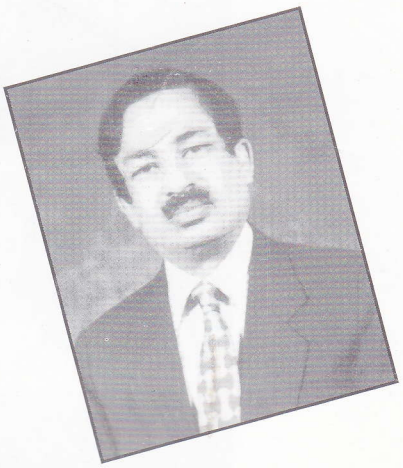
SAARC

STC Newsletter

Vol. XI No. 3 October-December, 2001

(Inauguration of the Eleventh Meeting of the Governing Board of SAARC TB Centre)

WELCOME TO...



H.E. Mr. Q.A.M.A. Rahim
Secretary General of SAARC

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2002 WE WISH YOU A VERY HAPPY NEW YEAR FOR PEACE, PROGRESS AND PROSPERITY

SAARC Tuberculosis Publication

Chief Editor
Dr. D. S. Bam, Director, STC

Editor
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STC Newsletter is regular publication of SAARC TB Centre. It includes reports on activities, decisions of important meeting of the Centre and recent information on tuberculosis and its control.

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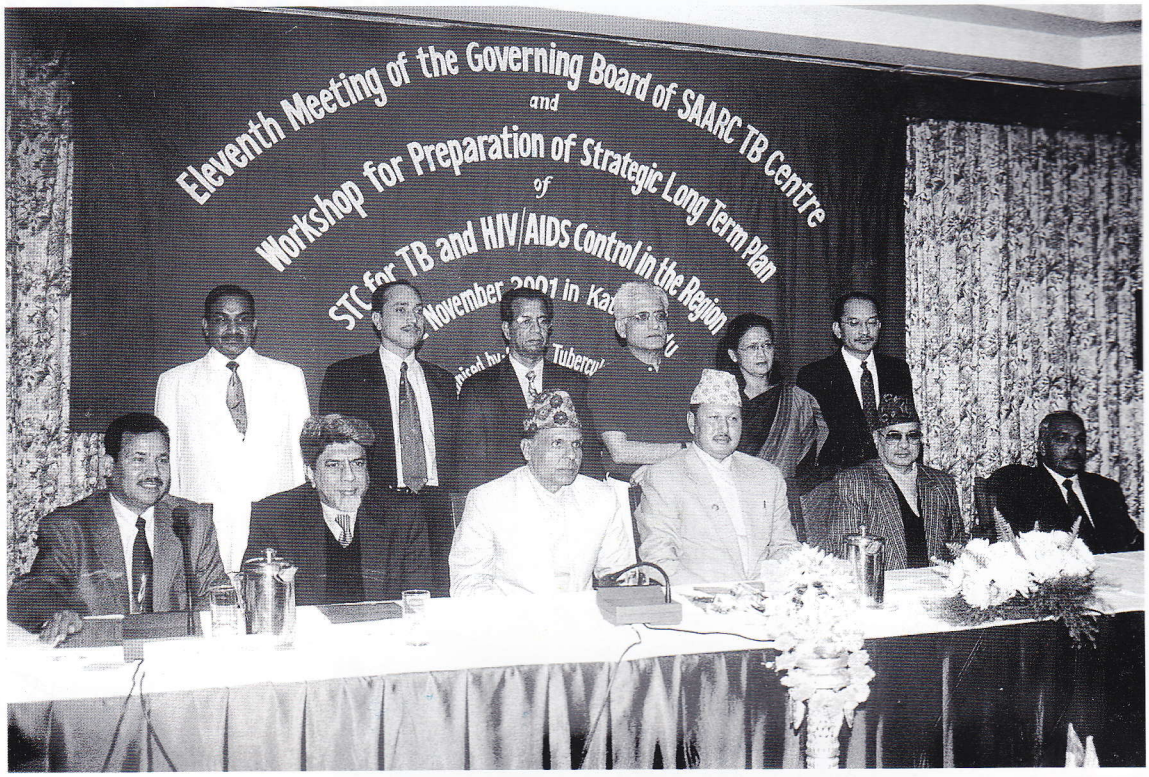
Report on Activities

Eleventh Meeting of the Governing Board



The 11th Meeting of the Governing Board of SAARC Tuberculosis Centre (STC) succeeded by the Workshop for Preparation of Strategic Long-term Plan of STC for TB & HIV/AIDS Control in the Region was held on 20-22 November 2001 in Kathmandu. The Meeting was attended by the members of the Board from Member Countries and SAARC Secretariat. The Governing Board is the policy making body of the Centre, which reviews the past activities and provides directives for the future course of action to be undertaken by the Centre.

The meeting was inaugurated by the Hon'ble Mr. Sarat Singh Bhandari, Minister for Health, His Majesty's Government of Nepal. Welcoming the participants Mr. Bhandari expressed appreciation for the work being done by the Centre to contain tuberculosis and check the dual infection of TB and HIV/AIDS. He congratulated the Centre for being chosen as a WHO collaborating centre in this field. He also expressed confidence that the collective efforts of Member Countries and other agencies such as WHO and CIDA would help the Centre in tackling this problem effectively. Dr. D. S. Bam, Director, STC welcomed the Board Members and the guests at the inaugural session of the meeting.

H. E. Mr. Nihal Rodrigo, the SAARC Secretary General highlighted the challenges posed by TB and HIV/AIDS and the efforts being made by the Centre to co-ordinate a regional response. He appreciated the increasing involvement of collaborating partners like WHO, CIDA/Health Canada and Japan. He also requested the Board to review the Performance Audit of the Regional Centre. The Secretary, Ministry of Health, the Director General, Department of Health Services, His Majesty's Government of Nepal also spoke on the occasion. The Vote of Thanks was delivered by Mr. Ibrahim Shaheem, the Chairman of the Governing Board.

The inaugural session was chaired by the Hon'ble Mr. Mohan Bahadur Basnet, Minister of State for Health.

Programmes for the Centre for the period of January to December 2002:

1. Public awareness and advocacy on tuberculosis on:
   - World TB Day 2002, SAARC Charter Day.
   - Partnership programmes with Schools, Media and Industries in Member Countries.
   - Documenting the situation of TB and HIV/AIDS control in the Region.
2. Two weeks modular training of trainers in TB control programme management.
3. Consultative meeting for TB and HIV/AIDS programme managers and development of public private linkage and coordinated involvement of Medical Colleges in TB control.
4. Workshop on development of research protocol related to operational research emphasizing quality assurance and MDR-TB.
5. Training for Regional/district level programme managers to strengthen their skills in data management in consultation with WHO/SEARO unit.
6. Develop public private linkage in TB control.
7. Coordinate involvement of Medical Colleges in TB control.

Programmes for SAARC-Canada Project:

8. Meeting of Directors of focal reference laboratories for the project in Member Countries.
9. Meeting of TB and HIV/AIDS focal points for the project.
10. Install a web-site and infrastructure of the epidemiological database and training of STC staff.
11. Co-ordinate inter-country research on gender based issues relating to TB and HIV control.

Programmes in collaboration with WHO:

12. Cross-border issues on TB, HIV, Malaria and Kala-azar.
13. Coordinate Southeast Asia Regional Training Course in TB control.

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Releasing of World TB Day 2001 Report

(Hon'ble Mr. Sarat Singh Bhandari, Minister for Health, HMG Nepal releasing World TB Day 2001 report)

On the occasion of the inauguration of Eleventh Meeting of the Governing Board of SAARC TB Centre, Hon'ble Minister for Health released a report of the activities held in the Member Countries during the observance of the World TB Day 2001. This compiled report has been distributed as per the mailing list of the STC and it has also been informed that interested people can obtained this report from SAARC TB Centre freely.

Workshop for Preparation of Strategic Long-term Plan of STC for TB and HIV/AIDS Control in the Region

In compliance to the decision of the 10th Meeting of the Governing Board, a one-day workshop on aforementioned subject was organized on 22nd November 2001 followed by the eleventh meeting of the Governing Board. Experts of National TB Control Programme (NTP) from

(Hin'ble Mr. Sarat Singh Bhandari, Minister for Health, HMG Nepal inaugurating the Workshop)

Bangladesh, India, Maldives, Nepal, Pakistan and Sri Lanka participated in the meeting. The objectives of the workshop were:

- To formulate the strategic long-term plan of STC to deal TB & HIV/AIDS in the Region.
- To review the trends of the TB & HIV epidemics and their impact on National TB Control Programmes.
- To identify the main technical & managerial challenges for control of TB & HIV/AIDS in the community.
- To develop and recommend an approach for effective control of the dual epidemic.

