date of Publication**: 31-12-2021

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drug resistant TB.[8] In 2012, Government of India has declared TB as the nationally notifiable disease and created a web-based, case-based notification system known as NIKSHAY.[9] It has alsoissued an order mandating that all health care providers, both public and private practitioners with in the country should notify to the local government health authorities regarding all the TB cases managed by them. Mandatory notification of TB cases provided an opportunity to support the private practitioners (PPs) in ensuring adherence to Standards for TB Care guidelines.

There are evidences suggesting that PPs in India are not equipped with sufficient knowledge to carry out proper management of TB patients and certain barriers in TB case notification.[6,7] No efforts have been taken to explore the barriers for case notification among PPs offering tuberculosis services in Davangere city. This study was undertaken to address this issue.

This would benefit the program managers, policy makers and care providers in preparing policies and planning of interventions to strengthen the current guidelines inthe country.

METHODS

Study design: In-depth interview, a type of qualitative research.[10] It involves direct one-to-one engagement with the study participants. It is usually done face to face, but in some instance over phone. In our study, it was done face to face by the investigators trained in qualitative research.

Study area: Davangere, a district in central part of Karnataka. According to Karnataka Private Medical Establishment (KPME) act, there are 386 private hospitals (clinics, polyclinics and nursing homes) in Davangere city. Totally, 464 doctors are practicing in these hospitals. Through NTEP, 1 TB Health Visitor (TBHV) is appointed for every 1lakh population in urban areas. TBHVs are given the responsibility to meet these PPs, create awareness and help PPs in TB case notification.

Inclusion and exclusion criteria: PPs diagnosing and treating TB case but not notifying it to District tuberculosis office in the year 2018 either manually or through NIKSHAY were included in the study.

Sample size and study period: PPs who diagnosed and treated TB patients in 2018 but not notified to district TB centre. PPs were selected for in-depth interview by simple random sampling method. In-depth interview were stopped based on the saturation of data. Study was conducted from July-December 2018.

Data Collection: Institutional ethical committee clearance was obtained before the data collection. Written informed consent was obtained from all the study participants. Personal face-to-face interview was conducted with the PPs at the time convenient for them by the principal investigator who is trained in qualitative research. Since the PPs didn't give consent for audio recording the interview, the field notes of the interview were recorded. Interview was based on the topic guided with perception and challenges for the PPSs in notifying TB cases.

Data analysis: Manual descriptive content analysis was used to analyze the transcripts. The field notes were transcribed and manually coded by the investigators. Codes were generated and similar codes were combined into themes. Representative statements were included in the results to illustrate the theme.

RESULTS

In-depth interview were conducted with 28 private practitioners (Specialist-8, General allopathic practitioners–13, AYUSH practitioners-7). Perceived barriers for notification of TB cases by private practitioners can be grouped into four thematic areas:

I) Misconceptions.
II) Patient's confidentiality and stigma.
III) Lack of co-ordination between public and private sector.
IV) Lack of simplified mechanism for TB notification.

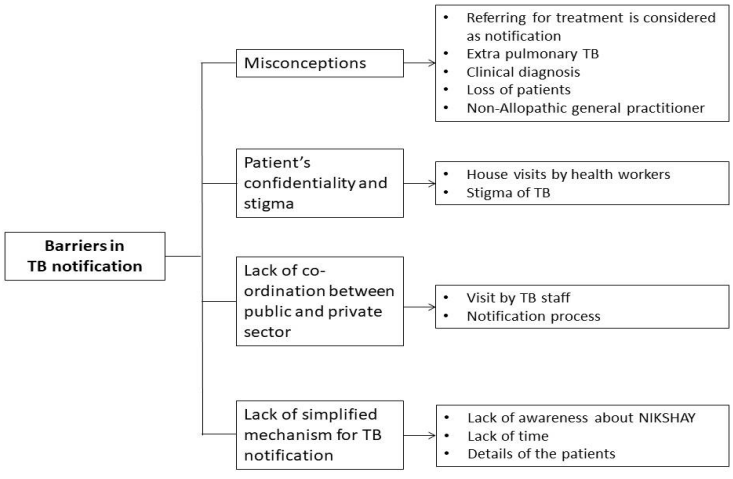

Fig 1: Barriers in TB case notification

I) Misconceptions:

a. Referring for treatment is considered as notification:

Most of the private practitioners refer the TB patients to the nearby DOTS Centre for treatment. So they felt that there is no need of notifying it separately as it's directly referred to DOTS centre.

