



In this issue

STC News:

1. 20th. Session of Standing Committee
2. Eighth SAARC Summit of Head of States or Governments of Member Countries of South Asian Association for Regional Cooperation in New Delhi.
3. Seminar on Tuberculosis Control Programme Through Primary Health Care Approach in SAARC Countries.
4. 4th. Governing Board Meeting of the SAARC Tuberculosis Centre.
5. Trainers' Training for District Tuberculosis Control Programme in SAARC Countries.

Special Articles and Technical Information on Tuberculosis:

1. TB Control Programme in India, Progress and Prospects, by Dr. A. K. Mukherjee, DGHS, India.
2. Scenario of Tuberculosis in SAARC Region and WHO Recommended Strategy of TB Control, by Dr. Prahlad Kumar, Dy. Director, STC.
3. The Hold Chain - by Dr. Ian Smith.

Wel-come News:

1. Establishment of Library in SAARC Tuberculosis Centre, Kathmandu.
2. Visit of SAARC Tuberculosis Centre.

Proposed Programmes of SAARC TB Centre

Letters to the Editor:



*Inauguration of the 4th Meeting of STC Governing Board at Kathmandu
31st. Jan-1Feb. 1995*

SAARC Tuberculosis Centre Newsletter is published every 6 months with report on the works, decisions, important meeting of the centre and recent important information on Tuberculosis.

SAARC TUBERCULOSIS PUBLICATION

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TWENTIETH SESSION OF THE STANDING COMMITTEE

Twentieth Session of the Standing Committee was held in New Delhi on 27-29 April 1995.

The Standing Committee considered and approved the report of the Fourth Governing Board of SAARC Tuberculosis Centre (STC) held in Kathmandu on 31 January to 1 February 1995.

The report of the STC Governing Board contained the achievements of the centre, budget and programme for the coming fiscal year 1995-96.

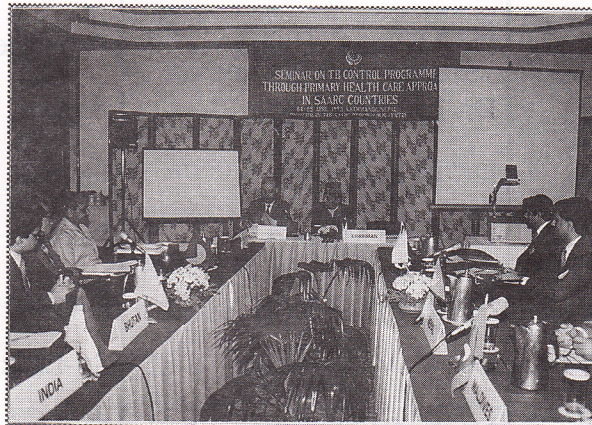
EIGHTH SAARC SUMMIT

Eighth SAARC Summit of Heads of States or Governments of SAARC Member Countries was held in New Delhi on 2-4 May, 1995. The Delhi declaration was issued on 4th May 1995 after completion of the meeting.

The following areas are highlighted in declaration:-

1. SAARC Decade
2. Regional Cooperation
3. Eradication of Poverty in South Asia
4. SAARC Preferential Trading Arrangement (SAPTA)
5. Integrated Programme of Action
6. Regional Centres
7. Women in Development
8. Children
9. Youth
10. Persons with disability
11. Shelter
12. Literacy
13. Environment
14. Anti-terrorism
15. Drug trafficking
16. Science and technology
17. People to People contact
18. South Asian Development Fund (SADF)
19. Projection of Collective Position
20. Security of small states
21. International Political Development
22. International Economic and social issues
23. Special measures for the least developed and land-locked countries
24. Dates and venue of the ninth meeting of the SAARC Heads of States or Government.

SEMINAR ON TUBERCULOSIS CONTROL PROGRAMME THROUGH PRIMARY HEALTH CARE APPROACH IN SAARC COUNTRIES Kathmandu, 4 - 5 APRIL, 1995.



1. The Seminar on Tuberculosis Control Programme through Primary Health Care approach in SAARC Countries was held in Kathmandu on 4 - 5 April, 1995. Delegates from BANGLADESH, BHUTAN, INDIA, NEPAL, PAKISTAN and SRI LANKA participated in the Seminar. The name list of the participants is given on the next page.
2. Dr. T. M. Shakya, Director, SAARC Tuberculosis Centre, made the welcome speech.
3. The Seminar was inaugurated by Dr. Kalyan Raj Pandey, Director General of Health Services, His Majesty's Government of Nepal.
4. The Deputy Director of STC, Dr. P. Kumar, proposed the Vote of Thanks. He expressed his profound gratitude to the Member States of SAARC for sending their delegates to the Seminar, and officials of His Majesty's Government of Nepal, Ministry of Health, Ministry of Foreign Affairs and SAARC Secretariat for their kind co-operation and co-ordination to organize this Seminar.

**Seminar on TB Control Programme through Primary Health Care Approach in
SAARC Countries
4-5 April, 1995, Kathmandu
Organized by: SAARC Tuberculosis Centre**

NAME LIST OF PARTICIPANTS AND OBSERVERS

S. No.	Name	Country
1.	Dr. A. K. Md. Ahsan Ali	Bangladesh
2.	Dr. M. K. A. Hyder	Bangladesh
3.	Dr. Pem Namgyal	Bhutan
4.	Dr. L. B. S. Dey	India
5.	Dr. Tariq Masood	Pakistan
6.	Dr. Anwar Janjua	Pakistan
7.	Dr. W. V. Senaratne	Sri-Lanka
8.	Dr. K. B. Shrestha	Nepal
9.	Dr. L. R. Pathak	Nepal
10.	Dr. T. M. Shakya Director	SAARC Tuberculosis Centre
11.	Dr. P. Kumar Deputy Director	SAARC Tuberculosis Centre
12.	Dr. S. B. Pande	Nepal (Observer)
13.	Dr. S. S. Mishra	Nepal(,,)
14.	Dr. D. P. Manandhar	Nepal(,,)
15.	Mr. A. R. Tuladhar	Nepal(,,)

DISCUSSIONS AND OBSERVATIONS :

The SAARC Countries had an opportunity to meet in Kathmandu on 4th. and 5th. April 1995 to discuss "Tuberculosis Control Programme Through Primary Health Care Approach".

