



SAARC Guidelines

for

Partnership with

**Industry**

in

Prevention and Control

of

**TB & HIV/AIDS**



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## FOREWORD

Tuberculosis- a disease that has struck millions of men, women and children all over the world, still remains one of the most defiant public health problem of our times, spreading relentlessly and killing more adults than other infectious diseases.

TB is now poised to explode into an even more formidable challenge due to the parallel of HIV/AIDS currently sweeping across South Asia. HIV reduces the capacity of the body's natural immune system to fight disease. The risk of developing active TB is thus several times higher among HIV-positive individuals as compared to those uninfected with HIV.

TB incurs tremendous costs, both economic and social. Human lives are lost during their most productive years. Families break-up. Children stop going to school. Patients, especially women, suffer humiliation and are given abandoned. Household incomes drop as much as 20 to 30 percent. The poor get poorer.

All Member Countries of the Region have adopted DOTS strategy, the best available and cost-effective strategy for control of Tuberculosis by 1997. Since then, considerable progress has been made in the SAARC Region. Overall cure rate in the Region is very near to global target but case detection rate needs to be accelerated. The Member Countries are strengthening their TB control activities, initiating new approaches and developing partnership to curb the epidemic.

In order to sustain the achievements, achieve targeted case detection rates and expanding the partnership activities, the SAARC Tuberculosis & HIV/AIDS Centre has identified **INDUSTRY** as one of the potential partners to be involved in this mission along with others like media, pharmacists, students, medical colleges and private sector, NGOs, Manpower and Travel Agency.

I would like to appreciate the efforts made by our staff for bringing out this document ***“SAARC Guidelines for Partnership with Industry in Prevention & Control of TB & HIV/AIDS”***.

I hope this document will provide updated information on TB and HIV/AIDS & will also help to accelerate partnership with Industrial sectors in prevention and control of TB & HIV/AIDS.

We look forward to your valuable comments/suggestions and urge to collaborate in fight against TB and HIV/AIDS.

2007, Kathmandu

Director, STC

### **List of Abbreviations**

AFB	Acid Fast Bacilli
AIDS	Acquired Immune-Deficiency Syndrome
ARV	Anti-Retroviral
BCC	Behaviour Change Communication
DOT	Directly observed treatment
DST:	Drug Susceptibility Test
DOTS	The internationally recommended control strategy for TB
EQA	External Quality Assurance
EP	Extra Pulmonary
HIV	Human Immuno Deficiency Virus
IEC	Information, Education and Communication
INGOs	International Non Governmental organizations
IDU	Injecting Drug User
MDR	Multi Drug-resistant
MoU	Memorandum of Understanding
MSM	Men having Sex with Men
MTB	Mycobacterium Tuberculosis
NACP	National AIDS Control Programme
NGOs	Non- Governmental Organizations
NTP	National Tuberculosis Programme
NGO	Non Governmental Organization
PLWHA	People Living with HIV/AIDS
PTB	Pulmonary Tuberculosis
PLWH	People Living With HIV/AIDS
STC	SAARC Tuberculosis & HIV/AIDS Centre
TB	Tuberculosis
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

### **List of Abbreviations**

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PTB	Pulmonary Tuberculosis
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STC	SAARC Tuberculosis & HIV/AIDS Centre
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VCT	Voluntary Counseling and Testing
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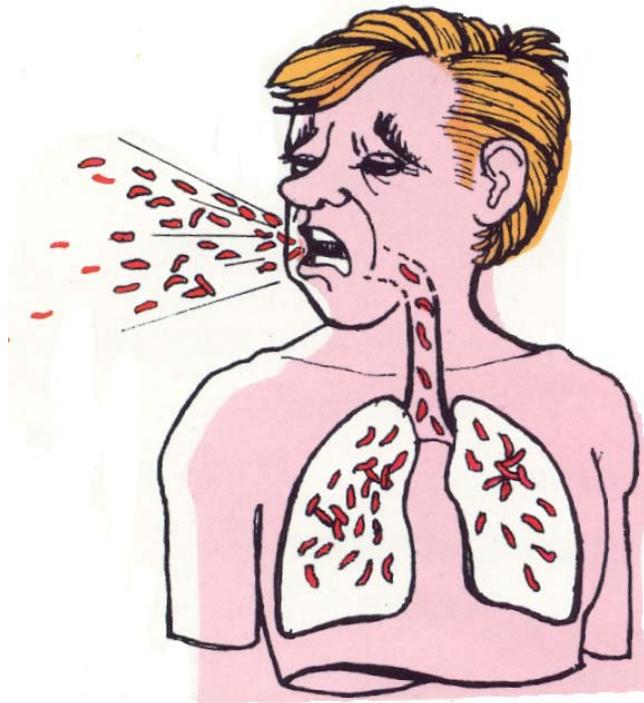
### A. General Information on TB

#### 1. What is Tuberculosis (TB)?

Tuberculosis is a communicable disease caused by an organism called *Mycobacterium tuberculosis*. This organism is also called as **tubercle bacilli**. Usually they affect the lungs.

#### 2. How does TB spread?

When a person with pulmonary TB coughs, sneezes, laughs, or talks tubercle bacilli are spread into the air in tiny droplets. People who are in close contact can breathe in these droplets and become infected.



