Engaging community (retail) pharmacists in TB DOTS: Public private partnership for TB Control

DOTS TB Pharmacist Project

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DOTS TB Pharmacist Project
Indian Pharmaceutical Association /SEARPharm Forum
Key Messages

• Community pharmacists: an untapped potential in national health programmes
• Developing Public-private partnership involving pharmacists
• Setting up DOT services in community pharmacies
• Increase DOTS network & increase in access to TB medicines /increase in case detection
• DOTS TB Pharmacists: Opportunity to Increase available workforce to fight against TB
TB & India

• India Accounts for nearly one fifth of the Global TB burden
  2 deaths every 3 minutes due to TB., 1000 deaths per day,

• TB accounts for approx. 20% of deaths from communicable diseases

• Annual incidence: 1.8 million new cases with 0.87 million infectious cases

• Significant socio-economic burden to the country

• Overcrowding, malnutrition, HIV contribute to increase TB cases

India needs to be at war with Tuberculosis
India’s Revised National Tuberculosis Control Plan (RNTCP)

Challenges:

- RNTCP provides DOTS coverage for 100% population
- Over 50% of TB patients seek treatment in private sector
- Private sector...no monitoring mechanisms ..high default rate ..emergence of resistant cases
- RNTCP seeking collaboration with private sector to expand DOTS services & improve case finding

Source: www.tbcindia.org (website of Central TB Division ,Ministry of Health & Family Welfare )

Need to focus on private sector TB cases & bring them on DOTS
Public-Private Partnerships in RNTCP

DOT close to patient’s home

Community DOT Providers
- Shop keepers,
- School teachers,
- NGOs

Retail Pharmacists: Untapped Potential
Pharmacies in RNTCP (1)

- **Expected benefits: Patient Perspective**
  - Longer opening hours
  - Convenient location
  - Easier access to free treatment
  - Pharmacist-medicine expert
  - Pharmacist - Patient friendly relations
  - Less stigmatic to get treated at Pharmacy

**DOT Pharmacies**: Acceptable & accessible DOT provider
Pharmacies in RNTCP (2)

- **Benefits to RNTCP**
  - First Port of Call Health Professional: Opportunity for case detection
  - Health Professional: Opportunity for case detection
  - Increase outreach of DOTS services
  - Help reduce no. of patients outside DOTS.... eventually helps reduce MDR TB

- Pharmacists: new pool of pharmaceutical human resources available for RNTCP

Contribute to TB-related Millennium Development Goal (indicator 24 )
- 70% detection rate & 85% Cure rate
Pharmacies in RNTCP (3)

Pharmacists’ perspective

- Rare participation in any national health programme
- No monetary benefits
- Not much interaction with Government health centers & staff
- No previous practice of documentation

But an opportunity for

- Socio-professional work
- Pharmacists-patient: more opportunity for interaction
- Improvement in the image in the society & in the Government

Opportunity for new role ... how many pharmacists will take it up?
DOTS Pharmacist: Concept to Effect Story since 2006...

Meetings with all concerned to discuss new model

| State/City TB Offices          | • Acceptance of concept  
|                               | • Cooperation for training  
|                               | • Approval of IEC material  
|                               | • Cooperation for implementation of the concept  |
| State & Local Chemist Associations | • Acceptance of concept  
|                               | • Cooperation for motivating pharmacists for participation  
|                               | • Cooperation for selection of the pharmacists  |
| Food & Drug Administration    | • Acceptance of concept  
|                               | • Permission to pharmacists for stocking of DOT medicine boxes  |

Apprehensions by all...finally agreed.
Pilot Program Details

1) Increase awareness of the RNTCP among local chemist associations & community pharmacists
2) Appeal for participation in this socio-professional activity
3) Liaise with City TB Services
4) Train willing and selected community pharmacists for the RNTCP
5) Follow formalities to seek permission from Food & Drug Administration

Extensive Coordination needed to implement this public-private mix model
RNTCP Training, by City TB Officer:
Kalyan Municipal Corporation