"Once the diagnosis is confirmed, I refer all the TB cases to nearby DOTS Centre for treatment." (46 years. Physician)

"I refer the diagnosed TB case to the nearby health facility for treatment. That is nothing but the notification. Right?" (38 years. Physician)

b. Extra pulmonary TB:

All the private practitioners treating EPTB felt that notifying those cases was not so important as it does not spread.

"Government is more concerned about contagious pulmonary TB. Skeletal TB is not contagious." (53 years. Other MD/MS specialists)

"Abdominal TB will not spread. Pulmonary TB is important to be notified." (45 years. Other MD/MS specialists)

c. Clinical diagnosis:

Few private practitioners felt that, they cannot notify the TB cases if it's clinically diagnosed.

"If all the tests are negative and still I'm suspecting TB clinically, then I'll initiate anti-TB treatment. We cannot notify such cases." (38years. Physician)

"We don't have quick, high sensitive test to confirm TB. If all tests are negative, then can we rule out TB? So such cases we can't notify." (36years. Allopathic General Practitioner)

d. Loss of patients:

All the private practitioners felt that notifying TB cases will lead to loss of patients.

"If we notify, then NTEP will continue the treatment. We may lose patients because of this." (43 years. Physician)

"If they (NTEP) only want to treat all cases, then I should shut my clinic." (33 years. Physician)

e. Non-Allopathic general practitioner:

All the non-allopathic general practitioners felt that they are not supposed to treat the TB patients.

"AYUSH doctors are not allowed to diagnose and treat TB patients, as we cannot use allopathic medications." (47 years. AYUSH general practitioner)

"We can treat TB patients only in government hospitals, not in our private hospitals. So I won't treat any cases here. I'll diagnose and refer to government hospital only." (35 years. AYUSH general practitioner)

II) Patients confidentiality and stigma:

a. House visits by health workers:

Majority of the private practitioners stated that house visit by the health workers will increase the stigma.

"As soon as we notify, health workers visit patient's house. Repeated visits lead to stigma." (38 years. Physician)

"I don't know! What is the reason to visit patient's home by government health staff. That will only lead to stigma in the society." (54 years. Physician)

b. **Stigma of TB**:

Majority of the private practitioners stated that many of the TB patients deny of disclosing their diagnosis to other family members as well.

"When patients deny us to disclose the diagnosis to their family members only. How can we notify such patients against patients will?" (45years. Allopathic general practitioner)

III) Lack of co-ordination between public and private sector:

a. Visit by TB staff:

Majority of the private practitioners said that TB health visitor's won't visit their hospital regularly.

"If the NTEP staff comes regularly then we can notify cases to them only." (42 years. Physician)

b. Notification process:

Few of the private practitioners said that they are not aware of whom to notify and how to notify the diagnosed TB cases.

"I don't know whom to notify and how to notify, as there is no proper government circular or training regarding this." (34 years. Other MD/MS specialists)

"There is no format for notifying only. What data I should capture?" (38 years. Other MD/MS specialists)

IV) Lack of simplified mechanism for TB notification.

a. Lack of awareness about NIKSHAY:

Few of the private practitioners said that NIKSHAY, a web based method to notify the TB cases are not feasible for them.

"I'm 62years old now. I have never used computer till now. Never heard or used NIKSHAY." (62 years Other MD/MS specialists)

b. Lack of time:

Majority of the private practitioners said that notification process will consume lot of time in their busy schedule.

"My OPD will be always busy. Notification is not possible due to time constraints." (52 years. Physician)

c. Details of the patients:

Majority of the private practitioners felt that TB notification form has too many details.