The meeting was inaugurated along with the eleventh meeting of the Governing Board by Hon'ble Mr. Sarat Singh Bhandari, Minister for Health, His Majesty's Government of Nepal.

SAARC Trainers' Training Programme for TB Control Management

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Celebration of the SAARC Charter Day

On the auspicious occasion of the SAARC Charter Day (8 December) SAARC TB Centre (STC), Kathmandu and National TB Institute (NTI), Bangalore jointly organized a two-week trainers' training programme for TB control management at NTI. The programme begun on 8 December 2001. Fourteen TB control experts working at various levels in the Member Countries attended the training course.

The programme was inaugurated by Dr. G. R. Khatri, DDG (TB), DGHS, New Delhi. In inaugural address, Dr. Khatri expressed his views on regional burden of TB, its current situation and status of implementation of DOTS. He also explained the role of SAARC for the welfare of the millions of people living in this Region. Dr. Khatri expressed that the organization has provided a regional platform for the eminent experts to discuss, formulate, sharing ideas & experiences and bring effective strategy to cope our common problems. He extended gratitude to SAARC TB Centre for organizing this course in NTI, Bangalore.

Dr. D. S. Bam, Director, STC addressed the function and highlighted the aims, objectives and achievements of the Centre. In continuation to his address, he also explained the situation of TB control in the region and the efforts being made by the Member Countries to bring the disease under control. Dr. Bam paid his sincere thanks to the Government of India for giving permission

to organize this training course in India. He also thanked the NTI family for warm reception and excellent arrangements made for this programme.

NTI is the pioneer institute for organizing TB control training as well as focal training institute of the STC he added.

The welcome address was delivered by Dr. P. Jagota, Director, NTI. Dr. H. G. Narayana Murthy, Deputy Director (TB), Karnataka also addressed the function. He highlighted the current situation of TB control in this state.

Dr. P. Kumar, Deputy Director, STC and Course Coordinator of the training proposed the vote of thanks. He highlighted the objectives and methodology of the training course and mentioned that this course is based on the approved modules for providing training to NTP managers working in the SAARC Region.

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STC's Director re-elected....

Dr. D. S. Bam, Director, STC re-elected for the post of Director of the Board of Directors of IUATLD for the next 2 years. The election was held during the 32nd World Congress on Lung Health of IUATLD organized in Paris on 1st – 4th November 2001. In the congress both Director and Deputy Director of the STC participated and presented the papers "Role of Schools in TB Control and Community Mobilization is Key to success of DOTS". In the meeting the activities and objectives of the STC was also highlighted for the information to the participants.

Participation in the consultation meeting

The Deputy Director of the Centre participated in the consultation on Leadership & Strategic Management in TB Control, organized by WHO/SEARO at Indian Institute of Health Management Research, Jaipur, India from 7 – 11 November 2001. The participants from different countries of South East Asia Region held interaction to meet the critical need with regards to strengthening management capacity within the National TB Control Programmes. The training modules on leadership and strategic management in TB control were discussed and finalized during the consultation. The following modules contained 12 topics on areas discussed & reviewed:

1. Leadership Styles
2. Personal Effectiveness
3. Effective Communication
4. Motivation and Action
5. Team Building
6. Building Partnerships
7. Management Principles
8. Strategic Development
9. Quality Assurance

The meeting also provided an opportunity to the Deputy Director to inform the experts about the activities being carried out at the SAARC TB Centre. Experts from WHO/ SEARO & Member Countries appreciated the efforts of the SAARC TB Centre in terms of providing trained manpower for effective management of National TB Control Programmes of SAARC Region and felt that Centre should incorporate training on development of leadership management skills for TB control programme managers.

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Special Articles and Technical Information on TB and HIV/AIDS Control

TB and HIV/AIDS in Bangladesh

Dr. (Mrs) Anowara Khatun
Dy. Programme Manager
NTP, Bangladesh

The development of TB control in Bangladesh has taken place in the context of a large sector-wide approach to Health Sector Development (HSD), with significant from international aid agencies in shaping the HSD process. Effective TB control is seen as a priority, given the potential scale of the problem, the growing threat of HIV, the population density and the generally high level of poverty.

The GOB is committed to nationwide coverage of TB services through the significant involvement of local Non Governmental Organizations (NGOs) in the delivery of slected services. NGO partnerships with organizations such as the Bangladesh Rural Advancement Committee (BRAC) and the Damien Foundation already serve 40% of the 110 million people covered at present. The direct partnership of NGOs in the delivery of TB services in Bangladesh has enhanced case-finding and treatment supervision through community participation. This approach is gender sensitive, cost-effective and supportive of patient needs. The creation of additional partnerships will be an important requirement for continued expansion in coverage and the fight against TB. One new group of partners is the private sector health care community, who have influence in shaping public opinion and treatment practices in Bangladesh. Their effective involvement in the national programme will help especially with services that are needed for the four major urban areas where private health services are strongly present. Social mobilization strategies are needed to stimulate demand for effective treatment.

Major international partnerships include the World Health Organization, the United Nations Children's Fund (UNICEF), the International Labour Organization (ILO) for workplace activities, the World Food Programme (WFP), the United States Agency for International Development (USAID) contractors, the International Centre for Diarrhoeal Disease Research (ICDDR) and the Research Institute of TB (RIT), Tokyo. The World Bank supports the Bangladesh 1998-2003 Health and Population Sector Programme (HPSP).

Health Sector Reform:

Health Sector Reform has provided an opportunity to strengthen TB control and enhance the contribution of the service to national development through appropriate cost saving and delivery efficiencies. For example, the National TB Programme has been integrated with the Leprosy Elimination Programme and now forms a-key component of the Essential Services Package (ESP) developed as part of the sector-wide health reform process. The benefits of integration include better use of shared activities such as training, surveillance, reporting, monitoring and Information Education Communication (IEC). The inclusion of TB control in the ESP will greatly expand access to TB treatment.

Challenges:

Challenges include extending partnerships to the private health care sector to ensure standardization of treatment. Private health care is a significant provider of service and the implementation of DOTS within the system is vital. Special efforts will be needed to establish TB control suitable for large metropolitan cities. Expanding the budget for TB control is paramount. At present, the TB budget is US$ 1.46 million, but projections identify a need for US$ 20-25 million up to 2005 to achieve full TB control. Another important challenge is dealing with the very high HIV/AIDS rates among specific high-risk groups. On the operational side, drug procurement procedures and quality control of laboratory services need considerable strengthening. Reinforcement of the NGO network to more effectively reach the TB control needs of women presents an additional challenge.

Success and Lessons Learnt:

TB along with Leprosy is integrated into the Government' ESP for national health development ensuring the appropriate prioritization of TB within a sector-wide approach to health development. Reform has created positive opportunities for TB to integrate with other delivery systems. The successful involvement of local NGOs and other partners has been vital to expand coverage.

NGOs in Bangladesh have demonstrated that even in poor countries relatively low literacy and educational levels, communities can be mobilized as effective partners for DOTS delivery. Partnership expansion maximizes results. Successful partnership with NGOs requires good technical services support to ensure quality.

Future Needs and Major Priorities:

- Budget projections: US$ 20-25 million (2000-2005)
- Technical Assistance
- Management and supervisory capacity building
- Social mobilization to stimulate demand
- National reference laboratory
- TB drug resistance surveillance
- Training curriculum review
- Metropolitan area expansion
- Behaviour change communication strategy
- Microscopy quality control system at peripheral level
- Operational research: optimizing TB control within reforming health system

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National Tuberculosis Control Programme in Bangladesh:

AIM:

To reduce the incidence of tuberculosis until it is no longer a public health problems by diagnosis and treatment all TB cases, especially those which are contagious and spreading the disease in the community.

OBJECTIVES:

i) to detect at least 70% of the contagious TB cases (sputum smear - positive)
ii) to cure at least 85% of them

DOTS has been adopted as the most cost - effective strategy to achieve these objectives.

DOTS strategy:

The DOTS strategy (Directly Observed Treatment, Short-course) is the brand name of the WHO recommended policy package to control TB.