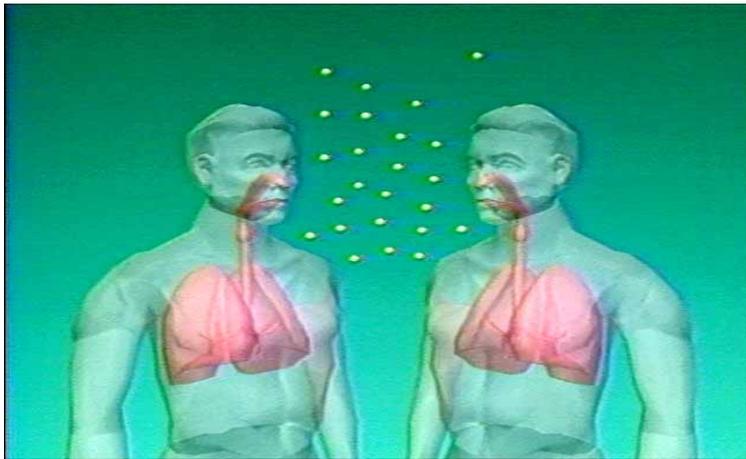
#### 3. What is a case of TB?

A patient in whom TB has been bacteriologically confirmed or diagnosed by a clinician.

#### 4. How many types of TB are there?

There are two types of TB (according to organ/parts of the body affected):

**Pulmonary TB**- When tuberculosis occurs in the lungs then it is called as pulmonary TB.

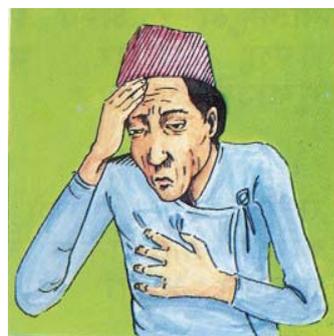
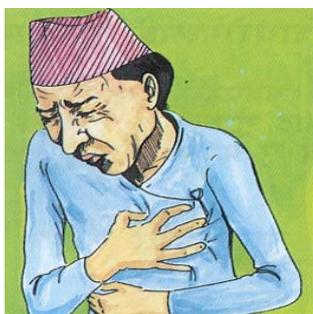


**Extra-Pulmonary TB-** If TB affects organs other than lungs, such as lymph nodes, bones and joints, genitourinary tract, meninges, pleura, intestines etc. it is called as Extra Pulmonary TB.

### 5. What are the symptoms of pulmonary TB?

**Symptoms of pulmonary TB include:**

- Cough more than two weeks
- Chest pain
- Low-grade fever, especially in the evening.
- Loss of weight
- Loss of appetite
- Blood stained sputum
- Night sweat



## 6. Who are vulnerable to TB?

Following individuals are at risk of contracting infections and developing the disease because of their exposure to a patient with TB.

- ❑ Family and close contacts of the patients
- ❑ The elderly
- ❑ People who inject illicit drugs
- ❑ People who live or work in certain setting, such as nursing homes, prisons, shelters for the homeless or TB treatment centres
- ❑ People with HIV infection
- ❑ People addicted to alcohol
- ❑ Malnourished people
- ❑ People with poorly controlled Diabetes
- ❑ People having chronic lung diseases
- ❑ Smokers
- ❑ People suffering from cancers

## 7. How is TB detected/ diagnosed?



Pulmonary TB can be detected by sputum examination. At present, microscopic examination of sputum is the best method for diagnosis of pulmonary TB. Chest X-ray may help in diagnosis of TB of the lungs. The smear microscopy is better method of diagnosis than X-ray because it is simple, easy to perform; less expensive and more reliable. Microscopy services are provided free of cost.

## **B. DOTS Strategy in TB Control**



### **1. What is DOTS and why DOTS?**

Tuberculosis is entirely curable and Directly Observed Treatment Short-course (DOTS) is the best ever known available strategy to cure TB patients and control TB.

Under this strategy TB suspects **are tested free of cost**. The diagnosed TB patients receive free treatment with recommended standard drugs and are observed taking every single dose at least for the intensive phase (first 2 to 3 months) of their 6-8 months treatment regimens. For the rest of the treatment course, patients are kept under strict supervision. This ensures that TB patients take all their drugs regularly in proper doses for the full-recommended period of treatment course, which ultimately ensures their cure.

### **2. What are the elements of DOTS strategy?**

The DOTS strategy consists of five elements:

- 1) Political Commitment
- 2) Good quality case detection using sputum smear microscopy in person who have cough of more than two weeks duration.
- 3) Short-course chemotherapy using standardized regimens and recommended case management protocols including direct observation of treatment
- 4) Regular supply of good quality anti-TB drugs, and
- 5) A standardized recording and reporting system that allows an objective assessment of individual patient outcomes as well as overall programme performance.

### **3. Why it is necessary to have directly observed treatment?**

At least one third of the patients receiving self-administered treatment do not adhere to treatment. It is impossible to predict which patients will take medicines regularly. Therefore, directly observed treatment is necessary at least in the initial phase of treatment to ensure adherence and achieve sputum smear conversion. A TB patient missing even one attendance can be traced immediately and counseled. No method other than directly observed treatment has been able to achieve 85% cure rate of new smear positive cases.

