Exercise 6: Public-Private Public-Public Mix DOTS (PPM)

**Topic to be covered in this session**
Assessing the number of cases that are being treated by public providers not yet linked to the National Tuberculosis Programme (NTP)

**Objective of session**
- To explore in detail the third ring of the onion, in particular those cases diagnosed by other public providers.
- To explore the third ring within the context of the organization of the health system in each country.

**Summary of two experiences: Indonesia and China**

**A. Indonesia**

**Background**
Large hospitals and private sector diagnose and treat a high proportion of TB cases, which are neither reported nor managed according to international guidelines. An assessment of case detection rate in 1999 in Yogyakarta revealed that private and public hospitals detected nearly three times as many TB cases as government health centres, yet these cases were not notified to the NTP. Therefore there was the decision to start a link with the public hospitals.

**How it was done - PPM Strategy**
The Hospital DOTS Linkage project began in 2000 in Yogyakarta (population of 3 million). The steps for DOTS expansion into these hospitals were:
1) Gaining commitment through letters of intent and memorandum of understanding between the public health authorities at national and regional and the hospitals association.
2) Preparing hospitals and chest clinics by training doctors, nurses, laboratory technicians, pharmacists, records personnel and health promoters. NTP guidelines and training modules were adapted for the hospital setting.
3) Creating a provincial DOTS committee with representatives from all stakeholders whose main task is to ensure standard implementation practices.
4) Establishing hospital DOTS units to improve internal coordination among hospital departments in order to improve treatment results, prevent defaults and assure proper patients referral to health centres.
5) Establishing proper referral system given that the project promotes patient referral to health centres for treatment and follow-up.
6) Integrating hospital and chest clinics laboratories into the NTP quality assurance programme.
7) Integrating these hospitals and chest clinics into the NTP's supervision.
8) Establishing community partnerships.
9) Facilitating collaboration (incentives for participation) through provision of TB drugs, laboratory reagents and equipment from the public health authorities to these hospitals and chest clinics.

Results
The notification of TB suspect doubled from 2000 to 2004, mainly due to the increase reported by hospitals and chest clinics, from 298 in 2000 to 7141 in 2004. The number of notified TB cases increased from 722 in 2000 to 2356 in 2004. Hospitals had a 41-fold increase and chest clinics a 9-fold increase. Default from treatment decreased in chest clinics. Through the implementation of the external quality assurance (EQA) the proportion of laboratories with error rates of less than 5% increased from 47% in 2003 to 64% in 2004.

Facts and eventual solutions:
- Supervision from NTP staff to specialists in hospitals and clinics was not well received. Therefore, member of the provincial committee with same status as specialists conducted this supervision.
- In the first year of expansion the cure rate in hospitals decreased sharply. Therefore, effort were intensified to improve coordination between hospitals and health centres.
- Majority of TB cases diagnosed in hospitals and chest clinics preferred to be treated by these facilities (which also indicates the preference for these providers from people).
- Default rates in hospitals fluctuate, but were highest during the first two years of the project reflecting a network problem. This was addressed through the creation of the provincial DOTS committee who kept a referral register and supervised all facilities.

B. China
Public-Public Mix for DOTS in China: Enhancing the contribution of public hospitals to TB control (there are two presentations from 2008 and one mission report from 2004 available)

Health system organization:
The public health care system in China is divided into the clinical services and public health. TB control is provided in TB dispensaries under the public health system which is under the Center for Disease Control (CDC). Clinical services, including hospitals, are governed by a different department in the Ministry of Health. A large number of TB cases are diagnosed and treated in the hospitals and traditionally had not being notified to the NTP neither treated according to NTP guidelines.

Background information:
Evidence from the 4th national TB epidemiological random survey in 2000 show:
a) Nearly 90% of patients with tuberculosis initiated their diagnostic and treatment process in hospitals and non-public health care facilities, where they were given tests and drugs as long as they could pay.
b) Many patients who improved or ran out of money
discontinued treatment. Thus, only 20% of patients with tuberculosis treated outside the public-health system took their tuberculosis medications regularly.

PPM Strategy:
PPM strategy aimed at linking the public health sector (CDC dispensaries) with the public hospitals its implementation started in 2004. The target is to involve 100% of the hospitals in TB control as per DOTS by 2010.

Two different approaches have been implemented in many provinces of China.
A. Referral and tracing: TB services are provided in the TB dispensaries, general hospitals refer TB suspects and patients to TB dispensaries, which are responsible to trance those been referred.
B. Designated TB hospitals: One general hospital per district provides diagnosis and treatment, meanwhile TB dispensary provides public health tasks such as health education, reporting, drug supply and supervision. There is a referral and tracing of TB suspect between the designated TB hospital and other general hospitals. This approach can be mostly seen in cities and urban areas, and pilot projects of the Global Fund.

For these approaches a TB suspect and TB patients reporting, referring and tracing system was established. Two internet based reporting systems are currently used. One, an existing system was used to report and trace TB cases since 2004, this is the Internet-based Nationwide Communicable Disease Reporting System (INCDRS). And, two, a TB specific system launched in 2005, called the Internet-based Tuberculosis Management Information System.

Evaluation of PPM Strategy is taking place during 2008.

Practical exercise
1. How is the health system organized in your country? This means, describe the broad categories of actors that are providing health services. For example, public health, social security, private sector, unique system, etc.
2. Which of these actors are engaged in DOTS?
3. Describe all providers of health services within each sector of the health system in your country, make sure all population is covered (hospitals, health centres,…).
4. Which of these providers are engaged in DOTS?
5. Which of these providers do not report TB cases to the NTP? For example, are the hospitals linked to the social security system reporting to NTP?
6. Identify the barriers to involve them in DOTS.
7. Are there any interim solutions? For example is there the possibility to set up a reporting system for the non-programme providers while they are fully engaged; discuss and explore the possibility to set up a reporting system for the public providers not yet in NTP.
8. Any idea how many cases could be treating these public providers not reporting to NTP?
9. What could you do to estimate the number of cases not being reported to the NTP?