

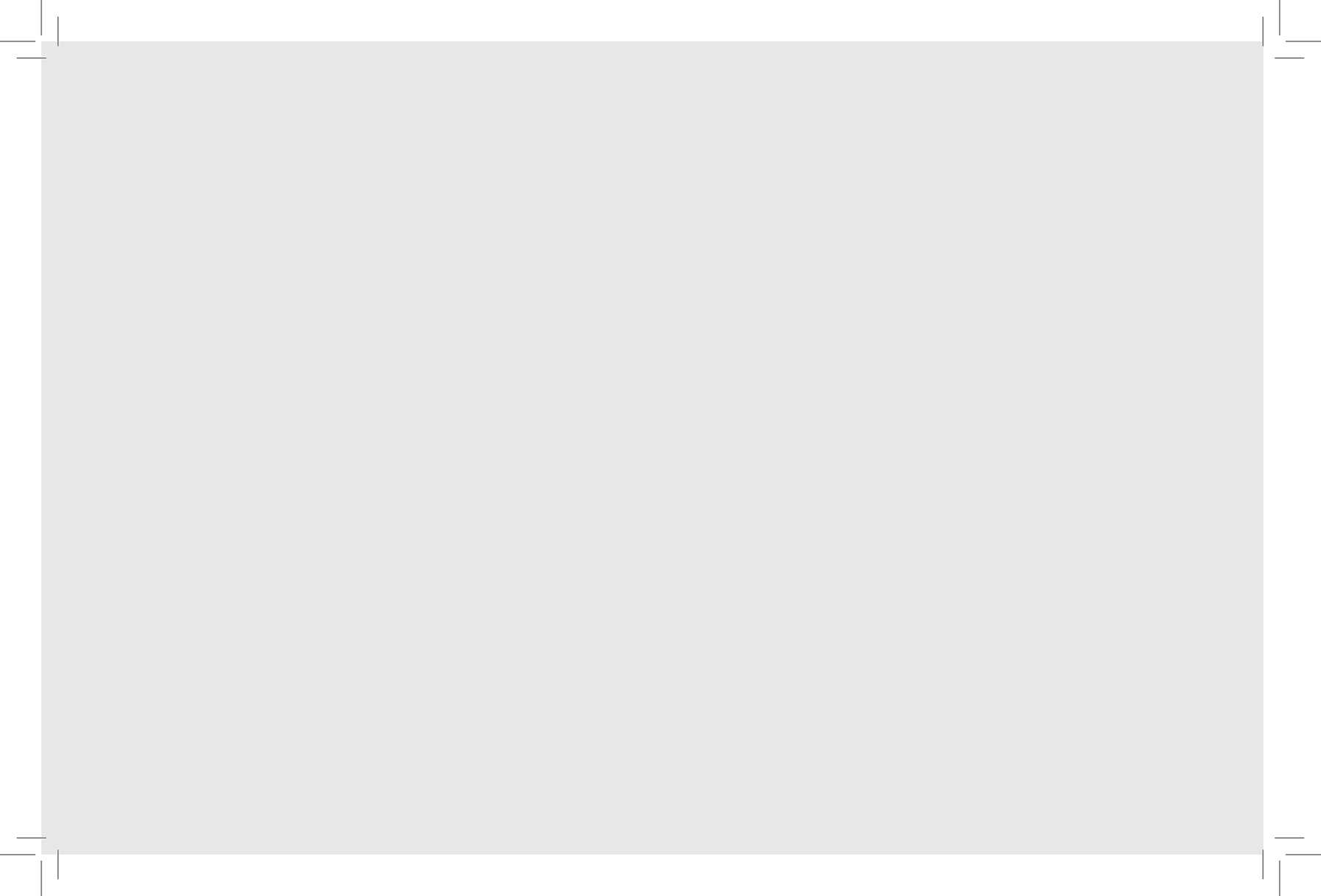


General Information on Tuberculosis

ON THE MOVE AGAINST TUBERCULOSIS:
Transforming the fight towards elimination

World TB Day 2011

SAARC Tuberculosis & HIV/AIDS Centre
GPO Box No 9517, Kathmandu, Nepal





Introduction of SAARC Tuberculosis and HIV/AIDS Centre (STAC)

