http://jmscr.igmpublication.org/home/
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v8i3.11

IGM Publication
Journal Of Medical Science And Clinical Research
An Official Publication Of IGM Publication

Perceptions of General Practitioners regarding inclusion as a DOTS provider in RNTCP, implemented in urban slum area of Mumbai

Authors
Dr Pravin Meshram[1], Dr Amandeep Kaur Ratta[2], Dr Sachin Singh Yadav[3]
[1]Assistant Professor, Department of Community Medicine, Teerthanker Mahaveer Medical College, Moradabad
[2]National Programme Officer, Norway India Partnership Initiative, New Delhi
[3]Associate Professor, Department of Community Medicine, Government Medical College, Datia
*Corresponding Author
Dr Sachin Singh Yadav
Associate Professor, Department of community Medicine, Government Medical College, Datia, India

Abstract
Background: *Engaging all health care providers in tuberculosis (TB) control has been incorporated as an essential component of World Health Organization's Stop TB Strategy and the Stop TB Partnership's global plan 2006-2015.Private practitioners treat a substantial proportion of tuberculosis cases. Since many patients first approach these practitioners, there is an opportunity to reduce diagnostic delay, to reduce subsequent transmission, and to improve treatment outcomes. Motivation of private practitioners for being a DOTs provider is one of the strategies developed by Govt. of India under the RNTCP to mitigate the disease burden. Hence the present study is undertaken to know perspectives of private practitioners regarding participation as a DOTs provider.*
Objectives: *Objectives of the study were to to study the profiles of General practitioners contacted for RNTCP orientation. To assess the inclination of private practitioners to be or not to be DOTS provider. To assess factors influencing their willingness to be DOTS provider.*
Material and Methods: *A present cross-sectional study was conducted from November 2014 to January 2015among General practitioners practicing in Malavani urban slum of Mumbai. A total of 40 participants were selected using a purposive sampling design with a random approach.*
Results: *Majority of the GPs in age range of 20 to 40 years and male preponderant (90.00%) in the present study.. About 20% of the GPs were already enrolled as DOTS providers. The main reason for enrollment was commitment towards serving the society and most common reason for non-enrollment was lack of knowledge about being a DOTS provider. The most common suggested measure to improve the participation of PPs as DOTS Provider was conducting CMEs on updates of the disease and its treatment.*
Conclusion: *In a present study we found about 1/5th of the GPs were DOTS providers when we assessed before the education sessions of the present study. The main reason for enrollment was commitment towards serving the society and most common reason for non-enrollment was lack of knowledge about being a DOTS provider. We recommend prompt advocacy form RNTCP Programme managers with private practitioners to ensure their participation and motivation for enrollment.*
Keywords: *Tuberculosis, RNTCP, Private practitioners.*

Introduction

Tuberculosis (TB) remains a global threat.India contributes 27% of global burden with estimated 27.5 lakhs patients as per Global TB report 2018[1].In most resource-poor countries the government has had the sole responsibility for the prevention and control of diseases of public health importance such as tuberculosis (TB). However, health services in general are rendered by both government and private health sectors. Engaging all stake-holders/ health care providers in tuberculosis (TB) control has been incorporated as an essential component of World Health Organization's Stop TB Strategy and global Partnership plan 2006-2015. In countries like India, physicians and other health care providers are challenged with providing adequate TB care. The chronicity of TB remains a problem as well and, unless addressed, will continue to result in increased morbidity and mortality in the country[2,3].Chronic infectious diseases like TB if appropriate control measures are not applied in the management of persons affected by the disease. One such measure is the development of guidelines for the management of TB patients. Engaging practitioners to use the guidelines and motivate them to become DOTS provider would contribute to the realization of national and global TB control targets[4–7]. A randomized controlled trial conducted by Yellapa V et al[8] to understand the role of private practioners concluded that involvement of them was an effective way to address issues like referrals, follow up and better treatment outcome among tuberculosis patients. Despite the usefulness of the TB treatment guidelines, not much is known about the perceptions of private medical practitioners (PMPs) towards these guidelines. With this background we conducted a study to understand the perception of general practitioners regarding inclusion of DOTS provider in RNTCP implemented in urban slum area of Mumbai.

