

# State of Tuberculosis in Bangladesh

BRAC Bangladesh and The Daily Star jointly organized a roundtable discussion on the "State of Tuberculosis in Bangladesh" on 13 December 2005, at the Seminar Room of The Daily Star. The objective was to explore the situation of TB in the country and the various efforts to battle it by different partners and stakeholders. It was expected that useful recommendations would also emerge from the meet. Participants were from various TB partnership agencies including the Government of Bangladesh, NGOs, health providing and research agencies, donors and other international agencies as well as public health specialists and health practitioners. Most of the participants at the meet had been active in the past few years in the National TB control programme, which is the key thrust programme to combat the virulence of TB in Bangladesh.

The meeting was introduced by the host Mr. Mahfuz Anam, Editor and Publisher of "The Daily Star". He said that The Daily Star has always cooperated with wider civil society initiatives on critical issues like combating TB and this was such a case. Mr. Abdul-Muyeed Chowdhury, Executive Director of BRAC, who presided over the meeting, said that a scourge like TB could not be controlled unless there was serious collaboration and sharing of experiences like this meeting. After this the guidelines for conducting the workshop was spelt out by the Editor. Next, the participants introduced themselves and the meeting began. The roundtable had two parts: Presentation and Open discussion

Abdul-Muyeed Chowdhury, Executive Director, BRAC: Bangladesh is an over-populated country and very vulnerable to tuberculosis. It is a major public health problem of the country. Based on current estimates, approximately 300,000 people fall ill due to Tuberculosis and 70,000 die of the disease every year. In order to control Tuberculosis effectively, Bangladesh is implementing the WHO recommended Directly Observed Treatment Short Course (DOTS) strategy. Bangladesh is trying to establish a Public-Private Partnership for controlling Tuberculosis through an outreach network of diagnostic and treatment facilities. BRAC is also one of the partners with other NGOs and civil society members and is working closely with the National Tuberculosis Control Programme of the Government as part of the partnership.

At present, the tuberculosis control programme is working much better than before and improvements can be easily sighted. In the year 2000, the case detection rate of TB was 30%. This went up to 46% in 2004. It is expected to go up to 65% by the next year (2006). In the areas covered by BRAC this has already reached 65%. The national average cure rate is 86%; in BRAC covered areas it is 89%. The Public Private Partnership can thus bring about a major change in the situation both at the national and the local level.

Community involvement is a key factor here and BRAC is implementing the programme using community involvement through the Shasthaya Shebika. They are field level para-volunteers who ensure daily intake of medicines and are paid a small sum of money to do this critical task. They represent the community spirit and willingness of the people to participate at the village household level to ensure health for all.

## MULTIMEDIA PRESENTATION

After the initial remarks by the Chair, Dr. Vikarunnissa Begum, Programme Manager, National Tuberculosis NTP, DGHS gave a brief multimedia presentation on the "Tuberculosis Control Programme of Bangladesh".

I am going to present an outline of the National Tuberculosis Programme in Bangladesh. But before going to that, I would like to say a few words about the TB situation in some other countries.

About one-third of the world's population is infected with tuberculosis. More than ten people are infected by TB every day and three million die of it each year. TB is more prevalent in males than in females and it is the widest cause of maternal death.

In most cases, TB occurs in the 15-45 age groups. Twenty-two countries constitute 85% of the TB burden in the world. Three countries (India, China and Bangladesh) are among the five high burden countries in south-east Asia and



Bangladesh is one of the top 5 high burden countries in the world. TB estimates in Bangladesh of 2004 say that about 50% of the adult population are infected by TB and there are 221/10000 population; incidence of new TB cases (all form) per year with one new TB case every 2 minutes and one TB death every ten minutes. Each year about 70,000 people die from TB in Bangladesh.

The vision and mission of the NTP are to battle Tuberculosis, as it is a major public health problem in Bangladesh. NTP's mission is to strengthen the effort of TB control through effective partnership, mobilizing resources and ensuring quality diagnostic and treatment services under the Directly Observed Treatment Short Course (DOTS) strategy. Also, the service should be equally available to all people of Bangladesh irrespective of age, sex, religion, ethnicity, social status and race.