STAC is one of the Regional Centers of SAARC working for prevention and control of TB and HIV/AIDS in the Region by coordinating the efforts of the National Tuberculosis Control Programmes (NTPs) and National AIDS Control Programmes (NACPs) of Member States.

The Centre develops regional strategies & coordinates for endorsement & subsequent

implementation, organizes trainings, workshops, seminars, meetings, conferences conducts research on TB & HIV/AIDS, publishes documents, disseminates the information, support NTPs & NACPs of Member States in review and evaluation of their programmes on request & carry out any additional activities identified by National Programmes & the Governing Board of STAC.



Mile stone of STAC

July 1994	2 nd meeting of Foreign Ministers of SAARC suggested to formulate specific project identified by Health and Population Committee
July 1990	8 th Meeting of Technical Committee proposed to establish SAARC TB Centre (STC) in Nepal
November 1990	5 th Summit decided to set up STC in Nepal
March 1992	1 st Meeting of the Governing Board formulated Rules and Regulations of STC
April 1994	Staff recruited & STC became functional
November 2005	the 31 st Session of Standing Committee of SAARC held in Dhaka, Bangladesh approved the renaming of the Centre as " SAARC Tuberculosis & HIV/AIDS Centre " (STAC)"



World TB Day - 2011

World TB Day, falling on March 24 each year, is designed to build public awareness that tuberculosis remains a major public health problem causing the deaths of an estimated 1.7 million people each year, mostly in developing countries. On March 24th the day is commemorated, in 1882 Dr. Robert Koch astounded the scientific community by announcing that he had discovered the cause of tuberculosis, the TB bacillus. At the time of Dr. Koch's announcement in Berlin, the discovery opened the way towards diagnosing and curing TB.

This year's campaign challenges us to look at the fight against TB in an entirely new way: that

every step we take should be a step towards TB elimination. The campaign is inspired by the ambitious-new objectives and targets of the Global Plan to Stop TB 2011-2015: transforming the *fight-towards elimination of Tuberculosis*.





Themes of World TB Day

1997	DOTS-the only way to fight TB
1998	STOP TB Use DOTS
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2000	Forging new Partnership to Stop TB
2001	DOTS: TB Cure for all
2002	STOP TB fight Poverty
2003	DOTS Cured me, it will cure you too!
2004	Stop TB now-Every Breath Counts
2005	Front line TB Care Providers: heroes in the fight Against TB
2006	Actions for life towards a world free of tuberculosis
2007	TB Anywhere is TB Everywhere
2008	I Am Stopping TB
2009	I Am Stopping TB
2010	On the move against Tuberculosis: Innovate to accelerate action
2011	ON THE MOVE AGAINST TUBERCULOSIS : Transforming the fight towards elimination



Tuberculosis

Tuberculosis is an illness caused by an organism called 'Mycobacterium tuberculosis'. TB is not a result of curse or sin, neither a hereditary disease. TB affects mainly lungs, when it is called pulmonary TB, but it can affect any organ in the body, such as brain, bones, glands, etc. It is reported that 80% cases of the TB are pulmonary (Lungs) TB. People, who are infected with TB, usually do not feel sick, do not have any symptoms, and cannot spread TB. But they may develop TB disease at some time in future, when their immunity is weakened.



Transmission of TB

When a person with Pulmonary Sputum Smear positive, TB coughs, sneezes, or talks, droplets containing

TB germs are released into the air. When a nearby person inhales these droplets, he/she gets infection.