After detailed presentations and discussions among Member States, it was the consensus that Tuberculosis Control services have been integrated in all Member States through different approaches. It has been observed in the meeting that the health workers are not yet fully motivated for Tuberculosis Programme. The staff are not adequately placed in position. They face difficulties in carrying out proper supervision due to lack of transportation and knowledge. There is often shortage of anti-TB drugs at the peripheral units. Information, Education and Communication system including monitoring and evaluation of the programme are not intensified properly. It has been further identified in the meeting that the quality control of the laboratory set-up at Primary Health Care level are lacking. The proper referral mechanism is not yet established to support the Primary Health Care services.

To have effective service delivery of Tuberculosis control at the grass root level all Member Countries are having the same strategies of Tuberculosis Control, i.e.

- to achieve cure rate to over 85 %, and
- to increase case detection to over 70 % (once cure rate has achieved to over 85 %).

However, there is scope for improvement in specific areas.

THE FOLLOWING ARE THE RECOMMENDATIONS:

1. To streamline Primary Health Care delivery in furtherance TB Control, identified deficiencies are to be rectified and job responsibilities specific to TB Control are to be incorporated at all levels of health system.
2. To strengthen co-ordination and co-operation among Member Countries by smooth flow of information on Tuberculosis Control to STC and feedback to the Member States;
3. To exchange experts on TB Control among SAARC Countries to gain experience from each other's programme;
4. To organize seminar/workshop in all Member Countries by rotation on uniform recording and reporting system and progress of activities on TB Control;
5. To establish referral laboratory at SAARC Tuberculosis Centre for quality control of TB bacteriology, Drug Sensitivity and Bioavailability for Member Countries.
6. To reserve seats for P.G. Diploma/Degree in Tuberculosis for Medical Officers working in the National Tuberculosis Control Programme, subject to contractual obligation to work in the programme for atleast 5 years after P.G., in identified teaching institutions in the Member Countries.

Fourth Meeting of the Governing Board of the SAARC Tuberculosis Centre (STC)

Kathmandu, Nepal 31 Jan. to 01 Feb. 1995.



Introduction:

At the invitation of His Majesty's Government of Nepal and the Director, SAARC Tuberculosis Centre (STC), the Governing Board of the STC held its Fourth Meeting in Kathmandu on 31 Jan. & 01 Feb. 1995. The Meeting was attended by Members of the Governing Board from all Member States and the SAARC Secretariat was represented by Mr. Humayun A. Kamal, Director.

The Meeting was inaugurated by Hon'ble Minister for Health, Mr. Padma Ratna Tuladhar, His Majesty's Government of Nepal. Hon'ble Minister for Health in his

Inaugural Address welcomed the participants to Kathmandu. He emphasized the need for enhanced co-operation among the Member States for prevention and control of Tuberculosis, which still constitutes a major public health problem in the Region.

The Board reviewed the progress in the implementation of the decisions of the Third Meeting of the Governing Board. The Director, STC, gave an overview of the progress made in the implementation of the Calendar of Activities of the Year 1994-95, which was earlier recommended by the Third Meeting of the Governing Board and approved by the Twelfth Meeting of the

Technical Committee of Health and Population Activities (Thimpu, 1-3 July 1994).

The Board noted with satisfaction that Seminar for TB Programme Managers was successfully held at the Centre's premises Funded by SAARC-JAPAN Special Fund. The Board recommended the following activities/programmes could be proposed by the Member States in the field of TB Control Programme for possible funding from Component I of SAARC-JAPAN Special Fund for the Year 1995-96:-

- i) Seminar for development of technical guidelines for multi-centric study on Annual Risk of Infection (ARI) in SAARC Region.
- ii) Seminar on HIV and Tuberculosis as co-infection & its impact on the TB Control Strategy in SAARC Region.
- iii) Skill upgrading of Professional personnel/GSS of the Centre.

The activities / programmes to be undertaken for the Year 1995-96:-

- 1) Workshop for preparation of health education materials.
- 2) Printing/production of health education materials.
- 3) Training Programme for regional/district TB programme co-ordinators.
- 4) Multi-centric study on TB bacillus drug sensitivity.
- 5) Training for Laboratory Technicians on TB Bacteriology.

6) Development of Pilot Demonstration Site on TB Control

- a) Training
- b) Printing of the guide book
- c) Drugs and Logistic
- d) Health education

7) Study tour for Director/Dy. Director.

8) Printing of Newsletters.

9) Purchase of books on TB and related diseases.

10) Subscription of Journals and newspapers.

Budget Provision for the Year 1995-1996:

The Director, STC gave a detailed report on various items of expenditures incurred during the Year 1994-95 under Institutional & Programme Cost Budgets and the present position of the Budgets.

(a) **Institutional Cost Budget for the Year 1995-96:**

The Board noted that the Institutional Cost Budget for the Year 1995-96 was less than the previous fiscal year.

(b) **Estimates of the Programme Cost for the Year 1995-96:**

The Board, noted that Program Cost Budget for the Year 1995-96 was much higher than the Institutional Cost Budget for the Year 1995-96. It endorsed the Programme Cost Budget for the Year 1995-96.

Discussion on Report of the Meeting of the Group of Experts (SAARC Secretariat - 20-22 December 1994) relating to SAARC Regional Centres.