"That form (TB notification form) has too many details. It should be reframed." (58 years. Other MD/MS specialists)

DISCUSSION

As India is committed for TB free India by 2025, it is important to involve all the stake holders specially the private practitioners in whom the 90% of chest symptomatic patients in urban settings first seek the health care.[3] Inspite of all the efforts from government including an amendment for not notifying all diagnosed TB patients, still there is gap in TB case notification by the private practitioners.

So the qualitative study i.e. an in-depth interview was conducted with these private practitioners to know and address the challenges faced by them. This can also added up in moving the country towards TB elimination.

Their perceptions and challenges were broadly grouped in to 4 areas like misconceptions, patient's confidentiality and stigma, lack of co-ordination between public and private sector and lack of simplified mechanism for TB notification.

In our study, misconception among the private practitioners about TB case notification, patient's confidentiality and stigma, lack of co-ordination between public and private sector and lack of simplified mechanism for TB notification were the barriers for TB case notification according to the private practitioners.

In our study, the major misconception about TB case notification was that referring the TB cases to DOTS centre for treatment was considered as TB case notification by private practitioners. This finding was consistent with the similar studies done in Bangalore by Siddaiah A et al [11], in Pune by Yeole RD et al [13] and in Kerala by Philip S et al [14]. In our study, all the private practitioners treating EPTB and few private practitioners treating probable TB cases felt that notifying such cases is not important. This finding was consistent with a similar study done in Kerala by Philip S et al[14]. In our study, all the non-allopathic general practitioners felt that they cannot notify the TB cases diagnosed by them, as they are not supposed to use the allopathic medications. This finding was consistent with a similar study done in Kerala by Philip S et al [14]. In our study majority of the private practitioners felt that notification of TB case can lead to loss of patients to them. They felt that after notifying of TB cases to district TB office; such patients have to continue treatment under NTEP. This finding was consistent with the similar studies done in Mysore by Chadha SS et al [15], in Kerala by Philip S et al [12], in Pune by Yeole RD et al[11] and in Chennai by Thomas BE et al.[10]

Majority of the private practitioners in our study felt that notification of TB case will hamper the confidentiality of the patients and repeated patient's house visit by the health worker will lead to stigma. This finding was consistent with the similar studies done in Chennai by Thomas BE et al [10], in Pune by Yeole RD et al[11], Kerala by Philip S et al [14], Mysore by Chadha SS et al [15], and Sulis G et al.[16]

In our study majority of the private practitioners said that notification process will consume lot of time in their busy schedule and TB notification form has too many details to be filled, which in turn consume lot of time. So the notification of TB cases is not possible. These findings are consistent with the similar studies done in Kerala by Philip S et al [14], in Pune by Yeole RD et al[13] and in Chennai by Thomas BE et al[12]. In our study, few of the private practitioners had lack of knowledge about use of technology. So, NIKSHAY, a web based method to notify the TB cases were not feasible for them to notify the TB patients diagnosed by them. These findings are consistent with a similar study done in Kerala by Philip S et al [14]. In our study, majority of the private practitioners felt that TB health visitor's do not co- ordinate with them properly in the notification process and few of them even had lack of awareness about the notification process. These findings are consistent with the similar studies done in Kerala by Philip S et al [14] and in Pune by Yeole RD et al.[13]

In our study few of the AYUSH PPs did not notify TB case due to falls belief that, they are not allowed to practice treating TB patients. Interestingly a study conducted by Datta A et al [17], involvement of non-formal health providers has improved the TB case notification in Odisha by 30%.

Present study even has certain limitations that it only concentrated on registered private practitioners, it did not address the challenges of the traditional healers. As the private sector is largely unorganized addressing the challenges in small clinics is also important.

CONCLUSION

TB case notification as the public health measure plays a major role in breaking the chain of transmission and moving the country towards TB elimination. Private practitioners are the main stake holders in this regard. Trust building and reorientation of private practitioners will address the major misconceptions about the TB case notification. Involvement of

liaison officers for public-private co-ordination wills simply the process.

Acknowledgement: We sincerely thank all the private practitioners for their involvement in the study and district TB officer and his team in helping us to approach the private practitioners.