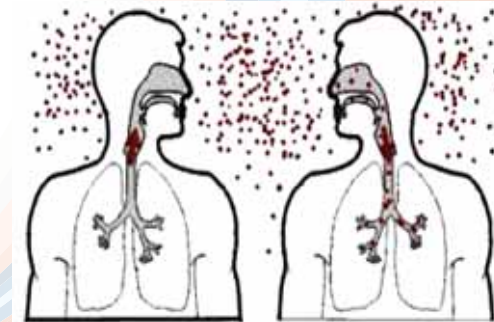


Sending TB Germs into the air

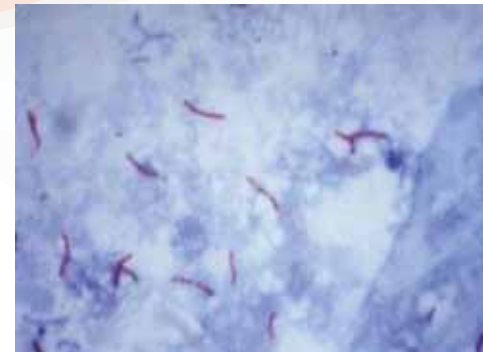


Symptoms of Tuberculosis

- ✓ Cough more than two to three weeks,
- ✓ Chest pain,
- ✓ Fever, especially, rising in the evening
- ✓ Loss of weight
- ✓ Loss of appetite
- ✓ Blood stained sputum



Transmission of TB



TB Bacteria seen under microscope



Types of Tuberculosis

- 1) Pulmonary Tuberculosis
- 2) Extra-Pulmonary Tuberculosis



TB suspected person should be managed

The person suspected of having TB, should be evaluated to confirm whether he or she has TB. Treatment of TB should be started as soon as diagnosis is established. For the successful treatment of TB, patient should take medicines for full period of the course (6-8 months). The best way to diagnose lung TB is by examining the sputum under a microscope. Germs of TB can be seen with a microscope. Two/Three samples of sputum should be examined for accurate diagnosis. Remember that for TB diagnosis X-ray is more expensive and less accurate than sputum examination. X-ray may be needed in some cases.

TB is fully Curable! Community participation is vital to increase TB Case Detection



Vulnerable to TB

- Family members and close contacts of the TB Patients
- People with HIV infection or AIDS
- People with poverty
- People having chronic chest diseases
- Malnourished & people living in a crowded areas
- Health worker working in TB hospitals/clinic and laboratory personnel
- People living in Refugee camp, prison etc
- Smokers & alcoholics
- Diabetes & Cancer Patients



Directly Observed Treatment Short-course (DOTS)

- Best known strategy for control TB.
- It is the most cost-effective strategy for TB control.
- DOTS cures patients, saves lives, prevents the development and spread of drug resistance and
- DOTS prevents development of Multi-Drug Resistant TB
- DOTS prolongs survival of HIV infected TB patients

DOTS Coverage within SAARC region has steadily increased since 2000. Population coverage in 1997 was 11%, since then it has been increasing and reaching 99.5% in 2006 & 100% in 2007

DOTS

(Directly Observed Treatment Short -course)

Spread the
message
that DOTS
is a Sure Cure for
TB



A TB patient is taking anti TB medicines under DOTS programme



The scale of TB in SAARC

Tuberculosis is a major public health problem in SAARC Region since long. One third of global population is infected with *Mycobacterium tuberculosis bacillus* and is at risk of developing active clinical TB disease. TB is the commonest cause of death from an infectious disease among adults of this Region. More than 75% of the morbidity and mortality due to the disease occur in the most economically productive age group of 15-45 years. The advent of HIV and the emergence of drug resistant TB underline the urgency with which responses have to be made.

All the Member States of SAARC have adopted DOTS strategy for TB control through their National TB Control Programmes and made good progress. Treatment success rate under DOTS is more than 86% with 100% population coverage. Case detection rate has reached 72% in 2009.



