# Effective Utilization of Private Pharmacies in Tuberculosis Care: A Potential Link in India

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#### **Abstract**

Tuberculosis (TB) is a global public health crisis. Around 25% of TB cases are found in India. Research reveals that TB management by private sectors in India is erratic in nature and around 50-80% of TB patients visit private health facilities for seeking care. The private facilities include private hospitals, nursing homes, private practitioners - qualified and unqualified/individual and institutional, traditional healers, and the pharmacies. The private pharmacies usually function as anti-TB drug dispensing depots where patients, especially the chest symptomatics or the cough symptomatics, seek medical care and buy medicines over the counter hoping to get rid of their conditions. Several aspects of private practitioners have been studied that includes knowledge, attitude, practice, prescription behavior, etc. However, studies regarding the role of private pharmacies in TB care are very few. This article briefly examines the effective utilization of private pharmacies including the probable advantages of distributing free quality TB drugs at private pharmacies and the contribution of the same in controlling TB in India. This article draws experiences from different settings where similar attempts have been made and tries to examine the same in a pan India context.

**Key words:** Free distribution of tuberculosis medicine, health seeking behavior for tuberculosis, pharmacies, private sector, tuberculosis care

#### **INTRODUCTION**

espite the significantly strengthened tuberculosis (TB) program and the progress made, 50-80% of TB patients in India still seek care at private clinics and TB treatment offered in the private health sector remains substandard.[1-3] The significance of mentioning about health seeking at private health facilities is primarily due to the involvement of private pharmacies in all those private health facilities, directly or indirectly. Studies on the health seeking behavior of TB patients and chest/cough symptomatics reveal that self-medication has been practiced by many of the chest/cough symptomatics before seeking help at a health facility. Selfmedication obviously implies buying medicines over the counter without a prescription or with the advice of chemist/druggist at the private pharmacies. A study conducted among 105 chest symptomatics in the urban slums of Aurangabad city revealed that 12.4% had indulged in selfmedication which was higher among the age group of 35-54.[4] Similarly, a cross-sectional

study conducted at the E-ward of Mumbai Municipal Corporation revealed that patients initially preferred private practitioners and self-medication. The cross-sectional study conducted at Mandi district, Himachal Pradesh among 234 new sputum positive cases revealed that 54% of the patients contacted health facility, 39% purchased the medications over the counter while a small proportion of patients resorted to self-medication or went to a traditional healer. This is further evident from the fact that out of the total market of USD 94 million for the first-line anti-TB medicines, the public sector in India purchases drugs worth USD 24 million while the private sector accounts for the remaining USD 61 million. On the other hand, one of the studies in India reveals that 95% of the pharmacists were not aware of the

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**Received:** 29-01-2016 **Revised:** 21-02-2016 **Accepted:** 25-02-2016 existence of National Level TB Control Programme in India; however, 97% of those pharmacists were willing to learn and contribute to TB care in India. [8] All these studies obviously give an indication that pharmacies play a great role in TB care by dispensing anti-TB drugs directly with prescription and indirectly with their own knowledge. Hence, tapping this potential link of private pharmacies for TB care in India is required at the national level for the betterment of a large volume of TB patients who visit any of the private sector health providers including the private pharmacies for TB care.

## SIGNIFICANCE OF PRIVATE SECTOR IN TB CARE

Government-run health-care services in low- and middleincome countries have been modestly successful in providing equitable access to high-quality care for diseases of public health importance. Due to this, in many low-income countries, much of the population, across all socioeconomic strata, turn to individual or institutional private health-care providers (PPs). PPs outnumber public health-care providers in some countries and often offer better geographical access and more personalized care than the public facilities. [9] Similarly, people in India have a higher reliance on private sector compared to the public health facilities. People mostly prefer private sector for the health problems that are usually not covered under the typical public health system. Despite being freely available as a fully centrally sponsored program, the health seeking behavior for TB treatment at public health facilities is relatively less in India. The role of private pharmacies, among different segments of the private sector, has been less explored in India. Effective utilization of private pharmacies in TB care can definitely be a potential link in India and should be explored. In the following sections, the functioning and strategies to utilize private pharmacies in TB care have been delineated in brief.