1) Commitment of the government through adequate political and financial support
2) Diagnosis of TB by Microscopy investigation of the sputum of the patients attending the health facilities.
3) Standardized treatment, on concentrate in less than one year and under direct observation.
4) Regular, uninterrupted supply of all anti-TB drugs and other supplies.
5) Registration and reporting of TB patients to avoid defaulters and monitoring the programme performances.

Services of the Programme:

The revised National TB Control adopted the DOTS strategy to improve past poor TB services and started in November 1993 in 4 pilot upalizes in two districts. Since January 2001 the programme is present 460 upazials and 3 metropolitan (Chittagong, Khulna and Rajshahi) covering 95% of the total population.

The service of TB diagnosis and treatment, free of charge, offered by the national programme are presently available in:

- 460 upazilas(at Upazila Health Complex or corresponding NGOs facility)
- 44 Chest Clinics
- 8 TB segregation Hospitals attached to the chest clinics.
- 4 TB Hospitals
- 41 urban dispensaries in Chittagong city
- 9 urban dispensaries in Khulna city
- 1 urban dispensaries in Rajshahi city

In Bangladesh, the cost afford by the government to cure a new TB patient is about Taka 900, it is the double to cure a patient poorly treatment in the past and it would be 100 times more to cure a patient with multi-drug resistance. Chances to get cured decrease progressively.

Performance of the Programme:

Coverage:
about 95% of the population 460 upazilas and the 3 metropolitan cities of Chittagong, Rajshahi and Khulna)

Detection of TB:
almost 30% of the expected contagious cases (case detection rate in 1999). More than 406, 032 TB cases detected since the start of the programme (Nov. 93- Dec. 00)

Treatment of TB:
84% cases successfully treated (year 1999). Nearly 80% of the contagious patients successfully treated since the start of the programme.

Collaboration with NGOs:

186 (40%) upazilas are covered through the collaboration with 6 NGOs, the other 274 (60%) directly by the government. More NGOs are collaborating with the programme in the metropolitan cities.

S.NO.	Name of NGO	Area of activity
1	Bangladesh Rural Advance Committee(BRAC)	60 upazilas
2	Banophul under (UFHP)	Khulna city
3	Damien Foundation	74 upazialis& Rajshahi
4	Danish Bangladesh Leprosy Mission (DBLM)	10 upazialis
5	Family Planning Association	Khulna city
6	Friends of Bangladesh	1 upazialias
7	Health Education&Economic Development (HEED)	25 upazialias
8	Image (under UFHP)	Chittagong city
9	LAMB Hospital	3 upazilas
10	Mamata (under UFHP)	Chittagong city
11	Nishkirti (under UFHP)	" "
12	PIME sisters	Khulna city
13	Rangapur Dinajpur Rural Service	14 upazilas
14	Nat. Anti- TB Association Bangladesh	Chittagong

Tuberculosis: a disease without borders;

No matter of sex, also women get TB:

- Globally, 8 million new people get sick of TB and two million die of TB every year.2.8 million of the TB sick people and 700, 000 of the deaths are women.
- Tuberculosis is a bigger killer than Malaria and AIDS combined and kills more women than all the combined causes of maternal mortality.
- Each year, more than 100, 000 Indian women are rejected by their families because of TB.

No matter of age, also children get TB

- About 1.3% of the TB cases are below 14 years.
- In India, 11% of children in families with TB are withdrawn from school and 8% enter work. 300,000 children leave school every year due to TB.

No matter of income, also rich people get TB;

- The poor are more likely to contract TB (malnutrition, crowding, poor air circulation and sanitation, and poor health care).
- Those who contract TB are more likely to fall into poverty because of the economic consequences of the disease.
- Despite the close link TB - poverty, TB can affect everyone: studies in India show that 30 - 40% TB patients are educated and earn good incomes.

Outcome Indicators of TB Control Programme in Bangladesh in 2000:

- Estimated New Cases of TB - 305 (thousand per year)

- Estimated Deaths from TB - 68 (thousand per year)
- No. of Cases of TB notified in 1998 - 72,256
- Male to Female Ratio of New Infectious TB Cases - 71%/29%
- Proportion of New Infectious TB Cases in Economically active Age Groups (15- 54) - 79%
- DOTS Population Coverage - 90%

HIV/AIDS Prevention

Introduction:

The national response in Bangladesh was initiated with establishment of a National AIDS Committee (NAC) and Technical and Coordination Committees at central level and committees at various peripheral levels in 1985. A number of activities have been implemented by the NAC, the Ministry of Health and Family Welfare as well as by the office of the Director General Health Services. Adoption of a National Policy in cabinet is a milestone in the way of an effective response. A well-established NGO network carries out various HIV/AIDS related prevention and care interventions. However, in spite of a substantial amount of work already done, the level of response needs to be further strengthened. The Government expression of commitment to AIDS prevention has to be translated into action at the ground level.

National Strategic Plan:

The National Strategic Plan formulated by the Government provides a framework for a national response to AIDS and defines Bangladesh's strategies and priorities for HIV/AIDS and STDs prevention and care for five years (1997-2002) in line with National Policy. It is worth mentioning here that Bangladesh is one of the very few countries that have a very well defined state policy document on HIV/AIDS and STC related issues. The strategic plan, which is periodically updated according to changed circumstances, builds on the works already done and emphasizes a multi-sectoral response to the AIDS problem to include enhancing the involvement of various ministries, NGOs, the private sector and the community, and outlines programme management aspects including monitoring and evaluation. This strategic plan also provides a guide for further planning and for the development of sector-specific work plans. The strategy in its projection identified and need for resource allocation and provided systematic guideline for the purpose. The broad strategic and interventions were planned taking into consideration the present epidemiological situation and the likely future scenario. The priority strategies, therefore include:

- Establishing and keeping a National AIDS programme management team effective at central, district and upzila levels;
- Preventing transmission of HIV through expansion of interventions targeted among individuals with high risk behaviours including sex workers and their clients, injecting drug users, transport workers, etc;
- Strengthening STD case management to include syndromic management approach; increasing availability, accessibility and use of quality condoms; promoting responsible sexual behaviour of young people both in and out of school, Information, Education and Communication (IEC) activities targeted at policy makers and the general population; enabling legislation and the use of the media, and above all creating and enabling environment for people in

general and for those afflicted in specific that would include making information and care available to them.

- Improving a safe blood supply through promoting voluntary blood donation and discouraging professional blood donation;
- Rational use of blood/blood products and s through screening of donated blood for HIV and other pathogens;
- Provision of couselling and other support including expansion of voluntary testing facilities targeted at pregnant women or women contemplating pregnancy and breast feeding mothers.
- Provision of care and support systems including counselling services, implementing activities to include legal amendments to counter the discrimination against people living with HIV/AIDS and vulnerable groups, towards improving community acceptance;
- Establishing HIV/AIDS and STC surveillance to determine present and future magnitude of the problem and to monitor HIV/AIDS and STD programmatic interventions and their effects;
- Strengthening capacity of diagnosis of HIV/AIDS/STDs;
- Mobilizing and supporting various government, private and non-government sectors.

Specific Response:

The Government response to address the epidemic is detailed below:

- As mentioned earlier, the National AIDS Committee (NAC) was formed in Oct. 1985, with representation from different stakeholders. The NAC is defined as an advisory body with responsibility for major policy issues and strategies, co-operation and co-ordination of various sectors including NGOs and supervision of implementation of the programme and mobilization of resources. A Technical Committee (TC) was also formed with experts from relevant field to provide in-depth scientific, medical and technical advice to the NAC and the National AIDS/STD Programme (NA/SP). By the end of 1990 a Co-ordination Committee (CC) came into being, constituted by key functionaries from institutions already engaged in HIV/AIDS elated activities. Responsibilities were assigned to each member of the committee as part of a programme building effort.
- In 1987, Government decided to start AIDS prevention activities with the technical and financial assistance of WHO Global Programme on AIDS (GPA). In 1998, planned prevention activities began under a 'Short Term Plan' (STP) which focused on determining HIV/AIDS prevalence and in developing prevention and control measures, particularly in the health sector. During 1989, a 3 years 'Medium Term Plan' (MTP) was formulated and during the 90's prevention activities were carried out with WHO support in areas of surveillance, laboratory diagnoses and strengthening technical, financial, health education and management capabilities.
- Since 1996, UNDP has been supporting interventions in the country. The Joint United Nations Programme on HIV/AIDS became operational in 1996 to work with Government, NGOs, the private sector and donors to support the national response to HIV/AIDS.
- The HPSP proposes restructuring of some components of the Health and Family Welfare wings towards unified service delivery. These factors need to be considered in formulating an effective management structure to deliver the health related aspects of the NA/SP.
- The management structure of National AIDS/STD programme has been outlined in the policy document. Programme activities are to be carried

out by three main functionaries, i.e. the NAC acting as an advisory body assisted its Technical Committee, the Ministry of Health and Family Welfare as the co-ordinating body and the Directorate of Health Services and other ministries, directories and agencies as the implementing bodies.