Global vs SAARC Region on TB Indicators

TB Control Indicators	Global 2008/09		SAARC 2008/09	
	Estimate	Notified	Estimate	Notified
Population	6.8 Billion		1.56 Billion	
New SS +ve TB Cases	4.06 Million	2.6 Million (64.0 %)	1.2 Million	0.87 Million (72.5%)
All types of TB Cases	9.4 Million	5.8 Million (61.7%)	2.7 million	2.0 Million (74.0%)
Treatment Success Rate		86.0%		87.9%



Multi Drug Resistance TB (MDR-TB)

MDR-TB is a specific form of drug-resistant TB due to a bacillus resistant to at least Isoniazid and Rifampicin, the two most powerful anti-TB drugs. In areas of minimal or no MDR-TB, DOTS achieves cure rates of up to 95%; rates high enough to dramatically reduce the TB burden while preventing the emergence of drug-resistant TB. While drug-susceptible TB can be cured within six months, forms of drug-resistant TB (such as MDR-TB) require extensive chemotherapy (with drugs which may have more side effects) for up to two years.

Two countries in the SAARC region, India and Nepal have been participating in successive rounds of Drug Resistance Surveillance (DRS) held since the late 1990s and conducted as per WHO- DRS Protocol. While higher rates of drug resistance to any anti-TB drug have been reported, the mean prevalence of MDR-TB among new smear-positive cases in the SAARC Region is estimated to be low, at an overall 2.2%. Isolated reports of higher levels of MDR-TB are reported mainly from hospital settings. All the SAARC Member States have taken a major step by starting treatment of MDR-TB under their National Programmes.



Estimates of MDR-TB in SAARC Member States 2008

Country	% among new TB Cases	% among previously treated TB cases	Number among		
			Incident new and relapse TB cases	Incident acquired MDR-TB cases	Incident total TB cases
Afghanistan	2.9	35.4	1800	580	2400
Bangladesh	2.2	14.7	8900	940	9800
Bhutan	2.2	14.7	29	4	33
India	2.3	17.2	55000	43000	99000
Maldives	2.2	14.7	3	0	3
Nepal	2.9	11.7	1600	66	1700
Pakistan	2.9	35.4	14000	1700	15000
Sri Lanka	0.2	0.0	25	38	63



TB/HIV Co-infection

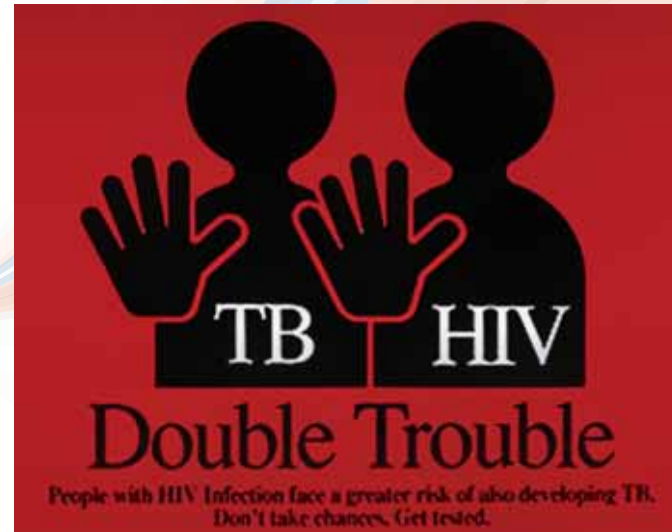
TB and HIV are commonly called the “deadly duo” and referred to as TB/HIV. HIV weakens the immune system and so people are more susceptible to catching TB if they are exposed. People with HIV/AIDS are up to 50 times more likely to develop active TB in a given year than HIV-negative people. TB bacteria accelerate the progression of HIV to AIDS. Some TB infections are “latent,” meaning that a person has the TB-causing bacteria but it is dormant. A person with latent TB is not sick and is not infectious. However, latent TB can progress to “active” TB. “Active” TB means that the TB bacteria are multiplying and spreading in the body. If there are a lot of HIV-infected people in the community, the vicious cycle results in more and more people with TB.