Methodology

A cross sectional study was conducted on perceptions of general practitioners regarding inclusion as a DOTS provider in urban slum of Mumbai. Malavani urban area of urban Mumbai slum was included in the study. It was conducted from November 2014 to January 2015. About 40 GPs (total practitioners 115, 30% population +5 % non response rate) were selected randomly by purposive sampling method. An orientation-training programme in "RNTCP – role of private practitioners" was organized for the enlisted general practitioners. A Semi structured questionnaire was distributed, followed by session with due emphasis on RNTCP & role of private practitioners envisaged in RNTCP. Post-test questionnaire was distributed 15 days after the session.

Inclusion Criteria

1. Private practitioners practicing in Malavani area
2. Private practitioners who have given written consent

Exclusion criteria

1. Practitioners not practicing in said study area
2. Not willing to participate in study

Sampling technique

Purposive sampling and samples selected by random sampling

Statistical Analysis

All data was entered in Microsoft excel 2010. Qualitative variables were expressed in terms of percentages. Quantative variables were expressed in terms of mean and standard deviation. To test to difference between the pre and post test percentages McNemars Chi square test was used. Data was analyzed using SPSS 20.00. The significance level was set at 0.05 and all the results were tailed.

Results

We included 40 GPs in the present study.

Table 1: Demographic particulars of the GPs

Demographic Particulars	Frequency	Percentage
Age group		
20 to 40	16	40.00
40 to 60	22	55.00
>60	2	5.00
Gender		
Female	4	10.00
Male	36	90.00
Qualification		
BAMS	11	27.5
BHMS	10	25.00
BUMS	14	35.00
MBBS	4	10.00
Naturopathy	1	2.50
Daily patient load		
10 to 20	9	22.50
20 to 40	20	50.00
40 to 60	9	22.50
>60	2	5.00
Duration of practice		
0 to 10	16	40.00
11 to 20	15	37.50
21 to 30	4	10.00
31 to 40	5	12.50
Frequency of referral of suspected TB cases		
Weekly	4	10.00
Monthly	18	45.00
Rarely	18	45.00

Majority of the GPs in age range of 20 to 40 years and male preponderant (90.00%) in the present study. About 27.50% were ayurvedic GPs, 25% were homeopathic, 25% were Unani, 10% were MBBS and 2.50% were naturopathy. Majority of them had daily patients load of 20 to 40 patients and had up to 10 years of practice.

Table 2: Distribution based on status of enrollment and reasons behind it

Status of DOTS enrollment		
Enrolled	8	20
Not enrolled	32	80
Reasons for enrollment (n=8)		
Commitment towards community	7	87.5
Patients convenience	6	75.00
Reasons for non enrollment (n=32)		
Not willing	3	9.37
Don't know PPS can become DOTS provider	15	46.87
Less remuneration	3	9.37
Follow up is tedious	7	21.87
I can get these disease	1	3.12
Not approached by anybody	12	37.5
Irregular in clinic	3	9.37

About 20% of the GPs were already enrolled as DOTS providers. The main reason for enrollment was commitment towards serving the society and most common reason for non enrollment was lack of knowledge about being a DOTS provider.

Table 3: Perception of GPs pre and post test

Perception	Pre test		Post test		P value
	Frequency	Percentage	Frequency	Percentage	
Awareness regarding RNTCP					
Yes	19	51.35	37	100.00	<0.001
No	18	48.65	0	0	
Salient features					
Don't know	22	59.46	31	83.80	<0.001
Adequate	4	10.81	2	5.40	
Inadequate	11	29.73	4	10.80	
Role of Private Practitioner in RNTCP					
Don't Know	26	70.27	0	0	
Could specify	8	21.62	37	100.00	<0.001
Couldn't specify	3	8.11	0	0	
Awareness regarding DOTS center in area					
Yes	32	86.49	37	100.00	<0.001
No	5	13.51	0	0	
Are u ready to enroll as DOTS Provider					
Yes	29	78.37	33	89.20	0.5543
No	8	21.63	4	10.80	