### **4. What are the evidences that DOTS works?**

In areas where DOTS was implemented, cure rates of up to 95% have been recorded, even in very poor countries. More over DOTS prevents transmission of new infections and the development of multi-drug resistant TB. The DOTS strategy has been ranked by the World Bank as one of the most cost-effective of all health interventions.

### **5. What are the benefits of DOTS?**

The benefits for patients themselves are the increasing treatment completion resulting in rapid cure. Furthermore, case management under DOTS strategy can prevent death, sequel & relapse. Moreover, DOTS can reduce community transmission of tubercle bacilli as well as emergence of drug resistance strains.

DOTS is the internationally recommended cost-effective strategy for TB control. DOTS cures patients, saves lives, prevents the development and spread of drug resistance, and reduces disease transmission.

#### **DOTS can:**

- Prolong life and improve its quality
- Stop the spread of TB
- Prevent emergence of multi-drug resistance TB
- Reverse the trend of multi-drug resistance TB

Treatment of TB under DOTS strategy is very effective, if a patient takes treatment:

- ❖ with right combination of drugs
- ❖ with correct dose
- ❖ regularly for full period of the course (6-8months) as advised by physician.

## **C. Burden of TB and HIV/AIDS**

### **1. Tuberculosis Burden within the SAARC Region**

Tuberculosis is one of the major public health problems in the SAARC Region with immense socio-economic impacts. Almost 50% the adult population of this Region has already been infected with *Mycobacterium tuberculosis* and is at risk of developing tuberculosis disease. In the year 2005/6 a total 1.7 million all types of TB cases was notified. This represents 68.2% of the 2.5 million estimated cases; the 0.7 million new smear positive cases notified account for 63.7% of the 1.1 million estimates.

According to this estimate SAARC Region was bearing 30.3% of the total global new sputum smear positive cases (with 23% of population share). India, Bangladesh, Pakistan and Afghanistan are occupying the 1<sup>st</sup>, 5<sup>th</sup>, 6<sup>th</sup> and 22<sup>nd</sup> positions in the list of 22 high burden nations {*according to estimated incidence (absolute number) of TB: high burden countries.2005*} with India revealing the highest (21.0%) global absolute burden of TB. These 4 SAARC nations account for 28.5% of the total global absolute burden of TB.

Average of 4.18 % died from TB in the SAARC Member States in the year 2006, highest mortality noted in India is 7.5%. More than 75% of these cases and deaths occur among 15 - 54 years age group, economically the most productive age group. As a result the social and economic loses due to TB are huge.

By adopting DOTS strategy this Region has been started to show success in TB control. In the year 2005/6 SAARC Region has covered over 99.5% of its population with DOTS and detected 63.7% of the total estimated new smear positive cases. This Region has already achieved the target of 85% (now 86.4%) treatment success rate of detected new smear positive cases. Major challenges are however there in control of TB, such as

- Sustaining quality in diagnosis and case management
- Expanding DOTS services in other public sector, private sector and hard to reach areas
- Improving the quality of implementation and making it more accessible to people in order to increase case detection

- Strengthening human resources in terms of numbers and technical capacity
- Strengthening laboratory network and improving EQA and supervision
- Building infrastructure and technical capacity for culture and DST for management of MDR TB
- Establishing effective coordination between NTP and NACP
- Tackling migration & cross border issue

There is obviously commitment within this Region for achieving TB control targets for Millennium Development Goals.

### **Economic and Social Costs associated with TB**

TB is a major barrier to social and economic development. More than 90% of global TB cases and deaths occur in the developing world, where 75% of cases are within the economically most productive age-group (15-54 years). An adult with TB (in the developing world) loses on average 3-4 months of work time and the economic losses to the family and community are staggering. The estimates suggest a loss of 20-30% of annual household income and, if the person dies of the disease, an average of 15 years of lost income. Within India, every year, more than 300,000 children are forced to leave school because of their parents' illness due to TB, and approximately 100,000 women lose their status as mothers and wives i.e., abandoned by their families because of TB illness.

### **2. HIV/AIDS Burden within the SAARC Region**

All the SAARC Member States are reporting cases of HIV and AIDS and the epidemic is spreading rapidly in most. On the basis of available information it can be assumed that around 3.2 million estimated HIV infected people are living within the region. The danger of SAARC region rests in the low general population, which may be undermining the gravity of the situation prevalence rates.

**Estimated number of people living with HIV in SAARC Region, end 2005**

<b>Country</b>	<b>Estimated Population (in millions)</b>	<b>HIV Prevalence Rate (%) among Adults</b>	<b>Estimated No. of PLWHA</b>	<b>AIDS Deaths</b>
<b>Afghanistan</b>	29.86	<0.1	1000	<100
<b>Bangladesh</b>	141.8	<0.1	11000(6400– 18000)	500 (<1000)
<b>Bhutan</b>	0.67	<0.1	500	100 (<200)
<b>India</b>	1114.2	0.9	2.47 million	
<b>Maldives</b>	0.29	<0.1	52	12
<b>Nepal</b>	25.66	0.55(0.3– 1.3)	70256 (40000– 1680000s)	5100 (2800– 8400)
<b>Pakistan</b>	158.0	0.1(0.1– 0.2)	84000 (46000– 150000)	3000 (1700– 4900)
<b>Sri- Lanka</b>	20.47	<0.1	5000 (3000–8300)	<500
<b>Regional</b>	1490.95		<b>2.64 million</b>	

Source: National HIV/AIDS Reports 2006

## Chapter-II

### A. General information on HIV/AIDS

#### 1. What is HIV?

HIV stands for “Human Immunodeficiency Virus” which infects cells of the human immune system and impairs their function.