The Director, SAARC Secretariat gave a brief introduction to this Agenda Item for the benefit of the Board Members. During the Meeting, the Directors presented their respective Working Papers and gave a brief over-view of the Centres' activities, highlighting constraints faced by them and suggesting possible remedies. The Group of Experts had felt that their recommendations on the Regional Centres should be placed before the next meetings of the respective Governing Boards for their comments.

Any Other Matter:

a) Audit of the STC's accounts:

The Director, STC referred to decision of the Third Meeting regarding audit of the STC's accounts for the Financial Years 1992-93 and 1993-94. He informed the Board that as per the existing practice, the accounts of the Centre was audited by two auditors from Nepal and Bangladesh.

The Board recommended the next Meeting of the Governing Board may be held in February/March 1996.

Vote of Thanks:

On behalf of all the Members of the Governing Board, the Member of the Governing Board from India thanked the Chairman for the efficient and charming manner in which he conducted the

deliberations of the Meeting. He also expressed appreciation to His Majesty's Government of Nepal and Director, STC for the warm hospitality extended to the Members of the Board and for making excellent arrangements for the Meeting.

Members of the Governing Board of the SAARC Tuberculosis Centre

Bangladesh:

Dr. A. K. Md. Ahsan Ali,
Director Micro-Bacterial Disease Centre
& Project Director, TB and Leprosy Control Services,
Dhanmondi R/A, Dhaka.

Bhutan:

Dr. Gado Tshering,
Deputy Superintendent,
Jigme Dorji Wangchuck National Referral Hospital, Thimpu.

India:

Dr. L. B. S. Dey,
CMO (TB), Ministry of Health & Family Welfare,
New Delhi.

Maldives

Dr. Ahmed Razee,
Senior Registrar in Medicine,
Male' Health Centre, Male'.

Nepal:

Dr. Dirgh Singh Bam,
Senior Chest Physician,
National Tuberculosis Centre,
Thimi, Bhaktapur(Kathmandu).

Pakistan

Dr. Muhammad Hussain Khan
Medical Superintendent
TB Centre, Rawalpindi.

Sri Lanka:

Dr. (Mrs.) C. Pitigala,
Director,
Respiratory Diseases Control Programme,
Walisara, Ragama.

**TRAINERS TRAINING FOR
DISTRICT TUBERCULOSIS
CONTROL PROGRAMME IN
SAARC COUNTRIES
4 TO 9 JULY, 1995, KATHMANDU**



A six day's training programme was organized by SAARC Tuberculosis Centre on 4 to 9 July, 1995 at Kathmandu. 17 participants and 2 facilitators attended the programme.

Participants:

2 from Bangladesh, 2 from India, 2 from Maldives, 9 from Nepal, 1 from Pakistan, 1 from Sri Lanka.

Facilitators:

Dr. B. Mahadev from India and Dr. P. Malla from Nepal.

Secretary of Health, HMG/Nepal, Mr. Jeet Bahadur Karki inaugurated the programme at a function held in STC training hall, on Tuesday, 4 July 1995.

Secretary of Health, Mr. Jeet Bahadur Karki extended a warm welcome on behalf of HMG/Nepal to the eminent experts in the field of tuberculosis from the SAARC countries, as well as other distinguished guests attending the ceremony. Stating the view that SAARC TB Centre has opened a

new area of opportunities for cooperation and technical support in National Tuberculosis Control Programme of the member counties.

Likewise, Dr. Dirgh Singh Bam, the Director, SAARC TB Centre made welcome speech and extended a warm welcome to all the delegates. Referring TB is a communicable disease, Dr. Bam emphasized the need that TB is a still a major public health problem in which must be controlled in the region. He expressed the confidence that such training programme will be helping us by providing more and more trained trainers in the field of TB control in this region.

Deputy Director of SAARC TB Centre, Dr. P. Kumar delivered vote of thanks to all the concerned member countries for sending their participants and other necessary helps. During the function, Mr. Prabal SJB Rana, Mr. Lila Prasad Sharma represented in the programme from SAARC Secretariat and Ministry of Foreign Affairs, HMG/Nepal respectively.

Programme was concluded on 9th July 1995. The concluding ceremony was chaired by Dr. T. M. Shakya, out-going Director of SAARC TB Centre. Mr. L. A. Choudhuri, Director, SAARC Secretariat, Mr. Lila Prasad Sharma, Ministry of Foreign Affairs, HMG/Nepal, Dr. D. S. Bam, Director, SAARC TB Centre, Dr. B. Mahadev, NTI, Bangalore, India, Dr. S. A. Shah, Participant, Pakistan and Dr. P. Kumar, Deputy Director, SAARC TB Centre, Kathmandu expressed their views on the TB control situation in the SAARC region.

**VISIT OF SRI LANKA BY DEPUTY DIRECTOR
UNDER THE PROGRAMME OF STUDY TOUR**



**Dr. C. Pitigala, the Director, Respiratory
Disease Control and other staff the
Chest Clinic, Galle with
Dr. P. Kumar**

Deputy Director, SAARC Tuberculosis Centre, Dr. P. Kumar visited Sri Lanka under the programme of study tour. He has observed the National Tuberculosis Programme and facilities available in Colombo Chest Clinic and Central chest Clinic, Galle, Sri Lanka.

Special articles and Technical Information on Tuberculosis

TUBERCULOSIS CONTROL PROGRAMME IN INDIA - PROGRESS AND PROSPECTS



By - Dr. A.K. Mukherjee
Director General
Health Services and
Chairman TB Association of India

1. PROBLEM OF TUBERCULOSIS

a) World Situation

After nearly four decades of introduction of specific chemotherapy for tuberculosis it is disheartening to note that the TB situation is deteriorating globally, over the years. It is estimated that at present nearly eight million cases occur annually and India and China together account for about half of them. Approximately three million people die of the disease which kills more adults each year than any other infectious disease. Even in the industrialized countries where it was considered to be on the decline not so long ago, the disease has been registering an increase in recent times. In the USA for example, the disease has increased by 20% between 1985-92, from a declining rate of 6% per year.

b) Indian Situation

It is estimated that about 1.5% of India's population, or about 14 million persons, could be affected with pulmonary tuberculosis. It is also known that nearly half of the adult population in the country must be infected with tubercle bacilli, who form the reservoir of those who would breakdown into active cases in the future. The chain of infection in the community is maintained primarily by a proportion of the patients who are smear positive, estimated to be about 3 to 3.5 millions.