Reasons for willingness to enroll as DOTS Provider (n=29)					
Commitment towards community	22	75.86	24	72.72	0.4783
Patient's benefit	16	44.17	10	30.30	
Reasons for non willingness to enroll as DOTS provider (n=8)					
Patients are negligent	3	37.50	0	0	
Increase resistance	1	12.50	0	0	
Less amount of remuneration	1	12.5	0	0	
Poor implementation of program	1	12.5	0	0	
Irregularity at clinic	3	37.5	3	75.00	
Not willing	1	12.5	1	10.00	
Would you like to promote colleague to be DOTS provider					
Yes	29	78.38	33	89.18	
Not applicable	8	21.62	4	10.82	
Perceptions of GPs regarding patient's benefit after their enrollment					
Easy availability of treatment	33	89.19	32	86.48	
Increase compliance	20	54.05	26	70.27	
Increase cure rates	11	29.73	19	51.35	
Decrease defaults	3	8.11	3	8.1	
No benefits at all	1	2.70	2	5.40	

The awareness, knowledge about salient features, role of private practitioner and awareness regarding DOTS center in the area significantly improve with the sessions we provided.

Table 4: Suggested measures to improve participation of PPs as DOTS provider

Measures	Frequency	Percentage
Conduct Cmes in area	32	86.49
Increase remuneration	6	16.21
Don't want to suggest anything	3	8.11
Perception regarding expectation from administration		
No expectation	15	40.54
Prompt follow up of missed doses by TBHV	9	24.32
Remuneration on time	1	2.70

The most common suggested measure to improve the participation of PPs as DOTS Provider was conducting CMEs on updates of the disease and its treatment. Further about 24.32% of the GPs suggested that regular and prompt follow up of missed doses by the TBHV is required.

Discussion

According to global TB report 2019, the estimated incidence of TB in India is approximately 27.5 lakh cases[1]. With this much and less doctor patient ratio India is facing a biggest challenge of shortage with respect to service provider. Role of private practioners in this regard is very crucial[5,7]. Implementation of this in a public private mix for the control of infectious disease like tuberculosis in the need of the hour[9–11]. We did a study to assess the perception of the GPs about being DOTS provider in our rural health training centre area.

The most common reason for non enrollment was lack of knowledge about being a DOTS provider in present study. Thomas BE et al[12] reported that the most common reason for not notifying in their study was lack time and concerns regarding patients' confidentiality. A study done by Salve S et al[13] inferred that 14 out 21 PPs in their study were already DOTS providers. The awareness proportion in the present study pre test was 51.35%. In a study conducted by Nautiyal RG et al[14] inferred that 97.2% of their study sample was aware about TB and RNTCP programme. In a study conducted by Dasgupta A et al[15] 27% of the PPs knew full form of DOTS, 60% knew about DOTS being applicable to children also and 22.3% gave health education about preventive practices to the patients. In a study done by

Nautiyal RG et al[14] the main themes of perceptions which were highlighted were about ignorance in private sector about DOTS, questionable efficacy of the drugs, poorly tolerated and compulsory sputum test is necessary. In the present study, the suggested measures to improve the participation were conducting CMEs on updates and use of print media and prompt follow up of the cases. Maharashtra Medical Council and Medical Council of India, has set the limits to renew registration on the basis of credit points. This forms the great opportunity to RNTCP programme managers to arrange the CMEs with credit points for private practitioners.

In a study conducted by Thomas BE et al[12] in south India revealed that the private practioners suggested use of newer technology like mobile communication, SMS and email notification. A study done by Krishnan A and coworkers[16] reported that the most common feedback was satisfaction with treatment provided and faced problem in obtaining drugs.

The skills of motivation, communication & social marketing need to be inculcated in health workers, who will be the first line motivators for the private practitioners.