- The TC continually reviews the programme to reflect the needs as they arise. Important contributions of the TC include assisting the NAC to formulate programme frame-works, guiding programme personnel in the design, development and monitoring/reporting of their activities and review research protocols to be funded by the government. Programme management itself acts to maintain functional links effectively between the tripartite coalition.
- Under the leadership of the Secretary, Ministry of Health and Family Welfare, the AIDS Information and Awareness Campaign Committee (AI & ACC), comprising of representatives from several ministries, WHO, donor agencies, media and NGOs have conducted many activities since its inception. Several IEC materials have been produced and distributed by this committee. Other activities have included social mobilization meetings, exhibitions and seminars in cities , towards and villages. Many media activities have focused on contexts in which people get involved in high-risk behaviours, as well as the public at large. However, means to redress religious and cultural sentiments, while still dispensing accurate information on means of transmission and methods for protection need to be considered. Recent surveys indicate that literate and non-empowered with sufficient information to protect themselves.
- The availability of a quality condom at an affordable price is an essential component of any HIV/AIDS and STD control programme. At present, GOB provides 37% of condoms while the remaining 63% comes from the Social Marketing Company (SMC) funded by the USAID and the European Union. SMC has recently introduced a new brand with a clear message to link its use to prevent STDs and AIDS. A market has been established for this brand. The STD message should also be considered for all other condoms. For the first time, SMC has also been allowed by the government to use TB for promoting condom for HIV. Condoms are also distributed free by many NGOs.
- In March 1997, a protocol for a safe blood transfusion service was submitted to the MOHFW by the Blood Transfusion Technical Sub-Committee of the NAC. At present, a few laboratories have started to provide facilities to test for HIV in the country. Most are in the private sector. However, pre, post and follow up counselling has yet to become an essential part of the process. As HIV/AIDS awareness increases, a rise in the demand for HIV testing is likely. To meet this demand, health facilities that offer voluntary counselling and testing would be required. As it stands now, MOHFW has embarked on establishing 97 blood transfusion centres in the country up to district level, some of which will in the private sector. These centres will screen blood for HIV, trepenoma, malaria, HBsAg and HCV.
- NGOs have set up a STD/AIDS network. It is broadly recognized that NGO, given their potential for flexibility and interactive relations with community members, have much to offer towards prevention and behaviour change activities. Relevant to STD/HIV/AIDS, close collaboration between government

and NGOs is currently being addressed. NGOs are being invited to support the MOHFW with delivery of the Essential Services Package (ESP); interventions for community behavioural change, training and providing standard guidelines for the programme. NGOs have been carrying out the major part of HIV/AIDS prevention activities nation-wide. From IEC and targeted interventions to policy formulation, NGOs have been instrumental at all levels. Indeed, without NGO participation, Bangladesh would undoubtedly have been much further behind than it is at present. Furthermore, there is a network of media people (AIDS and Health Writers Group) and an AIDS and legal issues group (ALACAA). A successful consensus workshop was held (November1995) to agree on the relative roles for GOB and NGOs towards HIV/ AIDS prevention and control. In essence, NGOs have been given full support to complement GOB efforts and to take on activities that are beyond government's scope.

- There are specific issues that AIDS brings to women. The disadvantaged and marginalized status of women in Bangladesh deprives them of access to information and intervention programmes on AIDS as well as most importantly, negotiating power in matters of sexuality. In response, a Women Wing (WW) of the NAC was set up to raise and plan for such issues within the NAC and the programme. In the NGO sector, women are taking part in programmes addressing the wider socio-developmental issues of women as well as providing information and behaviour change support to women. NGOs are also making a start to promote male responsibility in matters of sexuality and family planning. The role of the man as a dominant partner I sexual decision-making is often forgotten, perhaps because of the perceived difficulties. However, this is an area that obviously requires focused attention if a NAP is to be successful.

Major activities under taken and accomplished by National AIDS/ STD Programme:

1. Approval of the National Policy in 1997
2. Preparation and adoption of 5-year(1997-2002) National Strategy
3. Approval of the National HIV/AIDS Behaviour Change Communication Strategy
4. National Mapping
5. Generation of Data-base
6. Sentinel Surveillance
7. Multi-sectoral Involvement
8. Formation of Local Committees
9. NGO Inventory
10. NGO Selection Modalities and Selection Criteria
11. Partnership with NGOs:
12. Training of NGOs for Capacity Building
13. Training for Capacity Building at Management Level
14. Research Support
15. Support to professional Organizations
16. Training and Workshop for Capacity Building at Field Level
17. Collaborative Efforts with other Ministries for Capacity Building
18. Support to Other Organizations
19. Community Orientation
20. Development of Education and Instructional Materials
21. General Awareness Programmes
22. Community Participation Initiatives
23. Review of Legal, Ethical and Human Rights Issues
24. Support to People Living with HIV and AIDS
25. World AIDS Day Observation

National TB Control Programme and Status of RNTCP in India

Dr. G. R. Khatri, DDG (TB)
NTP Manager, India.

Magnitude of the Problem of TB in India:

India accounts for nearly one third of the global burden of Tuberculosis and the disease is one of India's most important public health problems. Every day more than 20,000 people become infected with the tubercle bacillus, more than 5,000 develop the disease and more than 1000 die from TB. TB kills 14 times more people than all tropical diseases combined, 21 times more than malaria and 400 times more than leprosy. Every year, another 2 million people develop TB, nearly 1 million of them highly infectious sputum positive cases – 2 such cases developing every minute in India. Every sputum positive patient can infect 10-15 individuals in a year, more than one in five 15 years old in the country has already become infected with the bacteria.

TB is a major barrier to social and economic development. The direct and indirect costs of tuberculosis to the country amount to US

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with sufficient servation
themselves.

- The availability of a q

the next decade. There is no time for complacency. Each life saved represents a child, mother or father who will go on to lead a longer, productive, TB-free, life.

Expansion of RNTCP

The Revised National Tuberculosis Control Programme (RNTCP) is succeeding and expanding rapidly. Begun on a pilot basis in 1993, large-scale expansion began in 1998. By mid – 1999, the RNTCP became the second largest DOTS programme in the world. By early 2001, more than one third of the country has access to the programme.

Progress of this massive scope has required the systematic training of more than 150, 000 health workers, the deployment of more than 1,400 supervisors in districts throughout the country, the performance of more than 7.5 million microscopic examinations and the administration of nearly 20 million directly observed doses of anti-TB treatment. As a result of this hard work, more than 500,000 patients have been placed on treatment under the programme and more than 80,000 lives have been saved.

The RNTCP has expanded rapidly in the past year. From population coverage of 18 million – less than 2% of the country – in 1998, by early 2001, the programme is covering more than one third of the country. This represents one of the fastest expansions of this strategy anywhere in the world. Expansion has not been easy. For this to occur:

National TB Control Programme and Status of RNTCP in India

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NTP Manager, India.

Magnitude of the Problem of TB in India:

India accounts for nearly one third of the global burden of Tuberculosis and the disease is one of India's most important public health problems. Every day more than 20,000 people become infected with the tubercle bacillus, more than 5,000 develop the disease and more than 1000 die from TB. TB kills 14 times more people than all tropical diseases combined, 21 times more than malaria and 400 times more than leprosy. Every year, another 2 million people develop TB, nearly 1 million of them highly infectious sputum positive cases – 2 such cases developing every minute in India. Every sputum positive patient can infect 10-15 individuals in a year, more than one in five 15 years old in the country has already become infected with the bacteria.