2. HIV AND TUBERCULOSIS

There is a rapidly expanding TB-HIV co-infection and with a spread of HIV epidemiological situation of tuberculosis would deteriorate as they are synergistic. HIV infection has emerged as the strongest yet identified risk factor to allow latent tuberculosis infection to progress to overt clinical disease. The chances of developing tuberculosis in HIV-TB co-infected people increase to 10% every year from 10% for lifetime in people having only TB infection. With nearly half of Indian adult population having tuberculosis infection and HIV infection increasing with time, there is no end in sight as to how bad the dual epidemics might get.

3. DEVELOPMENT OF NTP

The strategy of our organized fight against tuberculosis for the first time in 1962 was developed to meet the demands of the situation as above. It has been the result of a series of significant research findings of the then Tuberculosis Chemotherapy Centre Madras (TCC) and the National Tuberculosis Institute Bangalore (NTI). The programme had taken into account the scarcity of resources, social customs and prejudices of the people finding expression as their 'felt need', and the technological breakthrough that domiciliary chemotherapy was as good as that administered institutionally. The operational aspects of the strategy, to deliver the programme through primary health care,

were demonstrated to be both feasible and applicable, its potentials worked out and finally approved by the Govt. of India.

4. OBJECTIVES OF NTP

The National Tuberculosis Programme has the following objectives:

- i) To detect as large a number of TB patients as possible.
- ii) To effectively treat all patients so as to render infectious cases non-infectious
- iii) To establish DTC in every district.
- iv) To extend SCC in all districts.
- v) To strengthen existing state TB training & demonstration centres by providing lab. culture facilities.
- vi) To augment health education activities.

5. ORGANISATION OF NTP

Since 1962, the socio-political unit of a district with an average population of 1.5 million has been made the operational unit of the nation wide programme against tuberculosis, i.e., National Tuberculosis programme (NTP). In the district, the programme is implemented through the District TB Centre(DTC and a number of Peripheral health Institutions (PHIs).

The District Tuberculosis Programme (DTP) is supported by a State level organisation for coordination of the tuberculosis activities in the state and supervision of the DTPs. The Central level at DGHS has the responsibility of framing the overall policies, formulating the programme and its planning, carrying out monitoring and evaluation, ensuring logistic support (drugs, supplies etc.) and training. The Central level also has the responsibility for obtaining international support for the

programme. The organisational scheme is given in.

6. FUNCTION OF DTP

The functions of DTC are given in a series of manuals are produced for the key functionaries of the DTP who are trained at the NTL. Microscopes, reagents and drugs are supplied to every participating centre throughout the country besides vehicles for supervision by the district supervisory team.

7. PROGRESS OF NTP

a) Infrastructure

Of the 460 districts in the country 390 have been implemented under the NTP, with a DTC in each to coordinate the activities. This means a coverage for services of about 85%. However it is reported by Dr. Nagpaul that not more than 63% of the peripheral health institutions (PHIs) are implemented in the process as participating units. There is no doubt some progress has been made in the infrastructure creation under the NTP over the years, by way of implementation of the district Programme. The budgetary allocation under the programme has been increased from about Rs. 10 crores in 1989-90 to Rs. 46 crores in 1994-95.

b) Case Finding Activities

There is a substantial rise in the number of TB patients diagnosed, both sputum positive and negative, as well as in the proportional contribution made by the PHIs to the total diagnosed in a district as a whole. The level of performance of DTCs remained more or less the same over the years, at around 3000 sputum examinations carried out and detection of 400 smear positive patients. On the other hand, performance of PHIs had shown a substantial increase in terms of sputum examination and diagnosis of sputum positive cases. proportional contribution (%) by PHIs out of total achievements for the district both in

sputum examination as well as diagnosis of new cases has been rising 1978 through 1992.

c) **Treatment**

The failure to obtain a high treatment completion and absence of information on treatment results under NTP, however, remain a serious problem to be reckoned with. Only about 30% of DTPs are found to report on cohort analysis. Not more than 27% of patients were found to complete twelve monthly drug collections or more (Nagpaul¹), which is reported to have increased to 40% in 1992-93 (NTI²).

d) **Short Course Chemotherapy**

Until 1983, only conventional regimens were used under the NTP for all categories of patients. With the introduction of Short Course Chemotherapy (SCC) on a pilot basis in 18 districts initially, to be followed in more in stages, it was envisaged that a potent tool had been brought into operation. Currently, the SCC regimens are made available in 253 of the districts. Even though treatment completion on an average has improved to about 50% with the introduction of six months SCC drug regimens (NTI²), it is realized that in effect it still falls far short of the compliance required to obtain a cure rate of 85%, i. e., the expectation from a well managed SCC treatment programme.

e) **Supervision and Monitoring**

One of the key deficiencies in the functioning of the supervision and monitoring system of the programme activities under the NTP is the fact that not more than 50% of the PHIs are being supervised any time during the year, even though each needs to be visited by the DTP supervisors every quarter. The reporting by both the DTCs as well as the PHIs to the respective monitoring agencies are also found to be deficient. These observations of inadequate supervision by the DTCs along with

those on deficiency in coverage of the institutions for tuberculosis activity are considered to be significant lacunae in the process of rendering service to the felt need.

Thus, overall, it can be stated that even though the DTP presents a picture of encouraging progress, especially when seen in the context of a developing economy with its own pressures and compulsion, its policies and operations need some corrective actions.