20 pharmacists trained
Pharmacist as DOT Providers: Initial Success Stories

Felicitation by City Municipal Corporation on World TB Day, 2010

DOT Provider since 2008: Referral for several patients & DOT treatment for 14 patients
Learnings from Initial Pilots

• RNTCP treatment at Community Pharmacy set up
  – Innovative concept

• Pharmacist’s participation in national Health program
  – Promising potential

PPM Model, if scaled up can contribute significantly
DOTS TB Pharmacist Project

Multi-stakeholders: Scaling of this pharmacist centric public-private mix activity
Project Launch IPA ,HQ, Mumbai : 10th May, 10
Project Areas

4 Areas in & around Mumbai
No. of pharmacists trained 127

- Navi Mumbai
- Dombivli
- Mumbai
- Kalyan-Bhivandi

Approx. 3% of total pharmacies involved in the project
Working with 4 City Corporations
Task Mix (feasible) for Pharmacists

1. Community Awareness about TB
2. Referral of Chest Symptomatic cases
4. Provision & monitoring of DOT treatment
5. Maintaining patient records
6. Attempt to convert private sector patient to DOTS

Pharmacists as health educator, Counselor, case finder, DOT provider
DOTS TB PHARMACIST PROJECT OF IPA

ROLE OF COMMUNITY PHARMACIST

CASE DETECTION
  REFERRAL OF CHEST SYMPTOMATIC PATIENTS
    SPUTUM TESTING IN CORPORATION HOSPITAL
      PATIENTS DIAGNOSED WITH TB
        DOTS BOX STARTED AT PHARMACY/HOSPITAL

DOT PROVIDER
  DOTS TREATMENT AT PHARMACY
    PATIENTS REFERRED BY PHARMACIST & IF CONVENIENT FOR PATIENT TO BE TREATED AT PHARMACY THAN HOSPITAL

AWARENESS

PATIENTS DIRECTLY REGISTERED AT GOVT. HOSPITAL (IF CONVENIENT FOR PATIENT TO BE TREATED AT PHARMACY THAN HOSPITAL.)
Development of Informative leaflets for Consumers (1)

**TB INFORMATION LEAFLET**

Tuberculosis or TB is an ancient disease. Since the 20th century, it has become curable with availability of appropriate drug treatment.

**What is Tuberculosis?**

Tuberculosis (TB) is an illness which spreads from an infectious person to a healthy one. Germs of TB spread through the air when untreated patients cough, talk, or sneeze. TB mainly affects the lungs, but it can also affect other parts of the body (brain, bones, glauic, etc.).

**Who can get TB?**

Anyone can get TB, the rich, the poor, the young and the elderly. One-third of the world’s population carries the bacterium that causes TB, but the majority of infections do not lead to illness. Lung TB can be transmitted from one person to another & this makes TB a serious public health problem.

**What causes TB?**

TB is caused by bacteria called Mycobacterium tuberculosis. The germs can stay in our body for several years in a dormant state & many people do not become sick. Remember, a stronger body can keep TB germ sleeping for years.

**Why the sleeping germs “wake up”?**

Our body always tries to fight off the germs but sometimes our resistance power becomes low. Poor diet, old age or infections such as HIV/AIDS, smoking, alcoholism can reduce our resistance power. The germs then wake up & start multiplying & one can get active TB symptoms.

**Which part of the body can be affected by TB germs?**

It is about 80% of cases TB affects our lungs – this is called pulmonary TB (lung TB). In some people, TB affects other organs such as bones, intestine, brain, etc. This is called extra pulmonary TB. People with active lung TB can spread the infection. Extra pulmonary TB is not infectious.

**What are the symptoms of TB?**

- Cough persisting for more than 2 weeks
- Low grade fever (especially in the evenings)
- Weight loss, reduced appetite & weakness
- Pain in the chest at times
- Breathlessness (in later stages of the disease)
- Blood in the cough

**How is TB diagnosed?**

1) **General physical examination**

2) **Sputum test**

   - The best way to diagnose lung TB is by examining the sputum under the microscope. Germs of TB can be seen with a microscope.
   - Two samples of sputum should be examined for accurate diagnosis. This test is done free of charge at Government TB clinics.