Programme managers should have one to one interaction with private practitioners to ensure their participation and motivation for enrollment.

Mechanism of prompt follow up of cases who missed the doses should be established & regular feedback should be given to PPs ensuring the compliance of PPs in RNTCP programme participation.

Conclusions

We found about 1/5th of the GPs were DOTS providers when we assessed before the education sessions of the present study. The main reason for enrollment was commitment towards serving the society and most common reason for non enrollment was lack of knowledge about being a DOTS provider. The awareness, knowledge about salient features, role of private practitioner and awareness regarding DOTS center in the area significantly improve with the sessions we provided. In the end about 80% of the GPs suggested that they want to be updated in the TB treatment and notification by conducting CMEs on the same.

References

1. Revised National Tuberculosis Control Programme Annual report 2019, Ministry Of Health and Family Welfare.
2. Chadha VK. Tuberculosis epidemiology in India: a review. Int J Tuberc Lung Dis. 2005;9(10):1072–82.
3. John TJ, Vashishtha VM, John SM. 50 years of tuberculosis control in India: progress, pitfalls and the way forward. Indian Pediatr. 2013;50(1):93–8.
4. Murthy KJ, Frieden TR, Yazdani A, Hreshikesh P. Public-private partnership in tuberculosis control: experience in Hyderabad, India. Int J Tuberc Lung Dis. 2001;5(4):354–9.
5. Arora VK, Lonnroth K, Sarin R. Improved case detection of tuberculosis through a public-private partnership. Indian J chest Dis allied Sci. 2004;46(2):133–6.
6. Kumar MKA, Dewan PK, Nair PKJ, Frieden TR, Sahu S, Wares F, et al. Improved tuberculosis case detection through public-private partnership and laboratory-based surveillance, Kannur District, Kerala, India, 2001–2002. Int J Tuberc lung Dis. 2005;9(8):870–6.
7. Lei X, Liu Q, Escobar E, Philogene J, Zhu H, Wang Y, et al. Public–private mix for tuberculosis care and control: a systematic review. Int J Infect Dis. 2015;34:20–32.
8. Yellappa V, Battaglioli T, Gurum SK, Narayanan D, Van der Stuyft P. Involving private practitioners in the Indian tuberculosis programme: a randomised trial. Trop Med Int Heal. 2018;23(5):570–9.
9. Anand T, Babu R, Jacob AG, Sagili K, Chadha SS. Enhancing the role of private

practitioners in tuberculosis prevention and care activities in India. Lung India. 2017;34(6):538–44.

10. Mahendradhata Y, Lestari T, Probandari A, Indriarini LE, Burhan E, Mustikawati D, et al. How do private general practitioners manage tuberculosis cases? A survey in eight cities in Indonesia Public Health. BMC Res Notes. 2015;8(1):1–7.
11. William A. Wells. Scale and Ambition in the Engagement of Private Providers for Tuberculosis Care and Prevention**.** Global Health: Science and Practice March 2019, 7(1):3-5**.**
12. Thomas BE, Velayutham B, Thiruvengadam K, Nair D, Barman SB, Jayabal L, et al. Perceptions of private medical practitioners on tuberculosis notification: A study from Chennai, South India. PLoS One. 2016;11(1):1–9.
13. Salve S, Sheikh K, Porter JDH. Private practitioners' perspectives on their involvement with the tuberculosis control programme in a Southern Indian State. Int J Heal Policy Manag. 2016;5(11):631–42.
14. Nautiyal RG, Singh RK. Public private mix in tuberculosis control: is it really working in India? Int J Community Med Public Heal. 2018;5(2):728.
15. Dasgupta A, Chattopadhyay A. A study on the perception of general practitioners of a locality in Kolkata regarding RNTCP and DOTS. Indian J Community Med. 2010; 35(2):344–6.
16. Krishnan A, Kapoor SK. Involvement of private practitioners in tuberculosis control in Ballabgarh, Northern India. Int J Tuberc Lung Dis. 2006;10(3):264–9.