



STC

Newsletter

Vol. XII

No. 2

July-December 2002

**We Wish You
A Very
Happy New
Year
For Peace,
Progress
and
Prosperity**



(The Twelfth Meeting of the Governing Board of SAARC TB Centre)

2003

CONTENTS

Report on Activities:

- | | |
|---|----|
| • Twelfth meeting of the Governing Board of STC | 2 |
| • SAARC Consultative Meeting on TB and HIV/AIDS | 5 |
| • SAARC Meeting of Heads/Directors of Focal Reference Laboratory | 8 |
| • Activities under awareness programme: | |
| • Partnership programme with School Students | 11 |
| • Partnership programme with industry Workers | 13 |
| • Training of Trainers on TB Control Programme Management | 14 |
| • Training of Regional/District Level TB Programme Managers to Strengthen their Skills in Data Management | 16 |
| • Meeting to develop SAARC Regional TB and HIV/AIDS Epidemiological Network | 19 |
| • Audit of the Accounts of STC | 21 |

Page No.

Special Articles and Technical Information on TB:

- | | |
|---|----|
| • HIV/AIDS and HIV/TB Coepidemic within SAARC Region Countries - Why are SAARC Countries at Risk? | 22 |
| • Low prevalence ≠ Low Risk for HIV with in SAARC Region: Appearances can be deceiving | 28 |
| • Ambulatory DOTS experience in Anuradhapura District, Sri Lanka | 31 |

Page No.

Abstracts:

Welcome News:

- | | |
|--------------------------------------|----|
| • STC Visit of different dignitaries | 38 |
|--------------------------------------|----|

Proposed Programmes:

34

38

38

SAARC Tuberculosis Publication

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

Editors: Dr. Mallika Samaratinga, RO, STC
Dr. B.P. Rijal, Microbiologist, STC
Dr. Md. M. Rahman, Epidemiologist, STC

STC Newsletter is a regular publication of SAARC TB Centre, it includes reports on activities, decisions of important meetings of the Centre and recent information on tuberculosis and its control

For more information and correspondence, please contact

SAARC Tuberculosis Centre, (Thimi, Bhaktapur), P.O. Box No: 9517, Kathmandu, Nepal, Tel: 6631048/6632477/6632601
Fax: 00977-1-6630061, E-mail: saarctb@mos.com.np, Website: www.saarctb.com.np

Report on Activities:

Twelfth Meeting of the Governing Board



(Meeting of the Governing Board Members)

The twelfth meeting of the Governing Board of SAARC Tuberculosis Centre (STC) was held on 18-19 November 2002 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 progress of the Centre and provides directives for the future course of action to be under taken by the Centre.

The meeting was inaugurated by the Secretary, Ministry of Health HMG, Nepal, Mr. Mahindra Nath Aryal. Welcoming the participants, Mr. Aryal expressed his appreciation for the work performed by the Centre to contain tuberculosis and check the dual infection of TB and HIV/AIDS. He extended his gratitude to Health

Canada for developing a project to address TB HIV/AIDS and the HIV-TB co-infection in the SAARC Member Countries.

Dr. D. S. Bam, Director, STC welcomed the Board Members and the guests at the inaugural session of the meeting.

Mr. Ahmed Sareer, Director, SAARC Secretariat extended a warm welcome to the participants on behalf of the SAARC Secretary General. He highlighted the challenges posed by TB and HIV/AIDS and the efforts being made by the SAARC to develop a regional response.

The Vote of thanks was delivered by Mr. Ibrahim Shaheem, Chairman of the Governing Board of STC.

Programmes of the Centre for the period of January to December 2003.

The Governing Board recommended the following programmes for the year 2003:

A) Programme/Activities under STC Budget:

1. Public awareness, advocacy & partnership programmes on Tuberculosis in Member Countries:
 - a) World TB Day & SAARC Charter Day
 - b) Partnership programmes with Schools and Media
 - c) Involvement of Medical Colleges, pharmaceuticals & industries
 - d) Preparation/publication and distribution of guidelines/modules for the partnership programme
2. Preparatory work for SAARC Regional Conference on TB, HIV/AIDS and other Respiratory Diseases.
3. Collection & distribution of information on experiences in the field of TB and HIV/AIDS through:
 - a) participation in meetings, seminars, conferences etc. by Director and Professionals of STC.
 - b) country visits by the professionals of National TB Programme of Member Countries.
4. Strengthening of STC Library (procurement of books, journals, and other publications etc. related to TB & HIV/AIDS).
5. Publication & Distribution of STC Newsletter, SAARC Journal of TB, SAARC Epidemiological Report on TB

& HIV/AIDS, SAARC Directory of TB Institutions & Specialists.