TB is a major barrier to social and economic development. The direct and indirect costs of tuberculosis to the country amount to US $ 3 billion per year. Every year, more than 170 million work days are lost to the national economy on account of tuberculosis at a cost of US$ 200 million. Every year 300,000 children are forced to leave school because their parents have tuberculosis and 100,000 women lose their status as mothers and wives because of the social stigma of tuberculosis. Tuberculosis kills more women than all cause of maternal mortality combined.
HIV and multi-drug resistant TB threaten to make this situation even worse. Unless urgent action is taken, more than 4 million people in India will die of tuberculosis in the next decade. There is no time for complacency. Each life saved represents a child, mother or father who will go on to lead a longer, productive, TB-free, life.

Expansion of RNTCP

The Revised National Tuberculosis Control Programme (RNTCP) is succeeding and expanding rapidly. Begun on a pilot basis in 1993, large-scale expansion began in 1998. By mid – 1999, the RNTCP became the second largest DOTS programme in the world. By early 2001, more than one third of the country has access to the programme.

Progress of this massive scope has required the systematic training of more than 150, 000 health workers, the deployment of more than 1,400 supervisors in districts throughout the country, the performance of more than 7.5 million microscopic examinations and the administration of nearly 20 million directly observed doses of anti-TB treatment. As a result of this hard work, more than 500,000 patients have been placed on treatment under the programme and more than 80,000 lives have been saved.

The RNTCP has expanded rapidly in the past year. From population coverage of 18 million – less than 2% of the country – in 1998, by early 2001, the programme is covering more than one third of the country. This represents one of the fastest expansions of this strategy anywhere in the world. Expansion has not been easy. For this to occur:

RNTCP Implementation – Timeline:

1992: National programme review of tuberculosis concluded that efforts to control the disease had not made any significant impact

1993: Revied National Tuberculosis Control Programme was begun, applying the principles of DOTS – which were largely discovered in India

1997: Government of India obtained a "soft" loan from the World Bank for US$ 142 million to implement the RNTCP in at least one third of the country and to prepare the rest of the country for implementation of RNTCP at a later date, RNTCP in Orisa is supported by the Dasish Government and RNTCP in Addhra Pradesh is supported by the British Government

1999: RNTCP expands seven-fold to become the second largest such programme in the world

2001: One third of the country covered, more than 500,000 patients treated

2002: Plan to cover half of the country.

- Nearly 200 TB control societies have been formed in states and districts.
- Funds have been released from the central government directly to the societies.
- Detailed planning for implementation has occurred at the state and district levels.
- Civil workers have been done to ensure safe storage of drugs and to improve laboratories where microscopy is done
- More than 1,400 supervisors have been deputed or hired on contract to ensure the quality of diagnosis and treatment
- More than 150,000 health workers have been trained using high quality modular training materials, including more than 10,000 doctors and more than 3,000 laboratory technicians.

Appraisal teams from the central government, state governments and national institutions have visited each and every district prior to service delivery to ensure that high standards are maintained. As of March 2001, the RNTCP placed more than 500,000 patients on DOTS administered nearly 20 million doses of directly observed treatment and saved nearly 100,000 lives. Each month, there are nearly 10 million patient visits to health facilities covered by the RNTCP. Every day, more than 10,000 sputum examinations for tuberculosis are done in RNTCP areas and more than 1,000 patients are started on treatment, saving nearly 200 lives. The plan is to expand the RNTCP to cover half of the country by 2002.

Monitoring and Evaluation:

Although diagnostic and treatment policies of the RNTCP are technically very sound, perhaps the greater strength of the RNTCP lies in its system of reporting. Each quarter, every area implementing the programme reviews each and every patient and reports on their diagnosis, progress and outcome. Each and every of the more than 500,000 TB patients treated in the programme is recorded in a TB Register and all essential details of their treatment are available. This information is reported quarterly to the district, state and central levels. The quality of reporting has been exemplary with

district, state and central levels. The quality of reporting has been exemplary with virtually all districts reporting on time. These reports present an accurate picture of actual programme performance – both good and bad. This allows prompt recognition of good performance and prompt corrective action where required.

Status and Prospects:

Conservative estimates are that nationwide effective DOTS implementation by 2005 would result in cumulative saving of more than US$ 27 billion through the year 2020. For an investment of US$ 50 million per year, the yield would be more than US$2.5 billion per year. Full coverage would transfer US$ 160 million every year to patients in medical expenses averted.

By early 2001, every day 1,000 patients were being placed on treatment in the RNTCP, representing 200 lives saved and 2000 tuberculosis infections prevented. More than 500,000 patients had been put on treatment by March 2001, saving nearly 100,000 lives and preventing more than 1,000,000 TB infections. The challenge in the years ahead is to maintain the pace and quality of the programme while achieving national coverage so that tuberculosis is no longer a significant public health problem in India.

Diagnosing Patients:

In the RNTCP, the quality of diagnosis has been significantly improved, bringing it at par with international standards. This has been accomplished by improving both the infrastructure and the training for diagnosis of tuberculosis. Binocular microscopes have been provided to microscopy laboratories throughout the country. Civil works have been done to ensure that laboratories are well equipped and structured for efficient operations. A three-tiered system of quality control has been implemented so that each and every positive test is cross-checked and a significant sample of the negative tests is also cross-checked. This quality control network extends right from national level institutions - the National Tuberculosis Institute, Bangalore and the Tuberculosis Research Centre, Chennai – to state governments, district tuberculosis centres and laboratory technicians working on the from lines of the battle against tuberculosis.

In addition, a large number of doctors throughout the country have been trained in improved, scientific procedures to evaluate and treat all patients suspected of tuberculosis. The diagnostic algorithm ensures that patients who are treated for TB actually have the disease. In the previous programme and all too often in the private sector patients who do not have tuberculosis are unnecessarily treated for the disease on the basis of X-ray alone. While X-ray is an important complementary tool for the diagnosis of tuberculosis, sputum microscopy is the most reliable, specific and objective method available.

Not only is the quality of diagnosis good, but even the quantum of diagnostic activities is impressive. Each month, there are nearly 10 million patients visit to health facilities covered by the RNTCP and every day more than 10,000 sputum examinations for tuberculosis are done in RNTCP areas. Every quarter, more than 100,000 of sputum tests are cross-checked by specially trained supervisors.

As a result of all of these efforts, the quality of diagnosis in the RNTCP is excellent. In contrast with the earlier programme, where only one out of four patients had their diagnosis confirmed in the laboratory more than half of patients have laboratory confirmed TB as is expected in a well performing programme.

Curing Patients:

But diagnosing patients is only the first step. Tuberculosis treatment takes at least six

months and patients feel better within the first few weeks or months of treatment with powerful anti-tuberculosis drugs. For treatment to succeed – and for tuberculosis to be controlled – it is essential that treatment be standardized, effective and that patients are directly observed to take treatment. Availability of drugs have been decentralized ensuring that the patient is the VIP of the programme and taking of drugs should not require any change in the patient's daily schedule.

The RNTCP ensures standard state-of-the-art treatment to patients with all types of tuberculosis. In the RNTCP, depending on their condition, patients receive any one of three categories of treatment. Doctors decide on which category treatment to use based on a standard algorithm, which includes application of clinical judgement. For each category of treatment, a standardized regimen is used. Follow-up sputum tests are taken to monitor the patient's progress and outcome.

Patients are the VIPs of the programme and the health system, rather than the patient is responsible for ensuring cure.

In the RNTCP, every patient receives drugs in a patient-wise box. The patient-wise box ensures that no patient can begin treatment unless the full course of medicines is available.

Most importantly, every dose of treatment in the first, intensive phase of treatment is given under direct observation and at least the first dose of the three doses per week in the continuation phase is also given under direct observation. Direct observation of treatment is a service to patients and communities. It ensures that patients take medicines as prescribed in the right dosages at the right intervals and for the complete duration. Direct observation offers a platform for building a human bond between the health provider and the patient. This not only helps in wining the confidence of patients but also helps in promptly addressing any problem developing with the patient. In the DOTS strategy, of which the RNTCP is an adaptation. Patients are the VIP of the programme and the health system rather than patient is responsible for ensuring cure.

Virtually anyone – other than a family member – can be a treatment observer as long as they are trained and accountable to the health system and acceptable and accessible to the patient. The ideal of the programme is that no patient should have to pay for transport or treatment, miss work or suffer stigma to participate in a DOTS programme.

As a result of these policies, the RNTCP reliably cures patients. More than eight out of ten patients are cured in the programme as compared to less than four out of 10 in the earlier programme.