#### 2. What is AIDS?

AIDS stands for ‘Acquired Immune Deficiency Syndrome’ and describes the collection of symptoms and infections associated with acquired deficiency of the immune system.

Infection with HIV has been established as the underlying cause of AIDS and it applies to the most advanced stage of HIV infection.

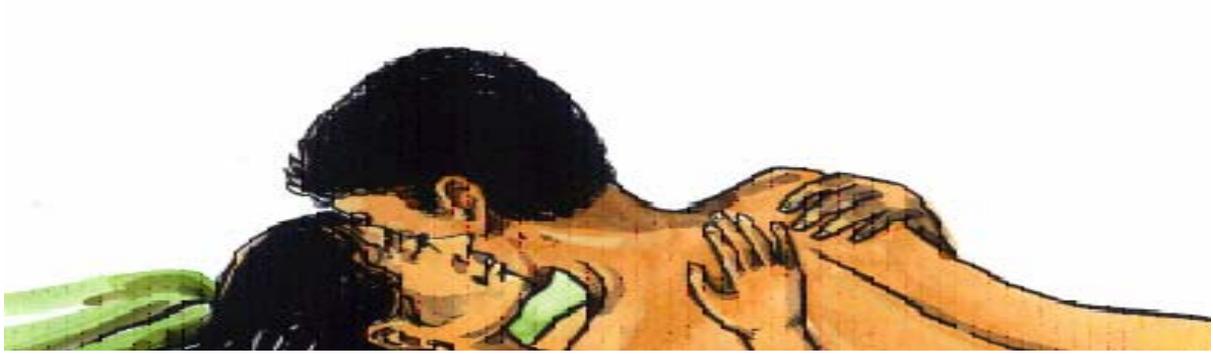
#### 3. What are the symptoms of HIV (infection)?

Most people infected with HIV do not know that they have become infected, because no symptoms develop immediately after the initial infection. Some people have a glandular fever-like illness (with fever, rash, joint pains and enlarged lymph nodes), which can occur at the time of sero-conversion. Sero-conversion refers to the development of antibodies to HIV and usually takes place between 45 and 90 days after an infection has occurred. The only way to determine whether HIV is present in a person’s body is by taking an HIV test.

#### 4. How HIV is Transmitted?

**The main modes of HIV transmission are:**

- *Unprotected sexual intercourse (anal and vaginal) and oral sex;*



- Contaminated blood and blood products, tissues and organs;



- Mother to child transmission (MTCT).



## 5. How HIV is not transmitted?

The following activities will not transmit the HIV virus:

- Shaking hands, hugging or kissing;
- Coughing or sneezing;
- Sharing food, eating or drinking utensils;
- Visiting a hospital;
- Using common toilets or swimming pools;

- Getting bites of mosquitoes or other insects.
- Caring of AIDS patients also does not carry risk of HIV transmission.

## 6. Prevention of HIV Transmission

### HIV and AIDS can be PREVENTED

- By being mutually faithful to sex partner
- By using only HIV screened blood or blood products when required
- By using new Needles, Syringes, Blades, Razor
- By avoiding inject able drugs and needle sharing
- By using a condom ( consistently and correctly) for safer sex
- By participating in Prevention of Mother To Child Transmission (PMTCT) program for delivery of baby from HIV infected mother

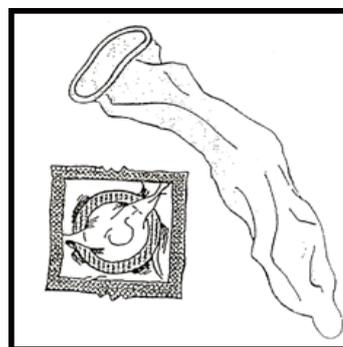
### Things to remember regarding condom use

- ❖ Use good quality condoms properly and consistently
- ❖ Avoid using condoms which are dry/brittle, sticky, discolored or date expired
- ❖ Store condoms in a cool and dry place out of direct sunlight.

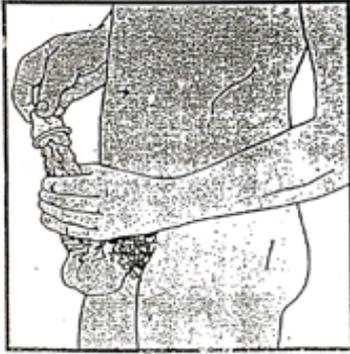
**It is not the condom on its own- it is the appropriate use of condom that produces benefit to the users.**

### ✚ CORRECT METHOD OF CONDOM USE

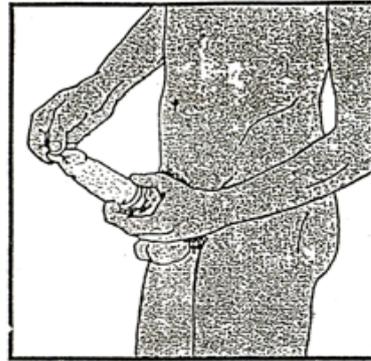
01. How to obtain?
02. How to store?
03. How to use?
04. How to dispose?