6. Preparation of SAARC regional training module guidelines for TB control programme.
7. SAARC trainers' training on TB control programme management (two weeks).

B) Programme/Activities under SAARC-Health Canada Project:

1. Workshop of nodal officers of Member Countries and other stakeholders to develop modalities for epidemiological networking and workshop to develop a uniform format for sending reports to TB & HIV/AIDS networking.
2. Workshop on development of research protocol based on gender issues related to TB and HIV/AIDS.
3. Joint workshop with WHO and UNAIDS to discuss technical issues in relation to TB & HIV/AIDS data collection, analysis and interpretation.
4. Two-week laboratory management workshop for 2 senior managers from 9 national TB reference laboratories based on WHO/IUATLD training modules.
5. Consultative meeting on TB & HIV/AIDS situation in SAARC Region.
6. Community awareness campaign on gender issue related to TB and HIV/AIDS in Member Countries.
7. Develop/update manuals for TB diagnostics and QA for SAARC region.
8. Preparation of the Annual Report of STC Regional TB Reference Laboratory
9. Participation of STC staff in regional and international UN workshops or seminars on TB & HIV/AIDS.

Programmes of the Centre for the period of January to December 2003.

The Governing Board recommended the following programmes for the year 2003:

A) Programme/Activities under STC Budget:

1. Public awareness, advocacy & partnership programmes on Tuberculosis in Member Countries:
 - a) World TB Day & SAARC Charter Day
 - b) Partnership programmes with Schools and Media
 - c) Involvement of Medical Colleges, pharmaceuticals & industries
 - d) Preparation/publication and distribution of guidelines/modules for the partnership programme
2. Preparatory work for SAARC Regional Conference on TB, HIV/AIDS and other Respiratory Diseases.
3. Collection & distribution of information on experiences in the field of TB and HIV/AIDS through:
 - a) participation in meetings, seminars, conferences etc. by Director and Professionals of STC.
 - b) country visits by the professionals of National TB Programme of Member Countries.
4. Strengthening of STC Library (procurement of books, journals, and other publications etc. related to TB & HIV/AIDS).
5. Publication & Distribution of STC Newsletter, SAARC Journal of TB, SAARC Epidemiological Report on TB

& HIV/AIDS, SAARC Directory of TB Institutions & Specialists.

6. Preparation of SAARC regional training module guidelines for TB control programme.
7. SAARC trainers' training on TB control programme management (two weeks).

B) Programme/Activities under SAARC-Health Canada Project:

1. Workshop of nodal officers of Member Countries and other stakeholders to develop modalities for epidemiological networking and workshop to develop a uniform format for sending reports to TB & HIV/AIDS networking.
2. Workshop on development of research protocol based on gender issues related to TB and HIV/AIDS.
3. Joint workshop with WHO and UNAIDS to discuss technical issues in relation to TB & HIV/AIDS data collection, analysis and interpretation.
4. Two-week laboratory management workshop for 2 senior managers from 9 national TB reference laboratories based on WHO/IUATLD training modules.
5. Consultative meeting on TB & HIV/AIDS situation in SAARC Region.
6. Community awareness campaign on gender issue related to TB and HIV/AIDS in Member Countries.
7. Develop/update manuals for TB diagnostics and QA for SAARC region.
8. Preparation of the Annual Report of STC Regional TB Reference Laboratory
9. Participation of STC staff in regional and international UN workshops or seminars on TB & HIV/AIDS.

-
10. Produce Annual Regional Surveillance Report on TB & HIV/AIDS
 11. Visit by STC staff to Member Countries for situation analysis in respect to epidemiological data base networking and laboratory net-working.

12. Establishment of a computer net-work between national reference laboratories.

As per the established SAARC practice, Dr. Hasan Sadiq, Member of the Governing Board from Pakistan was elected Chairman of the Board.