Directly Observed Treatment Short-course (DOTS):

Directly observed treatment short-course is a five-point strategy including the

Direct observation ensures that patients take the right drugs, at the right intervals and in the right dosages.

components of political and administrative commitment, diagnosis primarily through microscopy, uninterrupted supply of good quality drugs, direct observation of treatment and monitoring and supervision to track

diagnosis, progress and outcome.
The principles of DOTS were developed in India. In the 1950s and 1960s studies at the Tuberculosis Research Centre, Chennai demonstrated the safety and efficacy of domiciliary treatment of tuberculosis, effectiveness of intermittent chemotherapy and the necessity and feasibility of direct observation of treatment. In the 1960s, studies at the National Tuberculosis Institute, Bangalore documented the efficacy, feasibility and importance of case detection by sputum microscopy.

DOTS if implemented correctly can prevent multi-drug resistance. DOTS is also effective among HIV-infected patients.

NGO Involvement:

Involvement of the community plays an important role in the successful implementation of the DOTS strategy. NGOs are often closer to and more trusted by patients and perform an active role in health promotion in the community. As they work in areas where access to health facility is limited, they have a more important role to play in the RNTCP. Depending on their areas of expertise, NGO can be involved in health education, service delivery, planning, programming, implementation, training and evaluation. The strategy for involving NGOs in the RNTCP includes inviting representatives to serve as members in district/state, societies providing literature and information on a regular basis. Involving them in planning, implementation and evaluation of TB control programmes and in training programmes.

Strong NGOs can play an important role in extending the reach and improving the efficacy of DOTS and are particularly essential in areas where there is limited government infrastructure.

The government of India has introduced various schemes for collaboration between NGOs and the RNTCP such as:

Scheme 1: Health education and community outreach
Scheme 2: Provision of directly observed treatment
Scheme 3: In-hospital care for tuberculosis disease
Scheme 4: Microscopy and treatment centre
Scheme 5: TB unit model

Examples of Treatment Observer:

- Village Sarpanch
- Malaria Link Workers
- Headmistress of School
- Tea Shop Owner
- Landlord
- Cured Patient
- Family Member of the Health Worker
- Wife of District TB Officer
- Paint Shop owner
- School Teacher
- District TB Officer
- Zila Parishad Savadipati
- Non-governmental Organization
- Volunteers from Nehru Yuva Kendra
- Shoe Shop Owner
- Tailor
- Cycle Repair Shop owner
- Mother of Milk-cooperative Worker
- Policeman
- Postman
- Owner of House for Servant
- Religious Leader
- Anganwadi Worker
- Ayurvedic Doctor
- Private Pharmacist
- Private Doctor's Wife
- Fisherman
- Milk cooperative Union Worker
- Watchman of the Factory
- Hotel Manager
- Lift Attendant
- Swarnajayanti Volunteer
- Self-help Group Member
- Tea Garden Leader

- Lawyer
- Deputy Sarpanch
- Mahila Mandal
- Retired City Government Employee
- Barber
- Neighbour
- Alcoholic Anonymous Volunteer
- NSS Leader
- Senior Citizen Organization Member
- Dhabawala
- Dai
- Work-place Supervisor
- Laboratory Technician from Private Laboratory
- Compounder from Private Practitioner
- Kirana Shop Owner
- Housewife
- Vegetable Vender

Improving the Programme:

A good tuberculosis control programme uses scientific data to identify the problems of TB control and try out various interventions to solve these problems.

To succeed in the long run, the programme must continuously evaluate its performance and search for ways to improve. Therefore, research in the area of tuberculosis is not a luxury but is essential for the RNTCP. Several ambitious research initiatives are underway.

Annual Risk of Infection:

The most recent systematic national survey of the burden of tuberculosis was conducted by the Indian Council of Medical Research from 1955 to 1958. It is crucial that the programme have information on the current epidemiology of tuberculosis and means to track the effectiveness of programme interventions in the coming years. With this background, Government of India has undertaken to conduct a nation-wide representative sample survey of the annual risk of tuberculosis infection. The annual risk of infection is an excellent indicator of the burden of tuberculosis in a community. Furthermore, it provides a monitoring tool to assess the effectiveness of the programme in reducing the spread of tuberculosis. Under the leadership of the National Tuberculosis Institute, Bangalore and with the active collaboration of the Tuberculosis Research Centre, Chennai and other centres throughout the country, research teams have fanned out to different districts throughout the country to conduct the annual risk of infection survey. It is an ambitious undertaking and will take several years to complete. However, with energetic leadership from the National Tuberculosis Institute, Bangalore, the survey is now mid-way through.

Drug Resistance Surveillance:

Another important area of research is monitoring of drug resistance. Drug-resistant tuberculosis is a symptom of poor programme performance. It is important to document the level of drug resistance in the community in order to monitor the impact of the programme over time and also to ensure that treatment regimens are appropriate. In an effective programme, drug resistance is not created and the prevalence of drug resistance should decrease with time.

Tuberculosis Research Centre, Chennai which is a WHO-recognized Centre of Excellence in mycobacteriology, is coordinating this multi-centric project. Results to date suggest that the rate of primary multi-drug resistant tuberculosis is less than 3% in most districts, and less than 1%- 2% in many districts. The present rate of drug resistance in the country is of concern, but does not indicate the need for any change in RNTCP treatment policies. On the contrary, the presence of drug resistance makes the expansion of the RNTCP an even more urgent requirement.

- Lawyer
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Other priority research areas:

Government of India has identified three additional priority areas for operational research. These are evaluation of the strengths and weaknesses of different types of treatment observers, evaluation of different models for participation of the private sector in the RNTCP and evaluation of the usefulness and accuracy of the RNTCP diagnostic and treatment policies in HIV-infected persons.

TB Hospitals:

Research in the 1950s and 1960 at the Tuberculosis Research Centre, Chennai showed that hospitalization was not necessary for the treatment of TB. Admission to TB hospitals would be required only for treating complications or in very exceptional cases. The vast majority of TB patients require only ambulatory treatment. However, still there are more than 47,000 TB beds in 764 TB hospitals in the country. Although for a very limited number of patients hospitalization could be an important service, for most it is both unnecessary and expensive. To understand more about this important area, Government of India conducted a systematic survey of large TB hospitals.

Tuberculosis hospitals may diagnose as many as 1 million TB patients each year, including nearly 250,000 who are sputum smear positive. The national budget for all hospitals in the country may be as high as Rs. 200 crore. This is more than the total budget for the tuberculosis control programme of the country, yet diagnostic quality is poor, potentially dangerous treatment regimens are utilized and outcomes are not evaluated.

TB hospitals have a good reputation and many patients go to them for confirmation of diagnosis. Therefore, TB hospitals can play an important role in case detection if standard diagnostic practices are followed. Beds should be utilized for only seriously ill TB patients and the remaining beds should be used for other purposes. The substantial credibility and caseloads of TB hospitals should be taken as an asset to ensure that patients are accurately diagnosed and are referred for evaluation and treatment as per policy.

Private Practitioners:

Most patients with TB are aware of their symptoms and go to the nearest health facilities, 50%-80% of patients first contact private practitioners. Private practitioners are generally convenient to and trusted by patients. Unfortunately, case management practices in the private health sector overly rely on X-ray and treatment strategies too often are based on unproved and untested regimens.

For the programme to broaden its reach and have maximal impact, the involvement of private practitioners assumes great importance. Some initial attempts at their involvement have shown encouraging results in some of the RNTCP sites. A project in collaboration with Delhi Medical Association is being implemented. Similarly, a mega project to involve private practitioners working in about 4 million population of East Delhi is being formulated. In order to improve coordination and communication with the private health sector guidelines for collaboration between practicing physicians and the government are being developed.

Meanwhile:

All private practitioners can support and encourage effective tuberculosis control by:

- Ensuring prompt referral of patients with cough for 3 weeks or more,

- Providing reassurance that tuberculosis can be cured,
- Not starting treatment with rifampicin containing regimens unless it can be ensured that treatment can be completed,
- Giving only recommended drug regimens.

In addition, some private practitioners may be able to:

- Serve as treatment observers for patients who prefer to receive treatment observation from them,
- Have their laboratories included in the quality control network of the RNTCP.

All District TB Officers have been encouraged to:

- Establish a line list of large private and non-government health facilities in the district with some idea of the volume of patients and estimated number of TB patients catered by them.
- Foster cooperation and coordination at the local level. Personally, visit each heavily utilized practitioners or facility in their area. At this visit, policies of the RNTCP should be explained in brief, concerns of the practitioner should be elicited and addressed and practitioners should be encouraged to refer patients for sputum microscopy. In addition, a mechanism of feedback on patients referred should be established, and the practitioner's willingness to serve as DOT provider should be ascertained.