One man two diseases- TB and HIV

Is TB really as serious as people say?

Yes it is, especially for people with HIV infection. TB infection and HIV infection can work together to make you very sick. When your immune system is weak, untreated TB infection can quickly turn into TB disease. Without treatment, TB disease can cause you to get very sick or even die. The good news is that TB is easily prevented, treated, and cured.





Tell the people about TB; TB Control is a shared responsibility

IF YOU ARE A COMMUNICATOR

Tell the people what TB is, and the dangers of not getting it treated completely. Remove all myths & misconceptions associated with TB.

IF YOU ARE A CONCERNED CITIZEN

Enquire where DOTS is available Disseminate this information to communities as widely as possible. Make it easy for patients and especially for women to have access to DOTS. Spread knowledge about TB. Inform communities that TB is completely curable. Educate patients on how they can help to prevent the spread of their infection to their family members, their colleagues at work and others. Motivate poor and vulnerable people having symptoms of TB to get investigation and treatment if necessary.



IF YOU ARE A TB TREATMENT SUPERVISOR

So that the patient has chosen you as the TB treatment supervisor and trusts you, your main role is to make sure that the patient takes the TB drugs regularly, on schedule for the full duration of the treatment. Remember that the patient should feel comfortable with you and can ask questions about things that might be difficult to understand. The patient may be very ill and feel ashamed about having TB.

You will need to provide reassurance that you will be there to help the patient follow the treatment and be completely cured of TB. Listening and encouraging TB patients and their families is another way to supporting the needy.

IF YOU ARE A PUBLIC HEALTH WORKER

Public health workers may make routine visits to the pharmacies and to the mycobacteriology laboratories used by the facilities to which they are assigned for TB surveillance. With the collaboration of laboratory or pharmacy staff, public health workers can use the information found there to;



- Confirm suspected TB cases once the medical evaluation is completed.
- Monitor the progress of reported TB patients
- Collect information on possible drug resistance and the adequacy of the current regimen.

IF YOU ARE A SCHOOL STUDENT

Then remember that the students are the most revolutionary force, hence role of school as well as students may be proved most crucial one. Students are in the process of learning and are capable to propagate education in their friends, families and community at large on TB and its control. Tell other people about TB and its cure and organize interactive sessions in the schools.

IF YOU ARE MEDIA PERSONNEL

Media has a very significant role in stopping TB. Through advocacy, publications, and broadcasts and social mobilization activities, media does not merely heighten public awareness about TB and mobilize demand for TB services but also carries out the critical advocacy effort needed to build the political will necessary for governments to sustain effective TB control.



IF YOU ARE NGO PERSONNEL

The role NGOs and in prevention and control of TB has been no less significant. The DOTS strategy is considered today as most cost effective strategy to combat TB, first developed by an INGO - the IUATLD. Involvement of NGO personnel to stop TB covers a wide spectrum of activities from provision of TB diagnostic, treatment services to operational research. Traditionally, provision of TB treatment services has been the most common area for collaboration. However, with the advent of DOTS, NGO participation in stopping TB has been taken on even greater importance. Being closer to the communities they (being more credible, dependable and more integrated in the services) provide services. NGOs have a distinct edge over Government workers in convincing TB suspects to undergo diagnostic tests, take their medicines regularly and report for the prescribed follow ups to ensure complete cure.



It is important for media

- To report accurately
- To inform people of the value of DOTS as a public benefit.
- To sensitize to an individual's need for confidentiality and privacy
- To refrain from sensationalizing issues.



World TB Day 24 March 2011



TB patients should take medicines
regularly & complete
full course of treatment
(6-8 months)



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