Director, SAARC TB Centre visited Health Canada, Ottawa

Dr. D. S. Bam, Director, STC called upon officials of Health Canada, CIDA and Canadian Project Manager of SAARC-CANADA Regional TB/HIV Project on 11 Oct. 2002 and held a meeting regarding the project running at SAARC TB Centre, Kathmandu in Montreal. He was there to attend 33rd World Conference on IUATLD from 6 to 10 Oct. 2002 under the capacity of

Director, National TB Centre.

Report on Training to STC Professional

Dr. Basista Rijal, Microbiologist, STC attended a training programme on sputum microscopy and quality assurance organized in Tuberculosis Research Centre (TRC), Chennai, India from 6 to 26 July 2002.

A Regional TB Reference Laboratory is going to be developed in STC to support National reference TB laboratories of the Member Countries in the area of quality assurance of microscopy networks, the standardization of culture and drug susceptibility testing and implementation of international bio-safety standards.

We thank TRC authorities for this invaluable support in this regard.



SAARC Consultative Meeting for TB & HIV/AIDS Programme Managers



(Technical session of the programme managers)

In pursuant to the decision of the eleventh meeting of the Governing Board, a one-day meeting on aforementioned subject was organized on 20 November 2002 preceded by the Twelfth meeting of the Governing Board of STC. It was a follow-up meeting of the previous consultative meeting on TB & HIV/AIDS organized in Sept. 1996. The members of the Governing Board from Bhutan, Maldives, Nepal, Pakistan and Sri Lanka participated in the meeting. The objectives of the meeting were following:

- to review the trends of TB, HIV/AIDS and TB/HIV co-infection in the Region,
- to identify problems and challenges faced in TB & HIV/AIDS control and
- to formulate an update strategy for TB and HIV/AIDS control programmes within SAARC Region.

The meeting was inaugurated along with the twelfth meeting of the Governing Board by Mr. Mahendra Nath Aryal, Secretary of Health, His Majesty's Government of Nepal.

Recommendations:

The following recommendations have arisen out of a meeting held for TB and HIV/AIDS Programme Managers in Nepal. This meeting served to address the pressing issue of TB and HIV/AIDS increasing burden within SAARC Region. These recommendations aim to assist in developing policy for TB and HIV/AIDS control.

- SAARC Member Countries recognize the TB, HIV/AIDS and TB/HIV co-infection as major problems and serious developmental issues facing the Region. Each Member Country is committed to

cooperating in the major priority areas such as advocacy, training, research and the care of patients.

- SAARC TB Centre as mandated by the 11th SAARC Summit, 2001, will continue its function as the nodal centre to strengthen coordination and cooperation among Member Countries by the continual and beneficial exchange of information.
- Member Countries will exchange experts on TB and HIV/AIDS to gain experience from each other's programmes. Wherever overlapping epidemiology exists and it does for these two diseases, then it is important and beneficial that collaboration between separate programmes takes place. Such a union of expertise will aid in the reduction of morbidity, mortality and associated economic costs from these two high-burden diseases. This collaboration will also serve to reduce duplication of efforts at prevention and control.
- To begin this urgent collaboration and focused attention on these two diseases within SAARC Region, an annual meeting on TB and HIV/AIDS may be arranged in Member Countries by rotation. This meeting will serve to review progress made on activities relating to TB & HIV/AIDS control and to identify further areas for collaboration.
- Additionally, a two-day workshop is to be planned in 2003 in order to formulate policy and strategy for TB and HIV/AIDS prevention and control programmes. This meeting should include TB and HIV/AIDS experts from SAARC Member Countries as well as other related expert organizations i.e. UNAIDS, WHO,

UNICEF, UNFPA, UNDP, NGOs etc. This meeting, while drawing on the broad experiences globally on successful prevention and control strategies, should shape policy based on the SAARC Regions priorities.

- In addition based on the urgency and the window of opportunity for prevention and control of HIV/AIDS that may still exist for SAARC Region (and the impact that HIV/AIDS is having on fueling TB epidemiology) and based on the experiences gained from proven prevention strategies implemented in other Global nations, then basic general population HIV/AIDS awareness programmes (focusing on modes of transmission, high-risk behaviours, reducing the discrimination and stigmatization of HIV/AIDS and prevention measures such as reducing sexually transmitted diseases, condom distribution VCT etc.) must be initiated as soon as possible within SAARC Region countries.