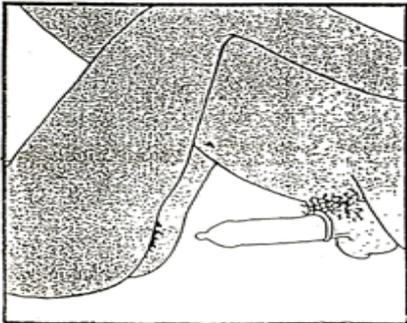
open the package  
the condom does not



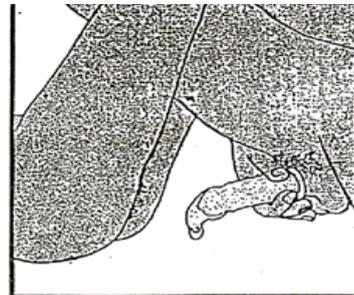
(2) Do not unroll condom before  
putting it on.



(3) If not circumcised, pull  
foreskin back. Squeeze tip  
of condom and put it on end  
of hard penis.



(4) Continue squeezing tip while  
unrolling condom until it covers  
all of penis.



(5) Always put on a condom before  
entering partner.

(6) After ejaculation (coming), hold  
condom and pull penis out before penis gets soft.

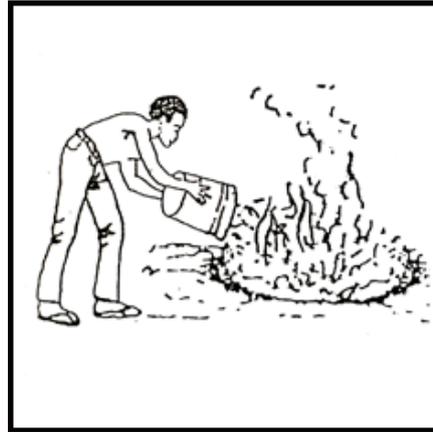
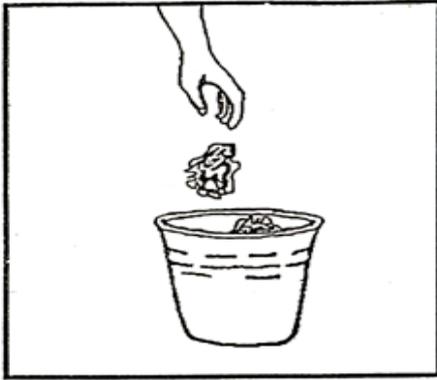


(7) Remove condom without spilling



(8) Disposal into a pit latrine OR

Liquid (semen) inside.



(9) Tie and wrap the condom (in paper, if available) then throw in dust bin. trash. Wash hands. OR

(10) Burn or bury the condom with other Wash hands.

### **7. How HIV is detected or diagnosed?**

HIV is diagnosed by clinical assessment and HIV testing. The usual HIV test is one that detects antibodies to HIV in the blood. Rarely, a single HIV test for an individual person may not be reliable. The usual recommendation in diagnosing HIV infection is therefore to perform two tests. Both should be positive for a diagnosis of HIV infection.

When a person gets infected with HIV, the virus will start to attack his/her immune system. After exposure, there is a 2-4 week period of intense viral replication before onset of an immune response (i.e. antibody production) and clinical illness. This period is called **window period**; in this period HIV testing will be negative.

In high prevalence, as many as 5% of those testing HIV antibody negative will actually be in the window phase and are really infected with HIV. People in these settings who test HIV negative should be counseled strongly to return in three months for repeat testing.

### **Diagnostic tests available for the diagnosis of HIV:**

- a. ELISA (Enzyme-Linked ImmunoSorbent Assay)
- b. Rapid Tests
- c. Western Immunoblot test (Confirmatory tests)

### **B. HIV and TB-relation**

HIV is the most potent risk factor for progression to active TB both in people with recently acquired infection and those with latent Mycobacterium Tuberculosis (MTB) infection. HIV-positive TB patients also suffer increased morbidity from other HIV related diseases.

Increasing TB cases among PLWHA augment the risk of TB transmission to the general community whether or not HIV infected.

TB is the most common causes of HIV related illness and death. HIV not only increases the number of TB cases, but also alters the clinical course of TB disease.

### **1. Impact of HIV/AIDS on TB control:**

- ❖ Increased case load of active TB attributable to HIV
- ❖ Increased HIV related morbidity and mortality in TB patients
- ❖ Increased emergence of drug resistance
- ❖ Higher default rates and lower cure rates
- ❖ High rates of adverse drug reactions during TB treatment
- ❖ Increased risk of TB transmission (including nosocomial transmission)
- ❖ Increased burden on TB services
- ❖ Delay of access to health services for TB suspects due to the stigma of HIV/AIDS

### **2. Impact of TB on HIV:**

- Increased case load of active TB among PLWHA
- TB may accelerate the progression of HIV-related immuno-suppression
- Increased morbidity and mortality from TB among PLWHA
- Difficulties with diagnosing TB among PLWHA owing to the different clinical presentations of HIV related TB
- Increased burden on HIV services

### **Sub-Populations at higher risk (PHR) of getting HIV infection:**

- Injecting Drug Users
- Sex workers : street based and Non-street (institute) based
- Clients of sex workers
- Labor migrant / Transport workers

- Men having Sex with Men (MSM)
- Housewives of migrants
- Street children
- Uniform service

## **Chapter-III**

### **A. Treatment of Tuberculosis:**

#### **1. How TB disease is treated?**

Tuberculosis is a curable disease and treated with the oral drugs & sometimes together with injections. **TB drugs are available at free of cost in all government health facilities.** The total duration of treatment is 6 to 8 months. It is essential to complete full course of treatment. If treatment is interrupted before completion of full course the drug resistance will develop which is dangerous to patient as well as to the community. Drug resistance TB is difficult to treat.

