

PROGRAM MODULE**PLANNING AND MANAGING TB CONTROL****Thursday 9 September 2010****08:30-09:30: Block 1: Introduction****Module objectives:**

At the end of the module to have good understanding of:

- 1. The basic principles of tuberculosis control**
- 2. Planning and management of tuberculosis control services**

At the end of the module to have acquired skills to:

- 3. Assess the quality of tuberculosis services**
- 4. Report findings and provide recommendations**

Planning and management cycle:

- 1. Problem analysis**
- 2. Planning and implementation of interventions**
- 3. Quality assurance and performance audit by supervision**
- 4. Monitoring through Health Information Systems**
- 5. Evaluating results**

You will use Asiam as a case study to learn to apply the management cycle. You will use the *Review of tuberculosis control in Asiam in 1992, 1996, 2002* and further the *Asiam proposals for Round 7 and 10 of the Global Fund* and the *Asiam data sets I, II and III* as background material for analysing the situation in Asiam and solving questions posed regarding several steps in the tuberculosis control process.

09:30-10:30: Block 2: Is tuberculosis a priority?

Objective of Block 2: to learn to explain to health policy makers and politicians why tuberculosis control is a health priority.

The Cabinet of Asiam has decided that a Health Sector Reform is needed. Therefore the Minister of Health of Asiam has asked the staff responsible for tuberculosis control at national level to prepare and present a policy document for tuberculosis control. On the basis of the document it will be decided whether to increase or decrease the budget for tuberculosis.

Exercise: List reasons why investing in tuberculosis control is important.

11:00-12:00: Block 3: Outline of a national plan for tuberculosis control

Objective of Block 3: to learn how to develop a national plan for tuberculosis control using a planning and management approach.

Based on the policy document prepared by the national tuberculosis team the Cabinet has decided that tuberculosis will have a high priority in the new health development plan. The team is requested to prepare a 5-year development plan for tuberculosis control.

Exercise: What is the information you would like to collect to do a situational analysis, which will form the basis of the development plan?

13:00-16:00: Block 4: The size of the tuberculosis problem in Asiam

Objective of Block 4: To analyse the tuberculosis problem in Asiam using the Asiam data set.

The development plan starts with an analysis of the tuberculosis problem in Asiam at present and the trend in the past.

Exercise: List in brief the main findings of your analysis of the Asiam data sets and the reviews. Answer at least the following questions:

1. What were the absolute numbers of new smear-positive cases and cases all forms and the rates per 100,000 population in 1991 and 2009?
2. What has been the trend of notifications and rates of all forms of TB and smear-positive TB cases (new + relapses), in the periods 1982-1991 and 1992-2009?
3. What was the average prevalence of smear-positive cases observed in the surveys held between 1981 and 1989 and what was the prevalence of smear-positive cases in the 2001 survey?
4. What do you conclude from Table 7 of data set I and table 2 of data set III

Add other observations, if any, concerning the **epidemiological** situation of tuberculosis in Asiam

Try to formulate a general conclusion about the severity and trend of the problem.

Friday 10 September 2010

8:30-12:00 Block 5: Planning of case-finding and diagnostic services

Objective of Block 5: To learn to plan case-finding and diagnostic services based on an analysis of the quality and coverage of these services in Asiam

The target of the NTP of Asiam is to detect as many smear-positive cases as early as possible. For this purpose effective case-finding and diagnostic services have to be organised.

Exercise: Analyse the efficiency and coverage of the laboratory network for direct microscopy in Asiam in 1992. Try to answer the following questions with use of the Asiam data set and 1992 review findings:

1. What is the proportion of smear-positive suspects in 1991?
2. Is this proportion too high, too low or normal?
3. What was the proportion of functional TB centres in Asiam in 1992?
4. Calculate the microscopy workload per day centre in 1992 using the following parameters
 - Suspects 1992 = suspects 1991
 - 3 smears per suspect
 - 260 working days
5. Calculate the number of microscopy centres needed in 1992 in Asiam for a population of 9 million using the following parameters:
 - The prevalence rate of smear-positive cases is similar to the average rate of the period 1981-1989
 - The NTP detects 35% of the prevalent smear-positive cases per year
 - 30 smear per smear-positive case
 - One full time technician per centre
 - Maximal 20 smears per technician per day
 - 260 working days

Was the number of functional microscopy centres in Asiam in 1992 sufficient in that situation?