8. **EVALUATION OF NTP**

In October, 1992, a joint GOI-WHO-SIDA evaluation of National Tuberculosis Programme was conducted and the following shortcomings were highlighted:

- i) inadequate budgetary outlays and shortage of drugs.
- ii) undue emphasis on X-ray instead of sputum testing for diagnosis.
- iii) poor quality of microscopy
- iv) emphasis on detection of new cases instead of achievement of cure.
- v) poor organizational set up and support for tuberculosis.
- vi) lack of consensus among practitioners regarding treatment regimes.

9. **THE REVISED STRATEGY OF NTP**

In view of these recommendations, steps have been taken in 1993 to take remedial actions to revise some of the activities under the NTP, with a **goal** to:

- i) reduce morbidity and mortality due to tuberculosis.
- ii) to cut the chain of transmission.

The **objectives** of the revised strategy of NTP are:

- i) emphasis on the cure of infectious and seriously ill patients of tuberculosis, through administration of supervised Short Course Chemotherapy, to achieve a cure rate of atleast 85%.
- ii) augmentation of the case finding activities to detect 70% of estimated cases, only after having achieved the desired cure rate. To achieve the above objectives the following **strategy** has been adopted.
 - i) use of sputum testing as the primary method of diagnosis among self reporting patients.
 - ii) augmentation of the peripheral level supervision through the creation of a sub-district supervisory unit.
 - iii) ensuring a regular, uninterrupted supply of drugs upto the most peripheral level.
 - iv) augmentation of organizational support at central and state levels for meaningful coordination.
 - v) training to programme personnel at all levels.
 - vi) intensive health education campaign.
 - vii) involvement of NGOs and private practitioners.
 - viii) operational research.

With WHO assistance, pilot projects on these lines are currently being run in Delhi, Bombay, Calcutta, Bangalore and Gujarat in total population of 2.3 million. The Project Areas already show signs of achieving a high sputum conversion rate of around 97% among the first cohort, results of which are just available, with a case fatality rate between 0-1%. The ration of sputum positive: negative patients is currently 1:1 in the project area, as against 1:4 in rest of India. It is envisaged to extend the project in phases in 5 states

and 10 metropolitan cities covering a population of 187 million, with World Bank support.

I would like to conclude here, no doubt with a note of hope in view of our progress in experimenting with the new strategy and the interest it has been able to generate towards tuberculosis control and among tuberculosis workers in this country and a response and helping hand from the agencies abroad. I would request the experts to organize the respective health programmes, including for tuberculosis, as per the National Guidelines and maintain them to a state of high efficiency through supervision and monitoring.

I take this opportunity to thank the SAARC TB Centre (STC) for making it possible for me to present my views. The STC, as all of us are aware, has been the fountain of most of the activities for the Tuberculosis Control in the region.

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SCENARIO OF TUBERCULOSIS IN SAARC REGION AND W.H.O. RECOMMENDED STRATEGY OF TUBERCULOSIS CONTROL

Dr. P. Kumar
Deputy Director
SAARC Tuberculosis Centre

Scenario of Tuberculosis in SAARC Region

Tuberculosis is a major public health problem in SAARC Region. 7 Member Countries - Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri-Lanka having about 5 million estimated TB patients. 2 million new

TB patients coming every year out of which 9,00,000 are sputum positive, responsible for spreading disease in community. 700,000 deaths occur in the region due to Tuberculosis every year. SAARC region bearing 25 % burden of the world TB problem.

TB CASES IN SAARC COUNTRIES

Country	Estimated number of sputum positive TB
Bangladesh	621,000
Bhutan	8,000
India	3,636,000
Maldives	1,000
Nepal	53,000
Pakistan	217,000
Sri Lanka	420,000
Total	4,956,000

Estimated Annual Risk of Infection, incidence and mortality due to Tuberculosis in the SAARC Region

S.No.	Country	Estimated ARI(%)		Expected Cases all forms (1000)	Expected deaths all forms (1000)	Death rate per (100,000)
		Average	Range			
1.	Bangladesh	1.50	2.00-1.00	202.8	83.5	68
2.	Bhutan	1.50	2.00-1.00	0.9	0.2	36
3.	India	1.70	2.50-1.00	1641.7	544.0	63
4.	Maldives	1.50	2.00-1.00	0.4	0.05	24
5.	Nepal	1.50	2.00-1.00	33.4	13.8	69
6.	Pakistan	1.00	1.50-0.70	128.2	48.7	38
7.	Sri Lanka	1.50	2.00-1.00	29.4	11.8	67

Assumptions:

- 1) 50% are smear-positive. In the SAARC region.
- 2) 50 (40 -60) smear positive cases per 100000 per each percent of ARI.
- 3) 1.22 smear-negative and extra-pulmonary case for each smear-positive case .
- 4) Cure rate of the SAARC region is 60%.
- 5) Case fatality among cases reported but not cured: Smear positive: 40%; Others: 30%
- 6) Case fatality among cases not treated: Smear positive: 55%; Others: 43%
- 7) Additional HIV- related cases are taken into account.

Source: -Demographic data for Health Situation Assessment and Projections, WHO, Geneva, 1993.

W.H.O.'s Recommended Strategy of TB Control

The combination of drugs recommended by WHO is called short-course chemotherapy. These TB drugs cost as little as \$ 13 per person in some parts of the world and are at least 95 percent effective. If properly used, these medicines would make it possible to virtually eliminate TB as a public health threat.

Only One Problem....

TB medicines must be taken for a long time—at least 6 months. Frequently, once the coughing ends and other symptoms go away, TB patients lose the incentive to continue taking their medicines.

When TB treatment is interrupted or incomplete, the bacilli in a person's lungs can survive, multiply, or form a more dangerous form of TB known as drug-resistant TB. The person is very likely to become sick with TB again and infect others. Only this time the same medicines may not work.