3) **X-ray:**

   - X-ray is more expensive and less accurate than sputum examination, but may be necessary for some patients.

**How does TB spread? Do family members need checking?**

Lung TB spreads through the droplets when an infectious person breathes out TB germs by speaking, coughing, sneezing or spitting. Other people in close contact with the untreated patients over a long period of time are at risk, this could include family members & especially the children.

**What care should be taken once TB is diagnosed?**

- Do not panic. Be assured of the cure.
- Take medicines regularly for complete duration (6 months or longer as per medical advice).
- Go for sputum test at regular time intervals as advised by the doctor.
- Eat a balanced diet, with lot of vegetables & fruits.
- Use a cup with household disinfectant & soap in that cup only. Do not spit elsewhere.
- Use handkerchief while coughing.
- Try to stay in well ventilated environments.

**How is TB treated?**

Tuberculosis can be cured. Modern medicines are extremely effective in nearly all cases. Directly Observed Treatment, Short course (DOTS) is the most effective way to ensure cure. A combination of 2-4 medicines are to be taken for the first 2 months or little longer (intensive phase) & then a combination of 2 to 3 medicines are to be taken for another 4 months or longer (continuation phase).

The Government, under its TB control programme, Revised National Tuberculosis Control Programme (RNTCP), is offering free treatment and medicines at various health centers and government hospitals.

You may start feeling well after only a few weeks of taking TB medicines, but beware! The TB germs are still alive in your body. Do not stop taking the medicines. You must continue to take medicine until all the TB germs are dead, even though you may feel better and have no more symptoms of active TB disease.

**Why is such long treatment necessary?**

Medicines have to kill both active and sleeping germs. It is essential that the medicines have time to kill the growing & active germs as well as the sleeping germs. Incomplete, irregular treatment or missing doses can make patient sick again as all the
Development of Informative leaflets for Consumers (2)

What should I know about the anti-TB medicines?

- Follow all the instructions given by the doctor.
- Common medicines are Rifampicin (RIF), Isoniazid (INH), Ethambutol, Pyrazinamide, Streptomycin.
- Occasionally these medicines may cause some side-effects. However, not everyone on TB medication develops side-effects. Most of the patients tolerate the treatment well.
- Common side-effects include vomiting, nausea, loss of appetite, joint pain, orange-red urine, or skin rash. You can continue taking your medicines but do talk to your doctor about it.
- Few side effects are more serious. If you have serious side-effects, tell your doctor immediately. The serious side-effects are: yellow or brown urine, fever for 3 or more days, abdominal pain, tingling fingers or toes, easy bleeding, aching joints, dizziness, tingling or numbness around the mouth, easy bruising, blurred vision, ringing in the ears, and hearing loss.
- Inform your doctor if birth control pills are being used. Their effectiveness is reduced by anti-TB medicines & you may need to use alternative method or family planning.
- Avoid alcohol, smoking, gutka in any similar bad habit when you are using these medicines.

What is Resistant TB?

- When the treatment is not taken as per the advice, all germs in the body do not get killed, become powerful & later in life patient gets more serious form of TB which is known as Multi Drug Resistant (MDR TB). The powerful germs become resistant to common medicines of TB. MDR TB is a result and symptoms of poor management of TB patients. DOTS has been shown to prevent the emergence of MDR TB and to reverse the trend of MDR TB in communities in which it has emerged.

Remember:

- TB is one of the leading causes of mortality in India—killing 2 persons every three minutes (nearly 1,000 every day).
- TB is preventable & treatable.
- We must become more “TB aware”
- TB is the most common opportunistic infection among people living with HIV.
- It is the social responsibility of each of us to help stop the spread of TB.

In India, two people become sputum-positive for TB every minute. One sputum-positive patient can infect 10-15 individuals a year. The Revised National Control Programme aims to stop the spread of TB by curing patients. The key of this strategy is to cure TB through Directly Observed Treatment at a time and place convenient to the patient.