## FUNCTIONING OF PHARMACIES IN TB CARE

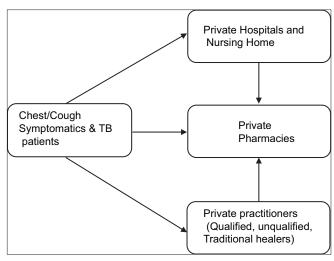
Private pharmacies are the privately owned pharmacies that usually sell drugs for profit, paid for out-of-pocket by the clients. There are basically two types of private pharmacies that come into picture of drug dispensing. They are called as "attached pharmacies" and "independent/standalone pharmacies." and "independent/standalone pharmacies that are usually attached to a private hospital or one or more private practitioners surrounding it while the standalone pharmacies do not come under this category and serve as a standalone unit. In the case of anti-TB drugs dispensing, the private pharmacies can act in either way; the patient can directly buy medicines from the pharmacies without a prescription or go through a private hospital

or practitioner with a prescription. Figure 1 shows the functioning of private pharmacies in anti-TB drug dispensing in India

## UTILIZATION OF PRIVATE PHARMACIES IN TB CARE IN INDIA

It was observed from various studies that private pharmacies are involved in the dispensing of anti-TB drugs in different parts of India. One of the studies conducted in central India to find out tracer drugs, isoniazid, and rifampicin were among the five tracer drugs, 60.1% (n=441) of private pharmacies were having the tracer drugs. [10] Similarly, a study conducted in South India found that 81% (n=300) of the private pharmacies had been dispensing anti-TB drugs, and 2800 prescriptions had been dispensed by these 300 pharmacists with an average of 9.3/month over a period of 5-year. [8] The same study also revealed that 97% (n=300) of private pharmacists are interested in aiding care for TB. [8] Based on these facts, it is believed that pharmacies and the pharmacists as well can contribute to TB care in India.

Aiding in early diagnosis, treatment, and referral of TB suspects: Pharmacists can greatly aid in early diagnosis and treatment of TB suspects as most of the TB suspects in India initially resort to self-medication assuming that the chest symptoms are of the nature of common cold or approach private practitioners which are evidenced from many studies in different parts of India. [1-7,11,12] In either way, self-medication and approach to private practitioners, patients do visit pharmacies for buying medicines. Hence, when the patients visit to buy medicines the pharmacists can assess their conditions and, if suspect for TB, can send them to public sector institutions for early diagnosis and treatment. The question arises whether the private pharmacists would be interested in doing so without any



**Figure 1:** Functioning of private pharmacies in anti-tuberculosis drug dispensing in India

incentive; however, initiatives in different parts show that pharmacists are interested in contributing to this endeavor voluntarily. This contribution is obviously sporadic in nature, however, with proper training and sensitization private pharmacists can be mobilized for this purpose.