The Key to Controlling TB

This is why the key to controlling TB is to make sure that patients take all of their medicines regularly. The best way to ensure this is for health workers to watch as patients swallow their medicines. This directly observed treatment, short-course, or "DOTS", is the key to stopping TB at the source.

Inspecting Progress

Unfortunately, it is not as simple as instructing all of the world's health workers to "be sure your TB patients take their medicines." Many TB patients are poor and live in remote villages, so it can be difficult to motivate health workers to verify that their TB patients are completing treatment and that a high percentage of people are cured.

This is why WHO works with governments to introduce a number of innovative methods to encourage directly observed treatment, short-course. For example, WHO encourages governments to establish a national TB

programme to monitor the effectiveness of local health services in fighting the epidemic. WHO believes that progress in curing TB patients can be expected only when it is frequently inspected.

Stopping TB at the Source

When a good evaluation and monitoring system is in place, health care workers are more accountable for making sure that patients take all of their medicines. And when TB patients take all of their medicines, three important objectives are accomplished:

The patients is cured.

The patient has more than a 95 percent chance of being successfully cured and avoiding becoming sick with the disease again. If no treatment is provided, most persons who are sick with TB will die within five years.

The Spread of the Disease Is Stopped.

The patient is no longer infectious, and cannot pass the disease on to others. It is estimated that if a person is not cured and remains infectious, she or he will infect, on the average, 10 to 15 other people in a year's time.

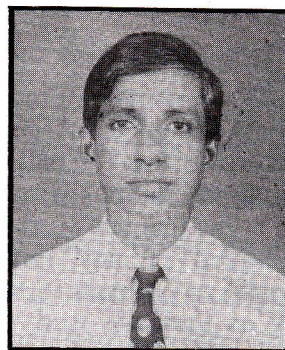
Multidrug-Resistant TB Is Prevented.

When the patient is successfully cured, it is virtually impossible for that person to develop incurable forms of TB and to spread these bacilli to others.

Wel-come News:

NEW DIRECTOR IN SAARC SECRETARIAT FROM BANGLADESH

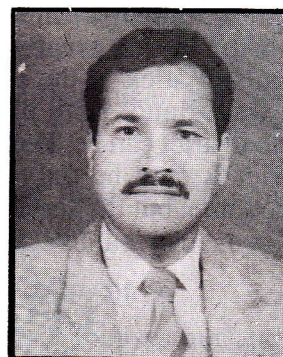
Mr. Liaquat Ali Choudhury from Bangladesh joined as new Director in the SAARC Secretariat on 5 July 1995, succeeding Mr. Kamal who served the Secretariat for 3 years. A career diplomat belonging to the Bangladesh Foreign Service. He served in different capacities in the Ministry of Foreign Affairs in Dhaka. He has also been closely associated with SAARC activities during the Seventh SAARC Summit in Bangladesh, 1993.



Mr. L. A. Choudhuri

APPOINTMENT OF DIRECTOR,STC

Dr. Dirgh Singh Bam has been appointed as the Director, SAARC Tuberculosis Centre from the month of July 1995. Dr. Bam has been working in National Tuberculosis Control Programme since 1979. Dr. Bam is M.D. in General Medicine and Post Graduate in Tuberculosis and Medical Epidemiology. Now he is Director of NTC also. In 1993 Dr. Bam was chairman of Governing Board.



Dr. Dirgh Singh Bam

Establishment of Library:

Recently a library has been established in STC. We are trying to collect all the books, journals and other information pertaining to Tuberculosis and its control from within and out side of SAARC region.

Visit of SAARC Tuberculosis Centre by eminent officials:

The Director, STC have pleasure to welcome eminent officials to the centre.

- Dr. Donald A. Enarson,
Scientific Director
IUAT/LD, Paris.
- Dr. Ghazala Ansari,
Director, Ojha Institute of Chest Diseases,
Karachi, Pakistan.
- Dr. R. C. Jain,
Director, L. R. S. Institute for TB and
Allied Diseases,
New Delhi, India.

Farewell to Dr. Thir Man Shakya:

Dr. Thir Man Shakya, out-going Director of SAARC Tuberculosis Centre has been retired from the post of Director from the month of July 1995. We all STC staff wish him a very happy and prosperous life.

Dr. W. V. Senaratne,
Chest Clinic, Kendy,
Sri Lanka.

Dr. L.B. S. Day'
C.M.O. TB Division,
Dte.G.H.S., New Delhi,
India.

Dr. B. Mahadev
CMO, NTI, Bangalore,
India.

THE HOLD CHAIN

Dr. Ian Smith
Advisor
National Tuberculosis Programme
Nepal.

Compliance or Adherence ? Arguments rage over which word to use for patients taking anti-tuberculosis medicines. Proponents of the latter term argue that the word compliance has paternalistic overtones, implying that patients are passive partners in the process, simply doing as they are told, and taking drugs as ordered.