Issued in public interest under “DOTS TB Pharmaceutical Project”

PROJECT QR:
International Pharmaceutical Federation (IPF), SEARPharm Forum & Indian Pharmaceutical Association (IPA) in collaboration with Lilly MDR TB Partnership
Supported by Maharastra State Chemist & Druggist Association & Shamu TB Control Foundation
Referral Form for Pharmacies

Pharmacists uses this form while referring case to Diagnostic Microscopy Center.
Project Monitoring

Consistent monitoring for:

- No. of patients referred
- No. of patients diagnosed positive
- No. of patients treated with DOTS at Pharmacy
- Cure rate at pharmacies

Monitoring is being done by project assistants & student volunteers
## Overview of the Project

<table>
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<th>Area</th>
<th>No. of participant pharmacists</th>
<th>No. of DOTS Provider Pharmacists</th>
<th>No. of patients on treatment (completed or ongoing)</th>
<th>No. of referrals (approx.)</th>
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<td>Bhivandi</td>
<td>13</td>
<td>06</td>
<td>22</td>
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</tbody>
</table>

48 out of 127 pharmacists now DOT providers
Increase Outreach of DOTS

Example:

• Area: Dombivli
• Population: 550,000
• No. of health posts: 6
• Private sector DOTS Providers (private physicians) – 60
• No. of DOT participant pharmacies – 15
• % increase in DOT network in area – 25%
Challenges

Challenge
• To increase the no. of “good performers”

Concerns:
• Busy schedule of pharmacies, business competition
• Busy schedule of Govt. TB Office staff, difficult to give enough attention to the new initiative

Any new trend takes time to set...
Measures Taken

• Appreciation & recognition of “good performer” pharmacists in various ways (motivation)
• Consistent meetings, telecon, emails with Govt. TB staff (mobilization)
• Frequent visits & telecon with participant pharmacists (reminding & monitoring)
Appreciation of “good performers”

Mayor felicitating the DOTS Provider pharmacists
Visibility to pharmacists: recognition & encouragement
Retail chemists across city decide to provide free drugs to TB patients

Recent Media coverage

Recent Media coverage

Recent Media coverage
What does DOTS Accredited Pharmacist say?

“Great satisfaction to see my patient getting cured”

“Feel satisfied that I can come out of routine business & contribute to community health”
Project Expansion in other cities

• Approach State TB /City TB Office
• Approach, conduct meeting & select pharmacists
• Organize training & implement the model
• Chemist Association/IPA Office bearer as Local Coordinator
• Coordination with National Coordinator
• Selection of pharmacists initiated in Chennai/Bhopal
Future Plan

• Start DOT Services at pharmacies in other cities in near future

• Eventually pharmacists’ services should be integral part of RNTCP, nationwide ...

(POLICY & REGULATORY MATTERS)

• Should be a practice than the project...
After learning from our work, Pharmacist model was one of the top recommendations from the Conference & will be tried in African countries,
Establishing Indian leadership
Concluding Remarks:

• DOTS though community pharmacies: Great potential to strengthen national TB programme
• Increased pharmaceutical human resources for TB control
• Setting new trends is a slow process...policy & regulatory environment takes time to adjust ....but once set, it could become sustainable
• Replication of model can be done with local, site specific modifications in other high TB burden countries
ACKNOWLEDGEMENTS

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• Lilly MDR TB Partnership
• RNTCP Staff & RNTCP WHO Consultants
• AIOCD & Local Chemist Associations
• All participant pharmacists
Resources

Health Exchange Magazine Online TB Project story
•  http://healthexchangnews.com/2010/03/24/private-pharmacists-the-missing-link-in-tb-control/

FIP website TB article

TBC India (Ministry of Health) website (for training module)
•  http://www.tbcindia.org/pdfs/Module%20for%20MPWs%20and%20other%20DOT%20Providers.pdf
•  Any further queries: contact: symghar@yahoo.com