The objectives for the mission is to sustain the 2005 targets achieving at least 70% case detection and 85% treatment success among TB cases under DOTS. To meet the objective and to control the crisis of TB problem, NTP proposes DOTS strategy which has five components:

1. Government commitment to ensure necessary political and financial support.
2. Case detection through sputum microscopy: cost effective diagnosis focus on smear positives, passive case finding, direct microscopy of sputum

for AFB.

3. Short-course Chemotherapy: effective treatment of the TB short course, standardized, multi drug, Directly Observed Treatment (DOT). Cure is the best prevention.

4. Supply system: to ensure uninterrupted supply of drugs and lab reagents.

5. Recording and reporting: to follow the patient and monitor the progress of treatment; standard forms, cards and registers; cohort analysis.

To ensure DOT, every Upazilla Health Complex is facilitated with DOTS. We have NGO facilities and better collaboration with GoB and NGOs at the local level. We can ensure it by involving NGO workers and community members. In severe cases the patient has the provision to get admitted to the hospital. If community based DOTS is not possible, it can be ensured by offering family DOTS.

There have been 14 important achievements -- See Box for 14 achievements -- through out Bangladesh by taking different initiatives in this programme. The date shows the situation regarding case detection and treatment success rate between the years 1993-2004. The case detection rate for 2004 was 46% and treatment success was 80.6% - 85%. It is expected that at the end of 2005, case detection will rise to around 60%.

Some of the challenges of NTP faces today are:

- Implementing health sector reform and integrating TB programmes within that. (Health, Nutrition and Population Sector Programme);
- Effective partnership with private sector, academic institutes and workplaces in DOTS expansion;
- Capacity development for effective supervision, monitoring and quality control;
- Adequate central level staff to carry out the programme smoothly;
- Appropriate initiatives for ACS (Advocacy, Communication and Social Mobilization).

By meeting these challenges hopefully we can reach the 70% target case detection by the next year (2006).

## NTP achievements at a glance

1. Expansion of DOTS in Dhaka and other City Corporations
2. Introduction of DOTS in prisons, academic institutions and workplace
3. Sustaining strong collaboration between Government & Non-Government organizations
4. Access to the Global DOTS Expansion plan funded by CIDA, Global Drug Facility (GDF), Global Fund to Fight AIDS, TB & Malaria (GFATM) and strong technical support from WHO
5. Initiation of Public Private Partnership Pilot Project in Dhaka City and process of linkage with NTP-NGOs
6. Detection of estimated new smear positive cases under NTP increased to 46% in 2004 as compared to 34% in 2002, expected detection rate over 55% in 2005.
7. Expansion of External Quality Assurance of smear microscopy
8. Revision, printing and distribution of laboratory guidelines
9. Revision of National guidelines, incorporating the new regimens including FDCs
10. Establishment of TB Steering Committee, Training Working Group
11. Confirmation of funds for TB prevalence study
12. NTP implementing different operational research jointly with ICDDR,B and other International organizations with publications in journals
13. Awareness campaigns initiated through mass media
14. Steps taken to function DRS

## DISCUSSION

Prof. Dr. Mirza Mohammad Hiron, Associate Professor, National Institute of Diseases of Chest and Hospital (NIDCH); BRAC has implemented the DOTS Programme through the Shasthaya Shebika, but it is really the job of doctors. For proper treatment and diagnosis, trained doctors and technicians are essential.

More than 30 million new infected cases occur in this country every year, and 70,000 people are killed by Tuberculosis every year. This is the fixed scenario from 1993. Though NTP (National Tuberculosis Programme) started TB control programme to stop new cases of infections, the figures remain the same since 1993.

Regarding the dual figures of case detection rate between the NTP and BRAC, I see that the case detection rate of NTP in 1993 and 1994 was 0.1 and 1.2 respectively but according to BRAC this figure is 26 and 29 in 1993 and 1994 respectively. This needs some clarification.