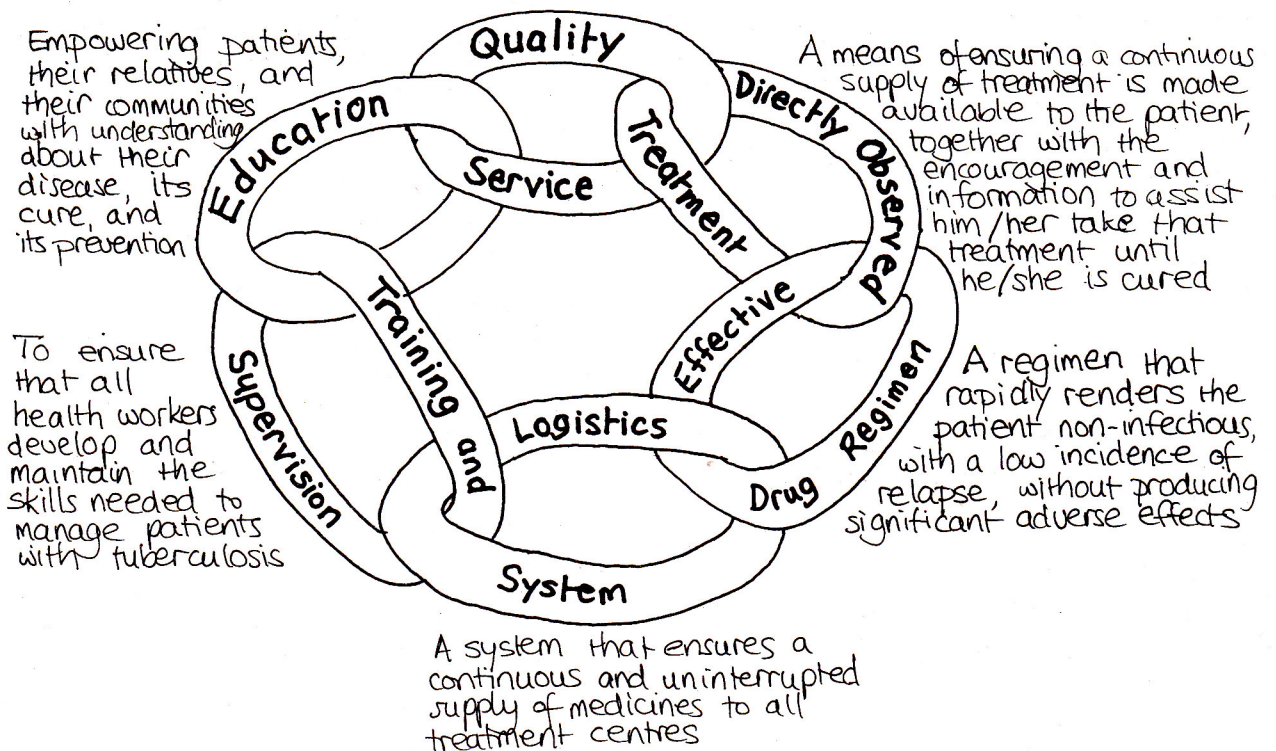
Adherence too has its problems - it suggests that patients 'stick' to their treatment. This is equally misleading, as it's usually the health service that fails to stick to the patient, and not the other way round. Here in Nepal the cure rate in one district can be 85 %, whilst in the next district it may be only 40 %. The patients are the same, but the services are

different. Clearly, the main factors influencing treatment completion are the characteristics of the health service - and not the characteristic of the patients.

What are the features of the health service that determine treatment completion ? Six factors are particularly important, and together constitute what we can call the 'Hold Chain' - hold coming from the phrase, "case holding" (which suffers from the same paternalistic overtones as "compliance"!). The Hold Chain parallels the "Cold Chain" of the Expanded Programme of Immunization - a major difference being that the Cold Chain is a linear model, whereas the Hold Chain is circular.

THE 'HOLD CHAIN'

- * Appropriate * Equitable
- * Accessible * Efficient
- * Acceptable * Effective



The first link in the Hold Chain is an effective drug regimen. This must be easily tolerated by the patient, with few adverse effects. It must rapidly render the patients non-infectious, and have a low relapse rate following treatment completion.

An effective treatment regimen is useless if there is no way of getting the drugs from the manufacturers to the patient. An efficient and reliable logistical system is essential to ensure that health units offering treatment to patients with tuberculosis never run out of drugs.

The drugs may get to the health units, but if health workers do not know how to use them appropriately, the right patients won't get the correct numbers and dosages of drugs, for the proper period of time. Skilled staff are an essential part of the hold chain, and need ongoing training and supervision to maintain their skills.

Skilled staff using effective drugs will be frustrated in their efforts if patients don't come to use the health service. Two links in the chain may prevent patients from doing so. First, if the community are not aware of the services available, and not aware of the symptoms of tuberculosis, they won't know to come to health units for diagnosis and treatment. An educated and empowered community is more likely to make appropriate use of available services.

The second related factor is that of quality of service. Even if patients are aware of the symptoms of tuberculosis, they may choose to avoid using it, if it is not acceptable, appropriate and accessible to them.

Efficiency, equity and effectiveness are other indicators of quality.

The final link in the chain is supervision of treatment. For patients this means Directly Observed Treatment (DOT), with follow-up of those who stop taking their medicines. Supervision of the patients is just one part of the overall system of supervision though, which starts at the top with the central unit of the National Tuberculosis Programme, and includes all the other levels- regional, districts and treatment centre. Supervision is a means of ensuring a continuous supply of treatment is made available to the patient, together with the encouragement and information necessary to assist him/her take that treatment unit he/she is cured.

If any of the links are missing, the Hold Chain breaks, and the patient will not be able to complete treatment.

The Hold chain focuses our attention on the health system and on what we as health workers can do to ensure that patients are given every opportunity to complete the treatment they need. As a model, it can be used in teaching to help health workers look at their own activities in aiding patients complete their treatment, and in management as a tool to look at the different aspects of the health service and identify weak areas that need strengthening. Until we can ensure a strong and sustainable Hold Chain, we will not achieve our objectives in the SAARC region - high cure rates in patients with tuberculosis, and control of this dreadful disease.

Proposed Programme of SAARC Tuberculosis Centre

1. Workshop for preparation of health education materials to fulfill the need of the SAARC Region.

2. Training programme for regional/district TB programme co-ordinators in SAARC countries.

3. Training for Laboratory Technicians on TB Bacteriology in SAARC countries

Letters to Editor:

Dr. D. R. Nagpaul,
Vice Chairman,
The TB Association of India.

"Dr. Kumar,
Thank you for your letter No. STC/02/ICC/1995-351 dated 20th Feb. 1995, enclosing a copy of Vol. III of the SAARC/STC Newsletter which is both informative and educative....."

Dear Sir,

Thank you very much for your letter and a copy of quarterly technical publication, the Indian Journal of Tuberculosis and other books for STC, library.