The following recommendations emerged in consensus from the Consultative Meeting for TB and HIV/AIDS Programme Managers in Kathmandu, Nepal held on November 20th, 2002:

- 1) An annual meeting on HIV/AIDS and TB is to be arranged within SAARC Member Countries by a rotation system. The first such meeting could be arranged in Bangladesh in the year 2003.
- 2) A two-day workshop is to be planned in the year 2003 (to be held in Kathmandu, Nepal) in order to formulate policy and strategy for TB and HIV/AIDS prevention and control programmes. This workshop will involve representatives from TB and

HIV/AIDS control programmes and other related organizations.

- 3) Public awareness and advocacy on HIV/AIDS and TB (focusing on modes of transmission, control, and prevention) is to be organized by each SAARC Member Country involving schools and industry. Each Member Country will organize at least two such public awareness and advocacy programmes in which representatives from SAARC Tuberculosis Center will present.

It is hoped that such recommendations regarding TB and HIV/AIDS prevention and control within SAARC Region countries will strengthen ongoing and future efforts.

List of Participants:

1. Dr. Tenzin Penjor,
Joint Director, Public Health,
Ministry of Health & Education,
Thimphu, Bhutan.
2. Mr. Ibrahim Shaheem,
Assistant Director General,
Department of Public Health,
Ministry of Health, Male, Maldives.
3. Dr. Kashi Kant Jha,
Senior Chest Physician,
National TB Centre,
Thimi, Bhaktapur, Nepal.
4. Mr. Lekha Nath Bhattarai,
Section Officer,
SAARC Division,
Ministry of Foreign Affairs, HMG, Nepal.
5. Dr. Shyam Sundar Mishara,
Director,
National Centre for AIDS and STD
Control,
Department of Health Services,
HMG, Nepal.
6. Dr. Hasan Sadiq,
Deputy National Manager, TB Control
Programme,
Rawalpindi, Pakistan.
7. Dr. P. V. D. S. Francis Seniro,
District TB Control Officer,
Gampha District,
Sri Lanka.
8. Dr. D. S. Bam,
Director,
9. Dr. B. P. Rijal,
Microbiologist,
10. Dr. Md. M. Rahman,
Epidemiologist,
11. Dr. Mallika Samartung,
Research Officer
12. Mr. Paul Alexander,
Epidemiologist, Health Canada.



Meeting of Heads/Directors of the National TB Reference Laboratories of the SAARC-Canada Regional TB and HIV/AIDS Project in Member Countries



(Participants and facilitator with the Directors STC & S.A.A.R.C., representative from CCO, Health Canada and supportive staff of STC)

In compliance to the decision of the Eleventh meeting of the Governing Board the aforementioned meeting was held in Kathmandu from 13 to 15 November 2002. The experts working in Reference Laboratories of all Member Countries participated in the meeting. The meeting was facilitated by Dr. C. N. Paramasivan, Senior, Deputy Director, Tuberculosis Research Centre (TRC), Chennai, India along with the professionals of SAARC TB Centre. Dr. Basista P. Rijal, Microbiologist, STC, coordinated the programme.

The general objective of the meeting was to

develop and implement a programme of regional collaboration between national TB reference laboratories in SAARC Member Countries to support quality improvement of laboratory diagnosis as well as good laboratory practices in the TB laboratory networks of the SAARC Region.

Dr, D. S. Bam, Director, STC and NTC extended a warm welcome to the participants in the meeting. He also offered his sincere gratitude to the Member Countries for sending the participants and to the SAARC Secretariat for supporting STC to work smoothly in every aspect of its schedule. He thanked Mr. Ahmed

Sareer, Director, SAARC Secretariat for his strong support to organize the meeting. He also thanked Dr. Paramasivan for facilitating the meeting.

Mr. Ahmed Sareer, Director, SAARC Secretariat addressed the meeting and extended a warm welcome to the participants and best wishes for the successful completion of the meeting on behalf of the His Excellency, SAARC Secretary General and himself.

Dr. C. N. Paramasivan, Senior Deputy Director, TRC, Chennai thanked SAARC TB Centre and Health Canada for organizing the meeting related to TB reference laboratory which will be very much fruitful to the personnel working in this field.

Ms. Carla Hogan Rufelds, Chief, CCO, Kathmandu welcomed the participants on behalf of Health Canada and explained the urgency in tackling the menace of TB and HIV in this Region. Dr. B. P. Rijal, Microbiologist delivered the vote of thanks.