Dr. Vikarunnissa Begum, Programme manager (TB), TB and Leprosy Control Program; Let me answer the question of data and figures. BRAC estimates are only for the particular region where they operate but NTP focuses on the whole of Bangladesh. In case of 0.1% case detection rate in 1993, we had only just started the NTP programme and were very new in that field. Which is why the achievement rate was described as so low. It's a baseline figure.

Major General Dr. A.S.M Motiur Rahman (Rtd.), Chief Advisor of national HIV/AIDS programme and Chairman, Technical committee, National Aids Committee; Bangladesh is suffering from three major problems. They are malnutrition, infection and over-population. Such problems are largely associated with illiteracy, ignorance, poverty and superstition. In order to control Tuberculosis, which is a national problem and makes us most vulnerable, we have to first fight social problems.

Our immediate priority should be increasing the rate of Tuberculosis case detection. Tuberculosis case detection rate must be increased to 60% by utilizing advanced technology, sputum microscopy and ensuring availability of drugs.

I will emphasize on the efficient utilization of money from donor groups, such as the US\$44 million for TB control programme. Proper utilization of money would be very important for us.

Dr. Marijke Bex-Bleumink, MO-TB, WHO: The total number of patients has been decreasing in the last few years due to different

activities initiated for preventing TB in the country. It is not easy to estimate the actual number of cases. Prevalence survey can be much more accurate to estimate the case detection and treatment services. That may account for any statistical discrepancy. However, the programme has been able to make progress despite many obstacles. Conducting a prevalence survey is being considered.

Dr. Ahsan Ali, Chief organizer, Public Private Partnership Pilot project; NTP programme's objective is to cut down the chain of infection and to ensure treatment for TB patients. NTP's next target is to explore the unexplored cases, the left outs, who should be registered. There may also be problems concerning patients not under the umbrella of the national programme. About 60% to 70% patients go to private practitioners at the initial stages. Those private practitioners handle the cases as they best deem fit and they are not registered in the NTP's data base. For removing this problem, I propose strengthening of the Public Private Partnership.

I would also like to focus on community awareness. It is very important to ensure that people go to public healthcare centres. Community awareness can be ensured through more advocacy activities. It should be aimed not only at the client or community level but also civil society at large.

Dr. M. A. Hamid Salim, Country Director and Medical Advisor, Damien Foundation; The major problem in Bangladesh is the failure of root case finding. At the public level, we have the facilities of free treatment, free drug, free diagnosis and free case finding facilities, but we could not achieve our desired result. There are some other issues related with the TB controlling programme. I'll mention two specific issues related with the TB control programme:

1. Social Awareness: Since the extreme poor of the society have no access either to the media or the health education programme, they are living beyond the information net. Thus they have no idea about TB treatment which is free of cost.

2. Private Sector: Although many people go to private practitioners, about 30% do not comply with the treatment. We must ensure DOTS in every case. Every public and NGO programme must have a strategy to introduce DOTS to the general people and also ensure free treatment and diagnosis facilities in every Upazilla and Union. Both public and private partner should come closer to eliminate this problem but it is the public sector that has

to provide free treatment facilities to the people, not the private sector.

Dr. A.K.M. Shamsul Haq, Former Director, National Institute of Diseases of Chest and Hospital; We are trying to make DOTS programme successful but unfortunately we cannot maintain 100% DOTS in every cases. It is also not possible to ensure DOTS in every case because patients may not come to the doctor regularly given our present socio-economic condition. Better implementation of DOTS is very much essential.

Again, the monitoring system of NTP is not very adequate and monitoring is essential for an effective NTP. In Bangladesh, the monitoring is done only from the capital but this central monitoring system may not bring effective results for us. So the monitoring system should be decentralized and carried out at the district level for better registration and case detection. Technical advice is needed for TB control programme. Consultants should go to the peripheral areas to make local people aware about the technical aspects regarding TB, its treatment and diagnosis.