#### **2. What are the effective anti-TB drugs?**

Following are the main anti -TB drugs available everywhere.

##### **Oral Drugs**

- ❑ Isoniazid (H)
- ❑ Rifampicin ( R)
- ❑ Pyrazinamide (Z)
- ❑ Ethambutol (E)

##### **Injection**

- ❑ Streptomycin (SM)

#### **3. What are the adverse effects of anti-TB drugs?**

Drugs used in the treatment of tuberculosis may sometimes cause side effects/adverse effects, such as loss of appetite, nausea, abdominal pain, joint pains, etc. These may cause the patients to stop taking medicines. Most TB patients complete their treatment without any significant adverse effects of drugs. However, a few patients do experience adverse effects. It is therefore important that patients need to be clinically monitored during treatment so that adverse effects can be detected promptly and managed properly. Health personnel can monitor adverse effects of drugs by teaching patients how to recognize symptoms of common adverse effects.

#### **4. When to stop anti-TB drugs:**

When a patient has minor side effects, explain the situation, offer symptomatic treatment and encourage to continue treatment. When a patient has a major reaction, stop the suspected drug(s) responsible at once. A patient who develops one of the following reactions must never receive that drug again.

**Streptomycin:** Skin itching, rash, deafness, dizziness

**Most anti TB drugs:** Yellowish discoloration of eyes (Jaundice), vomiting and confusion

**Ethambutol :** Visual impairment

**Rifampacin :** Rash, Shock

Refer patients with severe drug reactions to specialist centres.

#### **5. How one can help TB patients understand more about their disease?**

Patients are more likely to successfully complete their treatment if they understand about their disease and treatment. Patients are often afraid when they learn of their diagnosis, because they harbor misbeliefs such as TB is an incurable disease. Reassure them and provide them with proper and relevant information;

- TB is caused by an organism/bacillus
- TB spreads by air through coughing, sneezing.
- TB is a curable disease and not a hereditary disease.
- Investigation of TB suspects and treatment of TB cases are free of cost.
- If there is a side effect, inform Health workers as soon as possible.

Talking to an individual patient or patients in groups and distribution of pamphlets and brochures containing basic TB information should help to improve the patients' knowledge on TB.

### **B. Drug resistance to anti TB drugs & MDR-TB**

#### **1. What is drug resistance & MDR-TB?**

Drug resistant bacilli are the Mycobacterium tuberculosis bacilli, which are resistant to anti-tuberculosis drugs. Multi-Drug resistant (MDR) bacilli are the bacilli that are

resistant to at least INH & Rifampicin. MDR is currently the most severe form of bacterial resistance.

## **2. Treatment of MDR-TB**

Treatment of patients with MDR tuberculosis may have to involve second-line (reserve) drugs. These are drugs other than the standard essential anti-TB drugs. These reserve drugs are much more expensive, less effective and have many more side effects than standard drugs. They should only be made available to a specialized unit and not in the free market. It is the responsibility of National Health authorities to establish strong pharmaceutical regulations to limit the use of second-line drugs in order to prevent the emergence of drug resistance tuberculosis.

## **3. Priority is prevention**

A country with limited resources may reasonably decide that its resources should be concentrated on ensuring that all patients complete the standard National treatment and are thereby cured. With good standard treatment meticulously administered, multi-drug resistance should not occur.

The most common assumption is that the emergence of **MDR-tuberculosis is always due to medical error** prescribing an unavailable regimen, using unreliable regimen, using unreliable drugs, or failing to ensure (by directly observed treatment and education of the patients and the family) that the patients takes the drug as prescribed and for the full period prescribed. **MDR tuberculosis should always be regarded as a result of failure of effective implementation of the National TB control programme.** Top priority should be given to preventing such failure.

## **4. MDR TB a consequence of poor treatment**

In some countries MDR tuberculosis has arisen from poor treatment before the introduction of the National Programme or because some patients received poor treatment outside the National Programme. As a wide variety of different poor regimens may have been used for such patients, the MDR tuberculosis cases, which arise, will require detailed assessment by the specialized unit.

## **5. How MDR TB is produced?**

As with other forms of drug resistance, the phenomenon of MDR tuberculosis is entirely man-made.

Drug resistant bacilli are the consequences of human error in any of the followings:

- Prescription of chemotherapy —————> wrong combination, inadequate dosages
- Management of drug supply —————> irregular supply
- Case management —————> Irregular treatment, lack of monitoring & supervision.
- Process of drug delivery to the patient —————> Irregular delivery, lack of supervisory visits

## 6. What is DOTS PLUS Programme

The drugs used in the Directly Observed Therapy Short Course (DOTS) programme are the best for tuberculosis and called *First Line Drugs*. The name of the drugs being used in DOTS programme is mentioned in Chapter III. Most patients are cured using these drugs. However there are some **very few patients** who do not get cured using DOTS drugs. At the end of the re-treatment regimen these patients sputum is still smear positive for TB.