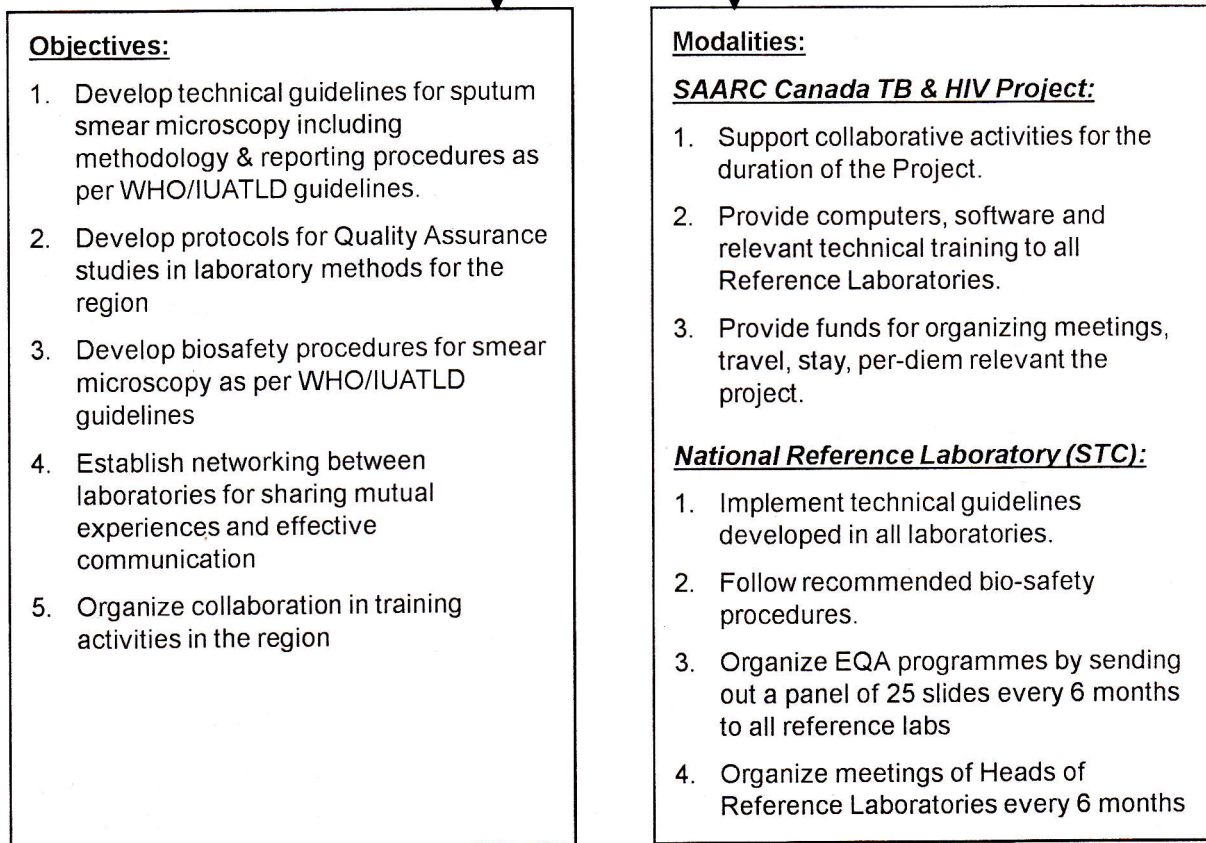
The meeting recommended following the Terms of References (TOR):

1. Technical guidelines specifically prepared in accordance to WHO and IUATLD guidelines for sputum microscopy for the SAARC Regional Laboratory networking meeting of National Reference Laboratories has been discussed and adopted. (*The document has been provided to participants in paper and in floppy format*).
2. Twenty-five slides for proficiency testing will be prepared and sent to all the National Laboratories from the SAARC TB Centre at the end of every six-month period. The first batch of the slides will be prepared with the help of TRC Chennai, and will be dispatched before March 2003 to the National Laboratories of SAARC member countries.

