Optimising the involvement of private practitioners in tuberculosis care and control in India

Citation for published version (APA):
Holalkere Yellappa, V. (2019). Optimising the involvement of private practitioners in tuberculosis care and control in India. Maastricht University. https://doi.org/10.26481/dis.20191111vy

Document status and date:
Published: 11/11/2019

DOI:
10.26481/dis.20191111vy

Document Version:
Publisher's PDF, also known as Version of record

Please check the document version of this publication:

• A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
• The final author version and the galley proof are versions of the publication after peer review.
• The final published version features the final layout of the paper including the volume, issue and page numbers.

Link to publication

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Download date: 05 Apr. 2020
Tuberculosis (TB) is the world’s leading infectious disease, killing more people than any other infectious disease. India has the highest number of TB patients among the high TB burden countries in the world. The Government of India launched the Revised National TB Control Programme (RNTCP) in 1997 based on the World Health Organisation (WHO) endorsed Directly Observed Treatment, short course (DOTS). In spite of the availability of free diagnostic and treatment services at the public facilities, more than 50% of TB patients, irrespective of the income group, are estimated to seek care from private practitioners (PPs). Studies have demonstrated that PP’s TB management practices in India are sub-optimal, and often TB is inaccurately diagnosed and ineffectively treated, thus posing a higher risk of mortality and drug resistance. Moreover, India is reported to have more than a million ‘missing’ TB patients every year that are not notified to the RNTCP. Thus, these patients do not get the standardised treatment.

Studies analysing the reasons for patient’s diagnostic delay have concluded that seeking care from PPs in the initial period of illness was a clear risk factor. TB patients had to resort to multiple contacts with PPs because of PP’s limitations in diagnosing and/or failure to direct patients to the RNTCP. Also, TB has resulted in a devastating socio-economic impact on patients from low-income households in the process of paying for inappropriate diagnostics and treatments. Though TB is a notifiable disease in India, TB patients diagnosed by PPs are often not notified to the RNTCP. Consequently, these patients are not included into the national data and mostly remain inadequately treated in the private sector.

Recognising the important role of PPs in the provision of TB care, the Indian Government is involving PPs in the RNTCP through the WHO recommended PPM (Public Private Mix) strategy since 2001. The PPM approach aims to strengthen TB care and control efforts through referral systems between the public and private providers and to provide standardised TB care. This partnership enables PPs to refer patients to the RNTCP for either free diagnosis and/or treatment. Thereafter, the patient can either continue treatment within the RNTCP or alternatively PPs themselves can provide DOT (Directly Observed Treatment) at their health facilities by procuring RNTCP drugs.

Several assessments of PPM initiatives in India have demonstrated that the PPM approach is feasible and effective. Yet, despite two decades of attempts to improve collaboration, PP’s involvement in PPM strategy remains insignificant. Available published PPM studies have mostly focused on reporting the performance of PPM projects and little is known about the successful efforts to scale up PPM in TB control. The numbers demonstrating progress in PPM do not fully reflect the ground realities and questions remain as to how best to pursue sustainability and scalability of such initiatives. It is essential to recognise ‘what works for whom, and under what conditions’ to improve the understanding of ‘how’ partnerships with private sector providers work (or do not) by unpacking the dynamics between the different health system components.
With this as the context, we designed a PPM model to optimise the involvement of for-profit allopathic PPs in RNTCP in a south Indian district. The study was conducted in four phases to improve referrals of presumptive pulmonary TB patients from PPs to RNTCP for sputum smear microscopy, and notification of TB patients to RNTCP who were either diagnosed and/or started on private TB treatment by PPs.

(i) Pre-conditions phase (2012-2013): We assessed the involvement of formal for-profit allopathic PPs in RNTCP in terms of referrals of presumptive pulmonary TB patients through review of RNTCP reports and registers.

(ii) Pre-implementation (2013-2014): In-depth interviews were conducted with stakeholders (PPs, TB patients, and RNTCP staff and managers) to understand the barriers for PPM implementation and PP’s referred modes of collaboration. A systematic literature review was carried out simultaneously to identify effective interventions to engage PPs in TB care. After analysing participant’s recommendations coupled with findings from the literature review, intervention package was designed to improve the collaboration between PPs and RNTCP.

(iii) Implementation phase (2014-2015): 316 PPs were identified through census and they were randomly allocated to an intervention and a control group. Intervention was implemented from December 2014 to January 2016, consisting of series of activities targeted towards key RNTCP staff and intervention PPs: (i) strengthening RNTCP staff capacity to collaborate with PPs; (ii) strengthening the documentation of TB patients referrals in laboratory registers; (iii) improving patient’s accessibility to microscopic centres; (iv) counselling of patients by laboratory technicians to go back to the treating physician; (v) strengthening communication between the RNTCP and PPs through and (vi) training of PPs on PPM strategy and provision of TB related materials to PPs.

As the main outcome of the study, we assessed the proportion of PPs referring presumptive pulmonary TB patients to RNTCP and the proportion of PPs notifying TB patients started on private treatment to RNTCP in the intervention and control group. During the study period, PPs referred 836 patients and 176 were diagnosed with pulmonary TB. The proportion of referring PPs, mean referral rate per PP-year and smear-positive TB case-finding rate per PP-year were significantly higher in the intervention arm than the control arm. PP’s referrals contributed to 20% of the sputum-positive pulmonary TB patients detected by RNTCP in Tumkur city (14% were from intervention arm PPs).

(iv) Maintenance Phase (2016-2017): The positive findings from the study were integrated into the programme. During the project, the capacity of RNTCP staff was built to collaborate with PPs which enabled them to adapt the positive findings from the study. Further, PPM activities were integrated into the routine monitoring, which made the project self-sustainable.
We demonstrated that a system-oriented intervention implemented by RNTCP staff based on the establishment of a strong referral and communication system with PPs, improved PP’s referrals of presumptive pulmonary TB patients to RNTCP. Our study conducted in routine programmatic settings provides important information about the systemic impediments that affects engaging PPs in public health programmes. Nonetheless, replication warrants examination because the ability of a programme to transplant its model from one context to another context. Based on the outcomes of this study, intervention is extended to the control arm in the study area. Further, the model is rolled out and evaluated in rural parts of the same district.