Abdul-Muyeed Chowdhury, Executive director, BRAC; Let me clarify on the performance of the BRAC Shasthaya Shebika. BRAC deals directly with the patients within BRAC's operational territory. The patient has to deposit 200 Tk as bond money and the entire deposit is refunded to the patient after completion of treatment. The Shasthaya Shebika gets a small incentive from the BRAC fund.

Shasthaya Shebika regularly supervises and monitors the drug intake situation of the patients. Therefore, to make the NTP programme successful, the government has to create an efficient and effective monitoring team at the regional level.

Dr. Salehuddin Ahmed, Province Chancellor, BRAC University; GO and NGO partnership has been developing since 30 years but they often ignore each other. It is very easy to say that we should function through Public Private Partnership but it's much more difficult to implement it. We have to find better mechanisms for better collaboration. The role of each partner should be specifically identified and they should perform their responsibility properly and all this should be monitored.

Financial support is very important to make this programme successful at the grassroots level. Again Social Mobilization is very crucial for the success of the programme and it should start from the grassroots level by the Shasthaya

Shebika. Most of the benefits of the communication, mobilization and community advocacy programme reach only the top 50% people of the society.

Dr. Frank Paulin, Health Advisor, DFID; A major problem which contributes to higher disease spreading in South Asia as well as among Bangladeshis is spitting. It means we need to address social behaviour issues

more stringently. For controlling TB, effective treatment and case detection are both important. We have to try and achieve a case detection rate of 70% within the next few years.

Dr. M Amanullah, MP and Ex-State Minister for Health, Member, Health Standing Committee; Our main problem is poverty. At first, we have to reduce the poverty level and then

deal with other issues. To make NTP programme successful we have to give equal emphasis on the improvement of social condition, economic condition, living standard, housing, drainage, sanitation, and environmental issues all over the country. All these facilities should not be available only to the well off sections of society. They should be accessible to all but more so to

the low-income groups, people who live in the slums and to the squatters. TB is a disease of poverty.

Dr. Dinesh Nair, Health Specialist, World Bank; Sustainable and long-term management of tuberculosis programmes will improve the entire health scenario in this nation. For long-term sustainability we have to improve the capacity of monitoring, supervision, advocacy and health service delivery system. In case of Public Private Partnership, the organized private sectors such as the NGOs are playing a vital role for controlling tuberculosis.

Dr. K. Zaman, Scientist/ Epidemiologist, ICDDR,B; ICDDR, B collaborates with NTP and BRAC on health issues. We need precise information about TB from both urban and rural areas. Prevalence of TB is a major issue in Bangladesh. It has been observed that about 95 persons out of 100 thousand (100,000) are infected by TB (research was conducted on a population of those over 15 years of age) in some specific areas. The diagnosis of children with TB is difficult because they cannot produce sputum.

Dr. Shaila Rodrigues, Second Secretary (Development), Canadian High Commission; I would specifically emphasize on the supervision system, which is necessary to improve the quality of TB control programmes. The Government of Bangladesh is working hard for the success of the programme and is achieving the target. I would also emphasize on increasing the cure rate and maintaining it. CIDA is working with International Union to control vulnerable diseases. I would suggest strengthening of the Public Private Partnership with more private involvement, and more NGO activities like BRAC's pilot projects on TB and building up a linkage between HIV and TB controlling projects.

Dr. Sadia Dilshad Parveen, Director, Quality Improvement, NSDP; The goal of the NTP programme is to achieve 70% case detection rate in Bangladesh, case detection and cure rate improved in the mid 90s. Basically it was possible due to increased donor support for the TB controlling programme. Without developing human resource and capacity for maintaining the case detection rate, it is not possible to achieve success in TB control programme. The goal of the NTP programme is to achieve 70% case detection rate in Bangladesh, case detection and cure rate improved in the mid 90s. Basically it was possible due to increased donor support for the TB controlling programme. Without developing human resource and capacity for maintaining the case detection rate, it is not possible to achieve success in TB control programme. The goal of the NTP programme is to achieve 70% case detection rate in Bangladesh, case detection and cure rate improved in the mid 90s. 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