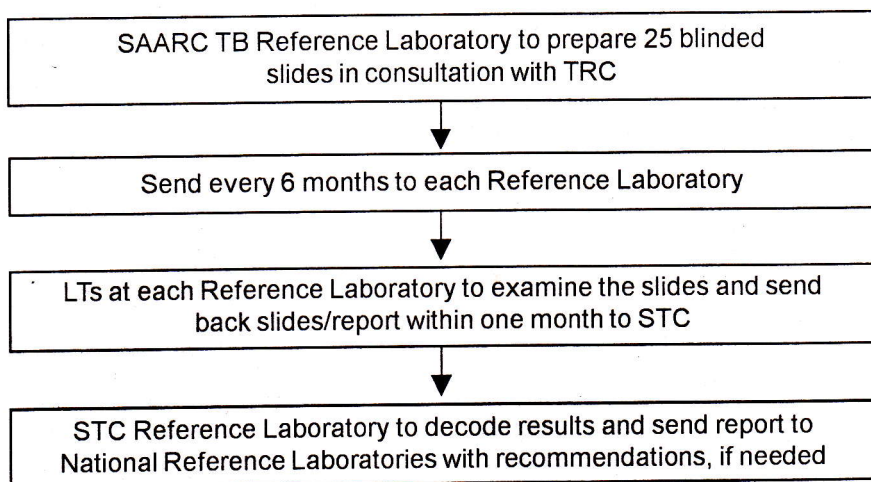
3. Guidelines for bio-safety regulations for both Sputum Microscopy and HIV/TB were presented to the participants of Member Countries (*details were provided in paper format*).
4. A basic protocol on "Quality Assurance Programme on sputum microscopy" with all annexures were provided to the Heads of the Laboratories of the Member Countries to enable them to adopt the same for their respective countries with suitable modifications, if desired. In addition, the need for networking of National Reference Laboratories among the countries in the SAARC Region and standardization of performances were also deliberated and adopted.
5. The progress of the above will be monitored periodically and discussed in a meeting of Heads of Laboratories once during every six month period. This periodic monitoring will occur for the duration of the SAARC-CIDA Project and later as per the guidelines of SAARC TB Centre.
6. As per the requests made by the members representing the National TB Reference Laboratories, for effective communication and dissemination of information, provision of computers/UPS/printers will be provided to the identified 9 TB Reference Laboratories of the region.
7. Efforts will be made in the near future to arrange training programmes for master trainers in Quality Assurance Programme under SAARC-CIDA Project.
8. Arrangements will be made to provide short-term consultancy services to assist member countries upon request during the initial phase of the Quality Assurance Programme.

NETWORKING AND COLLABORATIVE ACTIVITIES BETWEEN NATIONAL TB LABORATORIES IN SAARC COUNTRIES AND THE STC REFERENCE LABORATORIES

TERMS OF REFERENCE



PROFICIENCY PANEL TESTING



Public Awareness & Advocacy on Tuberculosis Partnership Programme with School Students



(Director, STC with the group of students)

Considering the burden of Tuberculosis in the Member Countries the Eleventh meeting of the Governing Board of STC, decided to involve the school students to expand the public awareness and advocacy on TB control.

Students are the most revolutionary forces in the society and they are capable of propagating any information among their friends, families and community at large.

A partnership programme with school students was organized at STC training building on 18 September 2002.

Dr. R. M. Samaratunga, Research Officer, STC coordinated the programme.

Students from 6 schools (5 schools from Bhaktapur district and 1 school from Kathmandu district) participated in the programme.

Objectives:

- * To educate school students about TB and its control.
- * To built a cadre of child ambassadors committed to spreading messages of awareness about TB and its control.
- * Forge an active partnership with students in fight against TB disease.

Dr. D. S. Bam, Director, STC made a detailed presentation about the disease, its cause, transmission and preventive and curative aspects. His presentation took place in the form of interaction with the students. Professionals from STC and NTC, Nepal participated in the interaction programme.

A pretest and a posttest on general knowledge of TB were performed. The 60% result at the pre test improving to 100% result at the

posttest proved that students received the correct message and the programme was successful.

At the end of the programme all students and teachers stood up joining their hands together to gesture their solidarity to support the TB control programme.