Exercise: Analyse the efficiency and coverage of the laboratory network for direct microscopy in Asiam in 2000. Try to answer the following questions with use of the 2nd Asiam data set and 2002 review findings:

6. What is the proportion of suspects with positive smear results in 2000?
7. What was the number of microscopy centres in Asiam during the 2002 review?
8. What was the average number of smears examined per day per diagnostic centre in 2000 using the following parameters:
 - All suspects had 3 smears
 - All positive suspects were registered for treatment
 - 260 working days
9. Calculate the average number of smears per day per centre in 2001 using the following parameters:
 - NTP detects 70% of the prevalent smear-positive cases
 - Each suspect has 3 smears and the positivity rate is 10%
 - Number of diagnostic centres in 2001 is similar to 2002
 - Population of 2001 = population of 2000

13:00-14:30 Block 6: The sputum positivity rate

Objective of Block 6: To understand the relation between the sputum positivity rate and case-finding efforts

Exercise:

To get an understanding of the relation between the sputum positivity rate and case finding efforts develop a graph showing the results of case-finding of smear-positive cases during the period 2001-2008 using 4 sets of data:

- Proportion of the population examined by direct microscopy each year
- Number of suspects examined each year
- Proportion of suspects with positive smears each year
- Number of smear-positive cases (new and relapses) registered each year

What does the graph shows us?

14:30-16:00 Block 7: The laboratory management and information system

Objective of Block 7: To learn to understand the use of the laboratory information system as a management tool for implementing quality assured direct microscopy services for AFB.

The Minister of Health of Asiam has organised a meeting with the head of the national laboratory services and the NTP to discuss the integration of direct microscopy services for AFB in the general laboratory services. The head of the laboratories does not see any need for a separate register for smear examinations as all examinations are already routinely registered in one general laboratory register.

Exercise:

1. Explain why a special register for smear examinations is needed.
2. What information can be derived from the register and how?

Monday 13 September 2010**8:30-10:00 Block 8: Case definitions, case register and case-finding report**

Objective of Block 8: To understand the system and reasons for case definitions and to use the knowledge as a tool for monitoring and evaluation the quality of case-finding and diagnostic services.

The Health Reform Implementation Team (HRIT) has organised a meeting with heads of programs to discuss a revision of the Health Management and Information System (HMIS) at district level. The guiding principle is that only information is collected and compiled which is relevant for decision making at the district level. The HRIT proposes that for tuberculosis only the total number of cases diagnosed is reported quarterly by the district.

Exercise:

1. Explain to the HRIT why the tuberculosis program uses case-definitions
2. Explain which information need to be registered and reported and why
3. The proportion of new smear-positive cases in the national referral hospital is 25%.
Comment on this level and give possible explanations

10:00-12:00: Block 9: Strategies for DOT

Objective of Block 9: To learn to develop an implementation plan for DOT in different settings.

In accordance with the WHO and IUATLD the intake of rifampicin should always be supervised by health staff. The NTP has a strategy to provide DOT on ambulatory basis as close as possible to the patient's home. The target is to provide DOT at 90% of the functional health centres.

Exercise:

1. Calculate the proportion of cases, which could be treated on ambulatory basis, and the number of beds per hospital still needed for the remainder of the patients for hospitalized DOT during the intensive phase of SCC.

Use the 2000 figures for population and cases detected.

Use the 2001 data for hospitals and functional health centers assuming that 90% of health centers would provide ambulatory DOT

Assume that the population and commune health posts are distributed equally over the area of Asiam and that only people living within 5 km of a health center can be treated on ambulatory basis

In 2005 Asiam shifted from 2HRZE/6EH to 2HRZE/4RH. Was the number of DOTS centres sufficient to treat all cases on ambulatory basis? What about the number of health centres in 2007?

13:00-14:30 Block 10: Treatment outcome, case register and cohort analysis

Objective of block 10: To understand the definitions of treatment outcome and how cohort analysis works.

The Health Reform Implementation Team (HRIT) has organised a meeting with heads of programs to discuss a revision of the Health Management and Information System (HMIS) at district level. The guiding principle is that only information is collected and compiled which is relevant for decision making at the district level. In the opinion of the HRIT it is sufficient that districts report the total number of defaulters per quarter as the indicator of the program performance.

Exercise:

1. What do you think about the proposal of the HRIT?
2. Explain which information need to be registered and reported by the NTP and why?

14:30-16:00: Block 11: Introduction of the field visit**Tuesday 14 and Wednesday 15 September 2010: Field visits**

During two days tuberculosis clinics in and around Hanoi are visited. Each visit includes:

1. Introduction to the health centre and clinic staff
2. General discussion about the organisation of the health service in the area, which is visited
3. Relation between the tuberculosis clinic and the health service;
4. Visit to the laboratory and assessment of laboratory services
5. Visit to the treatment section and assessment of treatment services
6. Visit to the pharmacy and assessment of pharmacy services
7. Where possible interviews with patients, either at the clinic or at home
8. Validation of the registration and reporting system
9. Assessment of the results of case-finding and treatment on the basis of the laboratory and tuberculosis registers
10. Analysis and evaluation of the clinic performance
11. Debriefing meeting with the staff about findings and recommendations

Thursday 16 September 2010

AM: Report writing

PM: Presentation of reports

Friday 17 September 2010**08:30-12:00: Block 12: TB and HIV in Asiam**

Objective of block 12: To discuss the TB-HIV co-epidemic in Asiam

Exercise

- What is the trend of the TB-HIV epidemic in Asiam from 1995 till 2007?
- What measures have been taken in Asiam to address the co-epidemic?
- Do you know about the “3 I’s” strategy? What does it involve?

13:30: Closing ceremony