Medical Colleges:

Medical colleges play a critical role in tuberculosis control for two reasons. First, as the medical opinion leaders and trendsetters, medical college professors shape the attitudes of their peers and of the next generation of physicians. Second, because of their role as referral centres, medical colleges treat a large number of patients with tuberculosis.

Initially, some members of the medical college community expressed reservations about RNTCP policies. However, a National Consensus Conference was convened several years back to air all issues. The Conference was attended by large number of experts from leading medical colleges throughout India, and Sir John Crofton as well as Professor John Sbarbaro also attended. At the Conference, it became clear that most reservations stemmed from lack of dissemination of knowledge from the programme, rather than disagreement with policies of the RNTCP. It was emphasized that the RNTCP is not a fixed dogma, but can and must adapt as experience is gained. Consensus was achieved:

In the past year, major steps have been taken to operationalize this consensus. Medical colleges have been requested to ensure standardized diagnosis and treatment of TB patients. Sensitization of medical college professors has been conducted at National Tuberculosis Institute, Bangalore and Tuberculosis Research Centre, Chennai.

In new initiative, each medical college in an RNTCP area, working collaboratively with the District TB Officer, will establish a microscopy and treatment observation centre. Staff for microscopy and treatment observation as well as commodity assistance as per the actual need of each medical college, will be provided through the District TB Control Society. A medical officer on contract basis may be considered to be provided to ensure coordination and effective functioning. In this project, physicians from all the major OPDs of the medical colleges will refer all patients with cough of 3 weeks or more to the microscopy centre. The medical college physicians will follow the diagnostic algorithm and standardized treatment policies as per the RNTCP for patients living in RNTCP areas. Staff will also ensure proper referral of patients who reside outside the area of the medical college.

Working together, the medical colleges and the RNTCP will ensure not only improved training and education in tuberculosis for the staff but also improved and better-coordinated services for patients.

Performance of the RNTCP:

- Total No. of State:	17
- Population covered (in 100,000) by RNTCP by 31.12.00:	2,871*
- State covered by RNTCP by 31.12.00:	30%
- Total cases treated in 2000:	245,135
- New S +ve cases treated in 2000:	95091
- Annual detection rate of New S+ve patients:	47#
- Annual detection rate of total cases treated:	126#
- Ratio of S+ve to S-ve patients:	0.8
- 3 month conversion rate of New S+ve patients:	87%
- Success rate of New S+ve patients:	82%

* Some districts, which began implementing in December 2000, will report starting in 2001

\# Rate calculations include only districts implementing for all of 2000

Proposed Programmes

Public awareness & advocacy on Tuberculosis on World TB Day 2002, SAARC Charter Day, Partnership programmes with Schools, Media and Industries in Member Countries and documenting the situation of TB and HIV/AIDS control in the Region.

Abstracts

1. Association between tuberculosis and HIV disease progression in a high tuberculosis prevalence area:

M. Badri, R. Ehrlich, R. Wood, T. Pulerwitz, G. Maartens
INT J TUBERC LUNG DIS 5(3): 225-232, 2001 IUATLD.

Summary:

SETTING:
Adult Human Immunideficiency Virus (HIV) clinics affiliated to the University of Cape Town, South Africa.

OBJECTIVE:
To assess the impact of tuberculosis on HIV-1 disease progression in an area with high tuberculosis prevalence and minimal anti-retroviral therapy use.

DESIGN:
Prospective patient cohort study.

METHODS:
Age, race, risk status, CD4+ T-lymphocyte count, history of AIDS, prophylactic co-trimoxazole and anti-retroviral therapy were controlled for in a time-dependent Cox proportional hazards regressions model.

RESULTS:
Tuberculosis fulfilling the case definition developed in 158/609 patients in the 5-year observation period. Tuberculosis was associated with an increased risk of AIDS (adjusted risk ratio [RR] = 1.60, 95% confidence interval [CI] 1.08-2.41; $P = 0.02$) and death (adjusted RR = 2.16, 95% CI 1.29-3.95; $P = 0.003$). In a stratified analysis, the increased mortality associated with tuberculosis was observed only in-patients with CD4 + T-lymphocyte count >200 cells/ µl and in those without AIDS at baseline.

CONCLUSION:
The onset of tuberculosis in HIV infected patients is associated with an increased risk of AIDS and death. Although a causal link cannot be established in an observational study, our findings support the view that prolonged immune activation induced by tuberculosis leads to prolong increased HIV replication and consequent accelerated disease progression.

2. DOT for patients with limited access t health care facilities in a hill district of Eastern Nepal:

D. F. Wares, M. Akhtar, S. Singh
INT J TUBERC LUNG DIS 5(8):732-740, 2001 IUATLD

Summary:

SETTING:
The hill district in Nepal, where access to health care facilities is difficult.

OBJECTIVE:
To compare results before and after a decentralized directly observed treatment (DOT) intervention.

DESIGN:

Prospective study of patients registered in Dhankuta district, Nepal, 1996-1999. Patients received their intensive phase treatment under health worker supervision via one of three DOT options: 1) ambulatory from the peripheral government health facilities; 2) ambulatory from an international non-governmental organization (INGO) TB clinic in district centre; or 3) resident in INGO TB hostel in district centre. Historical data from 1995-1996, with unsupervised short-course chemotherapy were used for comparison.

RESULTS:

Of 307 new cases, respectively 126 (41%), 86(28%) and 95 (31%) took their intensive phase treatment via options, 1, 2 and 3. Smear conversion (at 2 months) and cure rates in new smear-positive pulmonary tuberculosis cases were respectively 81.6% (vs. 58.8% historical, *P= 0.001) and 84% (vs. 76.7% historical, P= 0.03).* Overall costs to the INGO provider fell by 7% mainly as a result of staffing reductions in the government services during the intervention.

CONCLUSION:

By offering varied DOT delivery routes, including an inpatient option, satisfactory results are possible with DOT even in areas where access to health care facilities is difficult. Provision of in-patient care via and INGO TB hostel allowed a significant proportion of new cases (31%) to receive their intensive phase treatment who otherwise may have had difficult accessing treatment, due either to the distance to the nearest health facility or to disease severity.

Substitution of government hospital beds or local hotel beds for the INGO hostel beds may allow the model to be reproduced elsewhere in similar geographical conditions in Nepal, but further studies should be performed in a non-INGO supported district beforehand.

3. DOT or not? Direct observation of anti-tuberculosis treatment and patient outcomes, Kerala State, India.

V.N. Balasubramanian, K. Oommen, R. Samuel
INT J TUBERC LUNG DIS 4(5):409-413, 2000 IUATLD

Sumamry:

SETTTING:

The Pathanamthittha District of Kerala State, India, where the directly observed treatment, short-course (DOTS) programme was started in October 1994.

OBJECTIVE:

To determine the frequency with which direct observation actually occurred within a district level DOTS programme and the association of treatment observation with treatment out come under programme conditions.

DESIGN:

This retrospective study included 200 consecutive, newly-detected, smear-positive patients registered under the project between February 1995 and February 1996 at the District Tuberculosis Centre, as well as health workers responsible for providing directly observed treatment (DOT) who were separately and confidentially interviewed. Treatment outcomes were identified from results of sputum smear examinations for acid fast bacilli.

RESULTS:

Although all patients were recorded as having received DOT. More than a quarter of patients (26.5%) did not actually receive it. The 53 patients who were not directly observed were much more likely to have treatment failure or relapse, as compared to those who had received DOT (45% vs 3%, relative risk 16.6, 95% confidence intervals 6-46, $P< 0.001$). Women were somewhat less likely than men (61% vs 76%), $P = 0.06$) to receive DOT. Non-receivers of DOT accounted for 86% (24/28) of treatment failures or relapses.

CONCLUSION:

Patients treated without direct observation have a substantially higher risk of adverse outcome than those treated under direct observation. To be maximally effective, the DOTS programme must be both confidential and convenient.

4. Human immunodeficiency virus-related tuberculosis and primary drug resistance in Bangkok, Thailand:

J. Punnotok, N. Shaffer, T. Naiwatanakul, U. Pumprueg, P. Subhannachart, A. Ittiravivongs, C. Chuchotthaworn, P. Ponglertnagorn, N. Chantharojwong, N. L. Young, K. Limpakarnjanarat, T. D. Mastro.
INT J TUBERC LUNG DIS 4(6): 537-543, 2000 IUATLD

Summary:

SETTING:

Central Chest Hospital, a 500 bed referral hospital near Bangkok with a large out patient department.