The DOTS PLUS Programme offers drug treatment to patients who have failed first line Drug re-treatment or who have culture proven MDR –TB, with drug sensitivity Testing (DST) showing resistance to at least Rifampicin and Isoniazid . DOTS PLUS is-a **second line of treatment**, after patients have failed on fully observed DOTS treatment and re-treatment or for patients, who have smear and culture positive with DST proven MDT Tuberculosis. This is why this treatment programme is called the **DOTS PLUS programme**.

## Chapter-IV

### Facts about TB & HIV/AIDS

#### 1. TB:

- ❖ TB kills more youth and adults than any other curable infectious disease.
- ❖ More than 5000 people die from TB every day.
- ❖ For Industrial workers, TB results in huge losses due to long absenteeism, low productivity and costs for treatment.
  
- ❖ TB is a contagious disease but only people that are sick with pulmonary tuberculosis are infectious.
- ❖ Poverty increases the risk of tuberculosis; impoverishes its victims.
- ❖ DOTS restore health to young and adult people who are in their most economically productive years.
- ❖ More than 90% of TB cases and deaths occur in low and middle-income countries.
- ❖ TB carries a direct cost to the health services (diagnosis, treatment and control)
- ❖ DOTS can add two year of life to an HIV positive person and 25-30 years to an HIV negative person.
- ❖ TB is the leading cause of death among people who are HIV positive.
- ❖ Late diagnosis, inadequate treatment, over crowding, poor ventilation and repeated prison transfer encourage the transmission of TB infection.
- ❖ TB can be readily and inexpensively cured with DOTS.
- ❖ Every infectious patient cured reduced the risk to everyone of contracting TB.
- ❖ DOTS prevents new infections and the development of MDR-TB.
- ❖ From a public health prospective, poorly supervised, incomplete treatment of TB is worse than no treatment at all.

- ❖ In some parts of the world, the stigma attached to TB leads to isolation, abandonment and divorce of women.
- ❖ TB is the leading killer of people infected with HIV.
- ❖ TB causes at least 11% of AIDS deaths and possibly as many as 50%.
- ❖ More people are dying of TB today than ever before.
- ❖ TB is the biggest curable infectious killer of young people and adults in the world today.
- ❖ TB is an opportunistic disease that preys on weakened immune systems.

## **2. HIV/AIDS:**

- AIDS Kills more than 8000 people every day world wide.
- World wide, 14 Million people are co-infected with TB and HIV-70% of them are concentrated in Africa.
- Treatment of TB can prolong and improve the quality of life for HIV-positive people.

With effective treatment Tuberculosis can be cured,  
& HIV can be managed to prolong lives

Guidelines for  
Partnership Programme  
with  
Industry

*TB & HIV Control a Shared Responsibility*

**1. Industry and business**

SAARC TB and HIV/AIDS Centre is working in industries to prevent employers from tuberculosis and HIV/AIDS. The objective of this partnership is to mobilize the corporate sectors into the social activities. Since employees are the backbone of industries, their and their family's wellbeing therefore is of the prime concern.

**2. Why do we need partnership with Industry?**

TB affects people of all ages, but the hardest hit are those between 20 and 45 years of age, men and women who are at work during the most economically productive years of their lives. Out of 2.5 billion people in employment worldwide, over 50% are at risk of developing active TB in their lifetime. The industrial sectors therefore have a large stake in controlling TB. The illness imposes great costs on employers with disruption of work, reduced productivity, high treatment costs, and in addition, significant indirect costs that are expended for replacement and retraining of workers. Industry partners can actively contribute through identifying TB suspects among their workforce, referring them for diagnosis, and helping affected employees to be treated in order to prevent the spread of TB both at the workplace and by extension, in communities. A workplace may be more of a community, than even the neighborhood in which people reside. Most workers spend most of their waking hours at their places of work. In some situations, the workplace may also be where workers live. The need therefore to introduce access to TB control services may be stronger in this setting than in any other. Employers must therefore help provide access to information and support sick workers and link TB control with other workplace issues such as HIV/AIDS, elimination of other occupational health hazards such as silicosis.

Employers and their organizations can play a vital role in promoting and implementing TB control activities. Workers and their organizations can collaborate

in these activities and advocate for the needs of employees, including access to health care and ensure observance of ethical aspects of employment.

The introduction of TB and HIV /AIDS control practices into the workplace offers several benefits—a healthier workforce, reduced medical costs, higher work morale, higher productivity, an enhanced image in society through a credible demonstration of corporate social responsibility and an improved image in relation to customers, potential buyers etc.

On the background SAARC TB & HIV/AIDS Centre has identified Industry as one of the most potential group to be involved in this mission along with the others partners like medical/nursing colleges, media, school students, travel, man power agency and pharmacists can do a collaborative effort between the TB and HIV infected people and TB/HIV control programme.

### **3. Objectives of the partnership with Industry:**

#### **General objectives:**

Enhancement of public awareness on TB/HIV and its prevention and control

#### **Specific objectives:**

- To disseminate update information on TB/HIV.
- To seek coordination and cooperation for control efforts on TB /HIV

### **4. Strategy to fulfill the objectives:**

- Organize interaction programme with Industrial workers as well as management.