- Editor

Dr. S. D. Purohit,
Principal & Controller,
J.L.N. Medical College and
Attached Hospitals, Ajmer, India.

" It is indeed a great pleasure to receive your letter dated 29th Nov. 1994 and STC Newsletters."

Dear Sir,

Thank you very much for your kind letter.

-Editor

Dr. N. K. Jain,
Bacteriologist
New Delhi TB Centre, Jawahar Lal Marga
New Delhi - 110 002, India.

".....I find it very important the establishment of STC, TB is no more a country problem, but a regional as well as now a global problem.....I would like to put my name on your mailing list of STC Newsletter".

Dear Dr. Jain,

Thank you very much for your response towards the STC Newsletter. Your name is put in our mailing list.

Thank you very much.

- Editor

Dr. S. K. Satpathy,
Regional Director,
Regional Office for Health & Family Welfare
Government of India.

".....It was a pleasant surprise to receive the STC Newsletter from your end. I must congratulate you to bringing out this STC Newsletter which will be very much informative regarding the activities of the STC. I will try to contribute to the section "Letters to the editor":

Dear Dr. Satpathy,

Thank you very much for your kind letter and we always appreciate your contributions to this STC Newsletter.

- Editor

Dr. P Chandarsekher,
Epidemiologist & Director, NTI (Retired)
India.

"..... I am happy to get STC Newsletter of December 1994."

Dear Dr. Chandrasekher,

Thank you very much for your letter regarding the STC Newsletter.

- Editor

Dr. M. A. Rahim,
Prof. & Head of the Dept. of TB & Chest Diseases (Retd.)

"I have received your Newsletter Vol No. II and III. Though I have retired, I am interested in active participation of activities of SAARC TB programme."

Dear Dr. Rahim,

Thank you very much for your response towards the Newsletter.

- Editor

Dr. G. Visweswaraiiah,
Joint Director (Tuberculosis)
Lady Willingdon State TB Centre
Bangalore, India.

"....I am glad to receive the copy of STC Newsletter of Dec.1994, I have gone through the STC Newsletter which contains various TB controlling measure evened in SAARC countries, discussions made in conference and review meeting of TB experts which are really help...."

Dear Dr. Visweswaraiiah

Thank you very much. - Editor

Dr. Pravash Chandra Pattanaik,
Deputy Director of Health Services (TB)
Orisa, India.

"..... It is a great pleasure for me to receive the STC Newsletter Vol III. This provides important information on TB."

Dear Dr. Pattanaik,

Thank you very much for your letter.
-Editor.

Dr. Vikram Kumar Jain,
Prof. & Head,
Dept. TB & Respiratory Diseases,
SP Medical College, Bikaner, India.

Thank you very much for sending the STC Newsletter, which is very much informative and knowledgeable ."

Dear Dr. Jain,

Thank you very much.

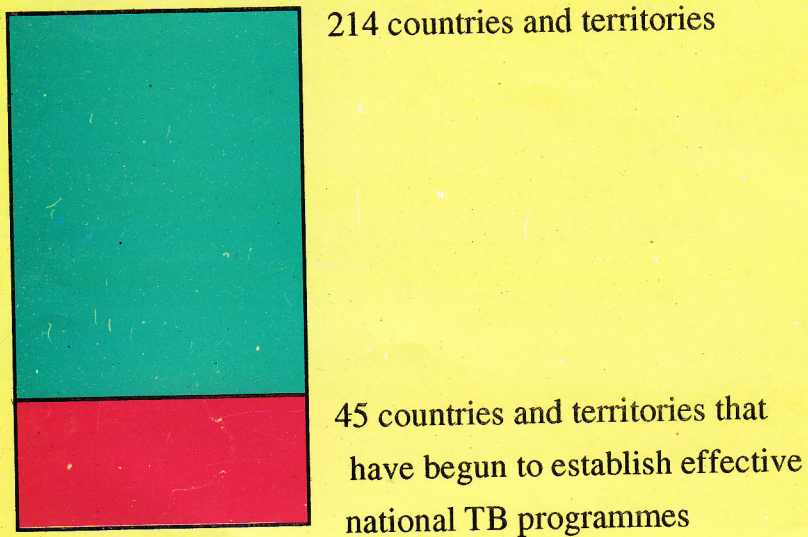
- Editor.

STC Newsletter, Wel-comes letters to the editor. Responses and Comments regarding the information included in this issue are most desirable. Letters may be edited for reasons of clarity or space.

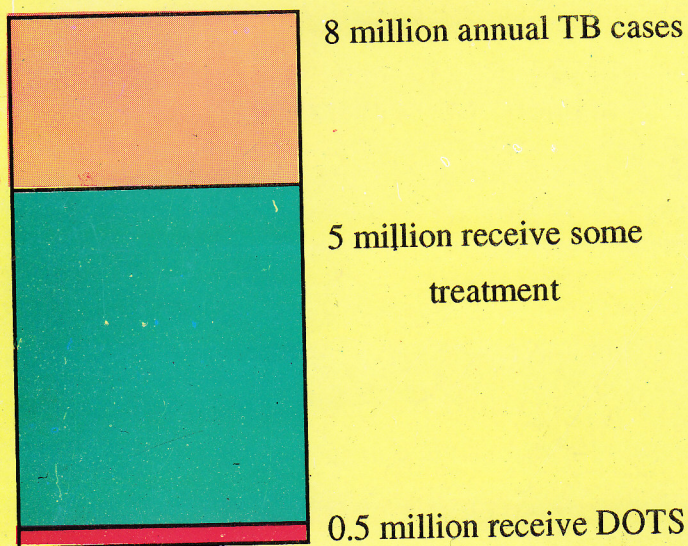
Thank you all.

- Editor

National TB Programmes



DOTS Is Not Used



Source: WHO TB Programme
(WHO Report on the Tuberculosis Epidemic, '95)

(DOTS = Directly-observed treatment, short-course)