OBJECTIVES:

To determine human immunodeficiency virus (HIV) seroprevalence among patient with pulmonary tuberculosis (TB) and compare HIV positive and HIV negative TB patients.

DESIGN:

From July 1995 through June 1996 a cross sectional study was conducted of newly registered adults (≥16 years old) with suspected pulmonary TB.

RESULTS:

Of 2587 newly registered patients with suspected pulmonary TB, 2019 (78%) received HIV pretest counseling and 1816 (90%) consented to testing. Of these 364 (20%) were HIV-seropositive. Among 1091 patients with baceriologically confirmed TB, HIV seroprevalence was 22%. HIV-positive patients were more likely to be young, unemployed, single men and to have a history of injection drug use. HIV-positive patients with first-episode TB were more likely to have Mycobacterium tuberculosis strains resistant to isoniazid (10.9% vs 3.5%; P = < 0.001), refampicin (9.4% vs 2.9%; P<0.001) and at least isoniazid and rifampicin (multi drug-resistant TB [MDR-TB]; 5.2% vs 0.4%; P<0.001)

CONCLUSION:

HIV prevalence is high among TB patients at this Bangkok hospital and is associated with drug resistance, including a 12 times higher risk of MDR-TB. These findings underscore the urgent need to assure adherence to completed, effective TB treatment regimens for all patients, including persons who are potentially difficult to manage such a injection drug users.

5. Diagnosis of Tuberculosis under RNTCP: Examination of Two or Three Sputum Specimens:

Rohit Sarin, S. Mukerjee, Neeta Singla and P.P.Sharma
Ind. J. Tub. 2001, 48,13

Summary:

The Revised National Tuberculosis Control Programme (RNTCP) recommends examination of three sputum smears for diagnosis. This may not practicable under all conditions, specially, in difficult areas. It further adds to the cost of diagnosis and cause inconvenience to patients. In order t study the diagnostic yield of examining only two smears and the additional yield by the third smear, a retrospective study of the data from the RNTCP area of the LRS Institute was carried out for the years 1998 and 1999.

In 1998, in all, 719 sputum positive patients were diagnosed out of 3738 new chest symptomatic examined (19.2%) and in 1999, there were 1044 sputum positive patients from 4189 new chest symptomatic examined (24.9%). The diagnostic yield of a single sputum specimen examined is insufficient under field conditions, especially where the sputum positive is low. However, sputum positivity of two or more sputum smears did not affect diagnostic yield. Further, of the three sputum smears examined (spot, early morning, spot) the early morning specimen had the best result.

It is concluded that under field conditions, two sputum smears (one of which is early morning) is as effective as three smears for screening of chest symptomatic. Reduction in the number of smears to two is expected to reduce cost (both for patients as well as health care provider) without compromising quality. However, before changing national programme policy, more studies in different situations (rural areas, difficult areas, etc.) are recommended.

6. Public-private partnership in tuberculosis control: experience in Hyderabad, India.

K. J. R. Murthy, T. R. Frieden, A. Yazdani, P. Hreshikesh.

INT J TUBERC LUNG DIS 5(4):354-359, 2001 IUATLD

9. Screening tuberculosis suspects using two sputum smears:

A. D. Harries, N. B. Mphasa, C. Mundy, A. Banerjee, J. H. Kwanjana, F. M. L. Salaniponi.

INT J TUBERC LUNG DIS 4(1):36-40, 2000 IUATLD

SETTING:

Ntcheu district hospital, Malawi.

OBJECTIVE:

To access a screening strategy for tuberculosis (TB) suspects using two sputum smears.

DESIGN:

A strategy of screening all TB suspects with two sputum smears for 6 months (1 July-13 December 1998) was compared with the period 1 January to 30 June 1998 during which the strategy of screening TB suspects with three sputum smears was in use. All chest radiographs of patients with negative sputum smears were assessed and in those with pulmonary cavities and extensive disease a third sputum smear was examined. Data were collected from the laboratory sputum register and the TB registers. The two six-month periods were compared.

RESULTS:

In the laboratory register, using a two sputum strategy 186 (16%) of 1152 TB suspects were smear positive a result that was no different than when the three sputum strategy was used where 173 (16%) of 1106 TB suspects were smear positive. The clinical pattern of TB using the different screening strategies was similar with 58% of registered patients smear positive with the two sputum strategy and 54% smear positive with the three sputum strategy. In the first 6 months 3177 sputum smears were examined compared to 2266 smears in the second 6 months a 29% reduction in the number of smears examined. The cost of consumables using the strategy of three sputum smears was US $ 731 compared with US $ 521 using the strategy to two sputum smears.

CONCLUSION:

Screening TB suspects using two sputum smears is as effective as screening using 3 sputum smears and is associated with less laboratory work and savings in costs.

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Wel-come news

Wel-come to New Secretary General of SAARC

The SAARC TB Centre family has the honour to welcome
His Excellency Mr. Q.A.M.A. Rahim, the Secretary General of SAARC

His Excellency Mr. Q.A.M.A. Rahim was born in Bangladesh in 1942.

He is M. Sc. in Chemistry from University of Dhaka. He taught in the University of Engineering and Technology, Dhaka (now BUET) for 4 years.

He was trained as a diplomat at the Pakistan Civil Services Academy at Lahore, served at the Ministry of Foreign Affairs at Islamabad for about a year and posted out to the Embassy of Pakistan in Tokyo in 1970.

Mr. Rahim was appointed as the first Charge d' Affairs of Bangladesh to Japan and he opened the Bangladesh Embassy in Tokyo in March 1972.

He served at the Bangladesh Missions in London, Doha, Washington DC, New York and Islamabad. He also served at the Ministry of Foreign Affairs in Dhaka as Director. He was the Consul General in Karachi, Pakistan (later Deputy High Commissioner when Pakistan rejoined the commonwealth).

In 1990, he joined the SARC Secretariat at Kathmandu on deputation. He was Director at the Secretariat till 1992 when he reverted back to the Government of Bangladesh and joined the Ministry of Foreign Affairs as Director General in charge of SAARC and South Asian Affairs. While serving in the post, he was the Chief Coordinator of the Seventh SAARC Summit held in Dhaka in 1993.

Mr. Rahim appointed as the High Commissioner for Bangladesh to Pakistan, Australia, New Zealand and Fiji.

Before joining as the Secretary General, he had been serving as an Officer on Special Duty (Secretary), Ministry of Foreign Affairs, Bangladesh. Mr. Rahim has taken over the charge as the Secretary General of the South Asian Association for Regional Cooperation (SAARC) from 11 January 2002.

Visit of Hon'ble Minister:

Hon'ble Mr. Mohan Bahadur Basnet, Minister of State for Health, His Majesty's Government of Nepal visited SAARC TB Centre and National TB Centre on 19th November 2001. The Director, Deputy Director and General Services Staff of the Centre welcomed the Minister of State at the Centre. Introduction of SAARC TB Centre and its achievements was presented by the Director for the information to the Minister of State.

Visit of SAARC Regional Director:

Mr. Yaqub Malik, Director, SAARC Human Resources Development Centre, Pakistan visited SAARC TB Centre on 10th October 2001. Director, Deputy Director and General Services Staff welcomed Mr. Malik to the STC. During his stay he observed the activities of the STC presented by the Director.

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Letters to Editor

Dear Editor:

I chanced upon your esteemed magazine STC's Newsletter in the library of Burdwan Medical College. Browsing through the STC's Newsletter, I became interested in it and am now an avid reader. I am currently engaged in teaching in Burdwan Medical College and the Newsletter has helped me immensely in my research work and in creating awareness about Tuberculosis among my patients.

Dr. Goutam Chakrabarty, M. D.
S/O Dr. A. K. Chakrabarty, M. D.
Ranisayar North Ghat
Burdwan, West Bengal, India.
PIN – 713 101

Dear Readers:

We have received many letters and acknowledgements regarding our publications specially for STC Newsletter. Would you please send critical comments, suggestions articles and information on recent developments taking place in the field of TB and HIV/AIDS control to make STC Newsletter more informative and useful to our readers.

Thank you.

Editor

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Thimi, Bhaktapur, Nepal.