- Creating awareness in the community: Pharmacists can create awareness in a similar manner to aiding in early diagnosis and treatment. The willingness of pharmacists and their interest in contributing to TB care in India is a great stance which needs to be tapped for this service. Their interest and participation in this activity are evident from the services rendered by the private pharmacists in different Indian communities. [8,13] Awareness in TB care is of utmost importance as it requires long-term treatment, timely sputum examination, and adherence to treatment by the patients until the completion of treatment.
- Dispensing of medicines only with prescription: Owing to heavy turnover of the patients it seems untenable to ban the sale of anti-TB drugs at private pharmacies due to the obvious reasons of private sector preference by the TB suspects in India. However, one intermediary step can definitely be attempted that is the sale of anti-TB drugs only with a prescription from a qualified medical practitioner. Although the TB management by private practitioner remains substandard, however assuming that few prescriptions would be rational prescription, the dispensing can be done. This would reduce the formation of advanced forms of TB such as multi-drug resistant-TB, extremely drug resistant-TB and totally drug resistant-TB as well.
- Free quality anti-TB drug distribution at private pharmacies: This is an important policy level issue which is being discussed in different forums during these days.[18,19] One of the case studies reported in "The Hindu" in one of the districts of Gujarat reports that the innovative idea of the free distribution of medicines by the private pharmacies can transform TB management and care in India. It reports that once a patient gets diagnosed with TB she/he goes to a designated private pharmacy where the prescription is verified to ensure treatment. After verification, the patient receives free drugs. Furthermore, the patients are given treatment support, counseling and sent regular reminders through mobile phones to take medicines. In situations where a patient does not pick up his or her drug refills on time, the health visitor makes a home visit to continue the treatment. By this process, 212 private practitioners and 295 pharmacies have been engaged to provide services to hundreds of TB patients, and it is hoped that more and more patients would come under this project. Critically, it may be evaluated that the program involves technology and resources, however, considering the fact that India has over a "million" missing TB cases, scaling up such innovations in a phased manner seems rational. [18] Given the situation of TB in India, the Government of India has decided to make free available of quality anti-TB

- drugs at all private pharmacies and corporate hospitals. After the diagnosis, each patient needs to register with the Revised National TB Control Programme and be given a unique ID. The ID will have all the information of the medicines prescribed and the dosage of the same. By this, any hospital or chemist will be able to give medicines as per the treatment schedule which will be available online, as reported by the Director General of Health Services (DGHS).[18] The DGHS also reported that government is going to spend 100 crores more on TB care compared with the current rate of 250 crores for this new innovative approach.[19] Having understood the TB situation in India and knowing the interest of pharmacists in contributing toward TB care, this initiative is highly desirable in India. Furthermore, this would be a win-win situation for both the patients as well as the private sector in which the chemists help in referring the patients, the private practitioners retain their patients and the patients get the right kind of diagnosis and treatment.[18]
- Monitoring the progress of treatment and counseling the patients for treatment adherence: All the efforts go in vein if proper monitoring does not take place, especially in the case of TB as it requires prolonged care and treatment. Counseling is of utmost importance as TB patients tend to drop treatment at the middle if little progress is incurred. Counseling and sensitization are very important for ensuring patient compliance and treatment completion. The process of follow up and sensitization do not really require a great effort in the part of a doer. It requires a sense of determination to spread the message and create a TB free society. Monitoring, repeated counseling, and sensitization by the pharmacists will lead to a changed behavior in seeking care for health. This is of utmost importance as a changed society cannot be expected without change happening in its each member. Private pharmacists can definitely be of great help in doing so and ensuring universal access to quality TB care.
- Aiding in TB care in rural and hard to reach areas: Rural areas and the hard to reach areas have always suffered from several public health problems peculiar to that area and is applicable to TB care as well. People in these areas have poor access to health-care services and are relatively less aware of various public health services freely available. With this premise in mind, private pharmacies those function in rural and hard to reach areas, although very few are available, can aid in TB care in all aspects; creating awareness about freely available TB care in India, aiding in diagnosis, treatment, and referral. In addition, they can also act as DOTS provider in these areas.

## **CONCLUSION**

The role of pharmacies in TB care in India has always been a neglected link. Given the significance of high patient turnover at private health facilities, the role of pharmacies in TB care cannot be neglected. Their utilization in TB care can be multifaceted which include free distribution of quality TB medicines, appropriate referral to public health facilities for quality diagnosis and treatment, monitoring and counseling of the patients. Most importantly creating awareness regarding early diagnosis and treatment of TB can be done by the help pharmacists as patients usually make a first visit to pharmacies thinking that their condition is a minor cough/cold and medications of 1-2 days could relief their problem.

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