### **5. Role of Industry on TB/HIV control efforts**

Many employers provide health care for their workforce that may include TB and HIV/AIDS control activities. Any employer can provide some or all of the following:

- Education and awareness about TB as part of general or occupational employee health education and awareness activities;
- Advocacy on TB control;
- Referral of employees with TB symptoms to the nearest health facility for diagnosis and treatment;

- Support of TB patients during their treatment, including directly observing their treatment. Individual employers can make different contributions depending on their size and how they arrange their occupational health services. Employers with onsite health clinics can collaborate with the NTP to offer the option of directly observed treatment (DOT) in the workplace. Workers' representatives and organizations can also undertake advocacy and awareness raising, and be a source of volunteers to support TB patients during their treatment, including DOT in the workplace. Some employers may have an outsourcing arrangement, perhaps with local private practitioners, that could be used for referring TB suspects for diagnosis and treatment. Others may provide a health insurance scheme for their employees, in which case they should ensure that the scheme covers TB diagnosis and treatment, in line with NTP policies. In large workplaces, a significant number of employees may develop TB each year – possibly enough to justify the establishment of a workplace TB programme. The employer could arrange for staff of the workplace clinic to help in identifying TB suspects and diagnosing cases, as well as helping patients to complete their treatment. The workplace programme would report the numbers and types of TB cases found and their treatment outcomes to the NTP

## **6. How to develop partnership with Industry?**

To develop partnership with Industry, it is necessary to organize a brief interaction programme for them in collaboration with the trade union. If there is no existence of such organization, all the industrial workers at their work place should inform individually or collectively for gathering in one proper venue for interaction programme. In the interaction objectives of partnership programme should be explained clearly.

## **7. How to organize partnership programme with Industry?**

### **Responsibility:**

The primary responsibility in organizing partnership programme with industry goes to the National TB & HIV/AIDS Control Programmes, Director/Manager of the country. The Director/Manager should appoint a programme officer for overall organization of partnership programme in the country.

At the periphery these programmes may be organized at the district level and main responsible person would be the district TB & HIV/AIDS coordinator.

### **Programme**

#### **Participants:**

- Industrial workers
- Industrial Management Personnel
- Supporting staff at the Industry

#### **Interactive programme:**

Talk programme with multimedia presentations on TB & HIV/AIDS problem, its prevention and control with emphasis on importance of partnership programme with industry in TB/HIV control. In this regard the following points may be explained:

- General information on TB/HIV
- Magnitude of TB/HIV burden in World, Region, Country and Local level
- Causative agent and its mode of transmission
- Symptoms of pulmonary TB and HIV/AIDS
- Diagnosis of TB/HIV
- DOTS and its importance
- Complications of irregular drug taking
- Inappropriate doses or combinations of TB drugs
- Impact of HIV/AIDS on TB disease
- Preventive measures
- Role of industry in TB/HIV control programmes

During the interaction programme IEC materials/publications should be distributed to the participants.

<b>Partnership Programme with Industries Organized by STC</b>
<b><u>Year 2002</u></b>
1. Balkumari Cotton thread Dyeing Industry, Thimi, Bhaktapur, Nepal
<b><u>Year 2003</u></b>
2. Elina Garments, Lalitpur, Nepal
<b><u>Year 2004</u></b>
1. BCCI, Bhaktapur, Nepal
2. Ashok Textile, Pvt. Ltd, Biratnagar, Nepal
3. Pokhara Industrial estate, Pokhara, Nepal
<b><u>Year 2005</u></b>
1. Javedan Cement Factory, Karachi, Pakistan
<b><u>Year 2006</u></b>
1. Nekon Plastic Factory, Parsa Nepal
<b><u>Year 2007</u></b>
1. Body Line Industries, Horana – Sri-Lanka

## **Chapter VI**

### **A. Contribution of STC towards Prevention and Control of TB and HIV/AIDS**

#### **Strategies:**

#### **1. Regional Strategy for TB/HIV Co-infection**

A regional strategy for TB/HIV Co-infection has been developed in 2003. The strategy presents an overview of interaction between the two epidemics and the impact of the co-infection on the epidemiology and control of both the diseases. It also provides guidelines for tackling the co-infection problems in the Region through collaborative efforts of both the programmes.

#### **2. Regional Strategy for HIV/AIDS**

On the directives of the 12<sup>th</sup> Summit of SAARC, a regional Strategy on HIV/AIDS has been developed through consultative process and close collaboration with the joint United Nations Programme on HIV/AIDS (UNAIDS) in 2005, which has been approved by 31<sup>st</sup> Session of Standing Committee of SAARC held in Dhaka on November 9-10 2005.

#### **3. Development of common Protocols, Guidelines, Policies, Plan**

For the development of common Protocols, policies, Strategies Plan and Guidelines and solution of common problems, issues, STC organized Seminars, Workshop, and Meetings at the different levels in SAARC Countries.

### **Remember!**

TB and HIV/AIDS Control & Prevention is not only the responsibility of health services seekers and health care providers. It's a shared responsibility as these diseases are not

only a medical problem but social as well. So every body has  
to contribute.

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