

Status of Mandatory Tuberculosis Case Notification among Pharmacy Outlets in Urban Puducherry: A Cross-Sectional Descriptive Study

Sir,

In 2018, approximately 10 million people were diagnosed with tuberculosis (TB) globally. Out of this, 3.6 million TB cases were missed by the health system.^[1] In 2018, out of all the notified cases registered in the Revised National Tuberculosis Control Program (RNTCP) in India, 25% were from the private sector, and this was 40% higher compared to that of the previous year.^[2] In addition to involving private practitioners in the program, involving pharmacy outlets is expected to further increase TB notification rates. No user fees or appointments and easy access make pharmacy outlets a preferred point to access health care.^[3] It is thus necessary to monitor TB drug sales to prevent the emergence of drug resistance due to the irrational use of antibiotics. The biggest challenge that the country presently faces is nonresponse to first-line anti-TB treatment (ATT) and multiple drug-resistant-TB (MDR-TB).^[4] The emergence of MDR-TB can be attributed to faulty medication practices. Therefore, for ensuring dispensing of appropriate ATT drugs to TB patients, notification mechanisms need to be streamlined.

Collaborating with the pharmacy outlets can also help in ensuring that patients with symptoms of TB reach proper treatment providers. The Central Government of India, on March 16, 2018, specified that all pharmacists who dispensed ATT drugs should notify TB patients to the nodal officer of the district, either electronically or otherwise.^[5]

A cross-sectional descriptive study was conducted in urban Puducherry to determine the proportion of pharmacy outlets dispensing ATT drugs without a prescription and notifying TB cases and as well as identify the barriers faced by them for TB case notification. 123 pharmacy outlets were mapped from six selected urban health centre areas with a relatively greater number of private health establishments. Study was conducted in two steps. In the first step, a simulated client approach was used to study the proportion of pharmacy outlets selling ATT drugs over the counter. Masters in Public Health students were trained to simulate clients and visited all outlets. Post their visit, they were interviewed to gather information on over the counter ATT. In the second step, owner/manager/salesmen of pharmacy outlets were interviewed for TB notification and its challenges.

Only 30 of the 123 outlets had ATT medicines. 23 (77%) outlets dispensed medicines without adhering to the notification procedure. To study the proportion of pharmacy outlets notifying TB cases to RNTCP, only 107 (87%) out of the 123 mapped pharmacy outlets could be reached. It

was found that 20% (95% CI: 11.2–26.2) of them stated that they currently had a stock of ATT drugs. Among these outlets, 62% (95% CI: 38.1–81.0) mentioned that they are notifying TB cases to RNTCP and dispensed ATT drugs only with a prescription [Figure 1]. Half (53/107) of the pharmacy salespersons were aware about the notification procedure.

Out of those who were notifying TB cases to RNTCP, 77% (10/13) preferred to submit the hard copy of the notification form and 23% (3/13) preferred online method for notification. Two-third (9/13) of the salespeople did not feel any inconvenience in following the notification procedure. Almost half (6/13) of the participants opined that patients were not comfortable in documenting their TB status along with their personal details. Almost three-fourth preferred to submit the hard copy of the notification form along with the photostat of patients' Aadhar card and prescription to RNTCP. One-fourth preferred to do the procedure online (by sending authorized E-mails). Because the procedure was lengthy and required the patient to reveal his/her personal details to a stranger (the salesperson), more than half of the pharmacy outlet salespersons felt that patients were not comfortable in complying to the procedure, probably due to the stigma associated with the disease. To allay apprehensions, it is important to sensitize the public and salespersons that the confidentiality of personal information is ensured by the program.

A key finding of the present study was that most (75%) of outlets with ATT stock were dispensing the medicine without a prescription and half of the salespersons expressed that they were aware about the notification procedure. Reinforcement training for pharmacists could improve the TB notification rates and decrease the over-the-counter sale of TB drugs.

Simulated client approach probably throws light on the actual status of over-the-counter availability of ATT drugs and TB case notification among pharmacy outlets. The notification rates from pharmacy outlets can be improved further by reinforced sensitization of salespersons at regular intervals and addressing the concerns of patients related to their confidentiality.

Because the study participants were selected from six urban PHC areas, the result of the study may not be generalizable to rural Puducherry. Social desirability bias could have resulted in fewer pharmacy outlets reporting that they dispensed ATT drugs without a prescription.

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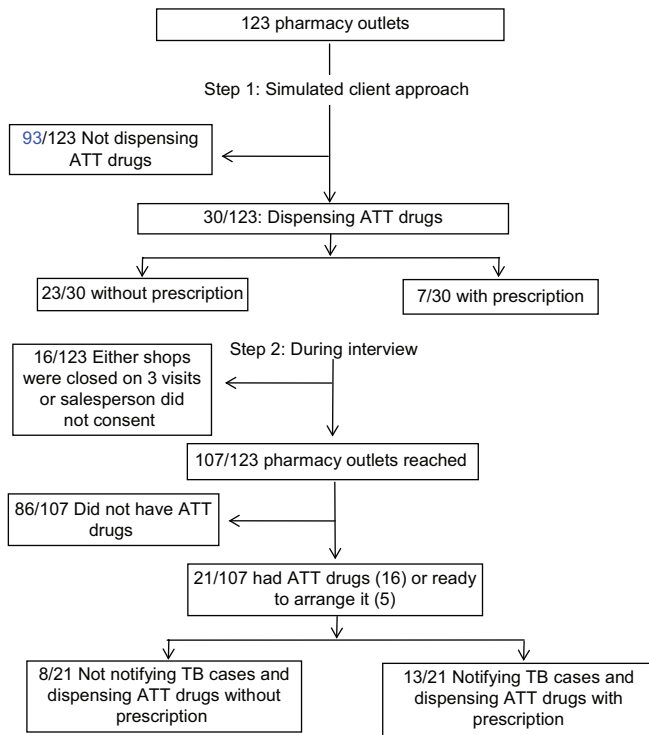


Figure 1: Results obtained by simulated client approach and through personal interview. ATT: Anti-TB treatment

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Conflicts of interest

There are no conflicts of interest.

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