REFERENCES

1. Government of India. TB India 2020 National tb elimination programme annual status report. [Online]. 2020 [cited 2021 Sep 25];1-292. Available from: URL: https://tbcindia.gov.in/showfile.php?lid=3538
2. Park K. Park's text book of preventive and social medicine. 24th ed. Jabalpur: M/s Banarisdas Bhanot publisher, 2017. p. 504-12.
3. Bronner Murrison L, Ananthakrishnan R, Swaminathan A, Auguesteen S, Krishnan N, Pai M et al. How do patients access the private sector in Chennai, India? An evaluation of delays in tuberculosis diagnosis. The International Journal of Tuberculosis and Lung Disease. 2016 Apr 1;20(4):544-51.
4. Satyanarayana S, Nair SA, Chadha SS, Shivashankar R, Sharma G, Yadav S et al. From where are tuberculosis patients accessing treatment in India? Results from a cross-sectional community based survey of 30 districts. PloS one. 2011 Sep 2;6(9):e24160.
5. Uplekar MW, Rangan S. Private doctors and tuberculosis control in India. Tubercleand lung disease. 1993 Oct 1;74(5):332-7.
6. Uplekar M, Juvekar S, Morankar S, Rangan S, Nunn P. Tuberculosis patients and practitioners in private clinics in India. The International Journal of Tuberculosis and Lung Disease. 1998 Apr 1;2(4):324-9.
7. Hazarika I. Role of private sector in providing tuberculosis care: evidence from a population-based survey in India. J Glob Infect Dis. 2011 Jan;3(1):19-24.
8. Sharma VM. Management of Tuberculosis-The Need to Enforce Proper Treatment Guidelines among Private Practitioners in India. Online Journal of Health and Allied Sciences. 2012 Jan 15;10(4):1-2.
9. TB Notification Module – Nikshay: User Manual. [Online]. 2012 [cited 2021 Oct 19];[5 screens]. Available from: URL:http://origin.searo.who.int/india/tuberculosis/topic/TB_Notification_Module_Nikshay_User_manual.pdf
10. In-Depth Interviews: Data Collection Advantages and Disadvantages. [Online]. 2016 2012 [cited 2021 Oct20];[2 screens]. Available from: URL:https://www.cfrinc.net/cfrblog/in-depth-interviewing
11. Siddaiah A, Ahmed MN, Kumar AM, D'Souza G, Wilkinson E, Maung TM, Rodrigues R. Tuberculosis notification in a private tertiary care teaching hospital in South India: a mixed-methods study. BMJ open. 2019 Feb 1;9(2):e023910.
12. Thomas BE, Velayutham B, Thiruvengadam K, Nair D, Barman SB, Jayabal L, Ovung S et al. Perceptions of private medical practitioners on tuberculosis notification: A study from Chennai, South India. PLoS One. 2016 Jan 28;11(1):e0147579.
13. Yeole RD, Khillare K, Chadha VK, Lo T, Kumar AM. Tuberculosis case notification by private practitioners in Pune, India: how well are we doing?. Public health action. 2015 Sep 21; 5(3):173-9.
14. Philip S, Isaakidis P, Sagili KD, Meharunnisa A, Mrithyunjayan S, Kumar AM. "They know, they agree, but they don't do"-the paradox of tuberculosis case notification by private practitioners in Alappuzha District, Kerala, India. PloS one.2015 Apr 24;10(4):e0123286
15. Chadha SS, Nagaraja SB, Trivedi A, Satapathy S, Devendrappa NM, Sagili KD. Mandatory TB notification in Mysore city, India: Have we heard the private practitioner's plea?. BMC health services research. 2017 Dec;17(1):1.
16. Sulis G, Pai M. Missing tuberculosis patients in the private sector: Business as usual will not deliver results. Public Health Action. 2017 Jun 21;7(2):80.
17. Dutta A, Pattanaik S, Choudhury R, Nanda P, Sahu S, Panigrahi R, Padhi BK, Sahoo KC, Mishra PR, Panigrahi P, Lekharu D. Impact of involvement of non-formal health providers on TB case notification among migrant slum-dwelling populations in Odisha, India. Plos one. 2018 May 23;13(5):e0196.