Following schools and students/teachers participated in the programme:

1. Adarsha Secondary School, Thimi.

- * Pradeep Shrestha
- * Minesh Shrestha
- * Bikash Prajapati
- * Anjali Shrestha
- * Arati Ranjit and
- * Laxmi Manandhar

2. Prabhat English Secondary School, Byasi, Bhaktapur.

- * Mr. Himal Basukala, Mr. Ajendra K. Laghu, and Mr. Birendra Khajju – Teachers
- * Sharmila Suwal
- * Meena Kusi
- * Rojeena Thusa
- * Rajesh Suwal
- * Sunil Pahiju
- * Rajesh Kaiti

3. Nobel Academy Higher Secondary School, Baneshwar, Kathmandu.

- * Mr. Bharat Adhikari – Teacher
- * Sushanta Jha
- * Sushanta Gautam

- * Ashim Aryal
- * Sasendra Dhakal
- * Smriti Aryal
- * Aditya Mahara
- * Prashant Kharel

4. Shree Padma Secondary School, Darbarsquare, Bhaktapur.

- * Mr. Prabal Man Shrestha – Teacher
- * Rojina Sharma
- * Rabina Pancha
- * Nabin Dhakal
- * Anish Khendhau
- * Tejkala Upreti
- * Dewaker Adhikari

5. Basu Secondary School, Byasi, Bhaktapur.

- * Mr. Ram Hari Tamrakar – Teacher
- * Prakriti Basi
- * Amrit Awal
- * Reena Shahi
- * Suman Jakibanjar
- * Krishnapwori Kiju
- * Rebika Twanju

6. Wise-land Secondary School, Jagate, Bhaktapur.

- * Mr. Punya Ram Kawan – Teacher
- * Manju Kisi
- * Rameshori
- * Shreejana Machamasi
- * Surendra Khyaju
- * Suresh Sanda
- * Arabindra Prajapati



Partnership Programme with Industry Workers



(Dr. D. S. Bam, Director, STC with the industry workers)

The TB situation in the SAARC Region is likely to be complicated by the rapidly spreading HIV/AIDS epidemic.

Expansion of Public Awareness and Advocacy on TB and HIV/AIDS is a timely felt need.

Considering this issue, SAARC TB Centre has identified new partners in control of these diseases and industry workers are considered as a very important category of partners.

With a view to develop this partnership, STC organized a one day awareness programme on "TB & HIV/AIDS" for workers and managers at Balkumary Cotton Thread Dyeing Industry at Thimi, Bhaktapur on 23 Sept. 2002.

Dr. Md. M. Rahman, Epidemiologist, STC coordinated the programme.

Sixty people from the industry participated in the programme.

Objective of the Programme:

- To sensitize industry people on TB and HIV/AIDS with a view to promote prevention and control.

- To build a partnership with industry people, committed to spreading messages to enhance awareness about these diseases.

Dr. D. S. Bam, Director, STC made a presentation on TB. He explained the symptoms, cause, mode of transmission and ways of prevention of the disease. He further mentioned the free availability of diagnosis and treatment facilities in the health institutions and the importance of Directly Observed Treatment Short-course (DOTS) in curing the disease.

Dr. Md. M. Rahman, explained about the HIV/AIDS, its cause, symptoms, mode of transmission and prevention in local language. He emphasized on preventive measures and the importance of creating public awareness on this deadly disease.

A Nepali version booklet prepared by STC on Tuberculosis was distributed among participants. Posters carrying information on TB and HIV/AIDS were displayed in industry premises.

SAARC Trainers' Training on Tuberculosis Control Programme Management 10 to 23 Dec. 2002



(Participants of the training programme with organizers)

SAARC TB Centre and National Programme for Tuberculosis Control and Chest Diseases (NPTCCD) Sri Lanka jointly organized a two-week training course on Tuberculosis Control Programme Management from 10-23 December 2002 in Colombo, Sri Lanka.

TB control programme managers from Bangladesh, Bhutan, Nepal and Sri Lanka participated in this training programme.

Dr. Athula Kahandaliyanage, Director General of Health Services, Sri Lanka attended the Inaugural Ceremony as the Chief Guest. He highlighted in his address, the vital role that SAARC is playing for the welfare of the millions of people living in the Region. He appreciated the activities carried out by SAARC since its

establishment. Addressing the meeting, Dr. D. S. Bam, Director, SAARC TB Centre highlighted the goal and objectives of the training programme. He further discussed the TB situation in the Region and the efforts being made by Member Countries for its control.

Dr. Kapila Sooriyaarachchi, Director, NPTCCD, Sri Lanka also addressed the gathering.

Experts from following institutions facilitated the programme:

- NPTCCD, Sri Lanka
- SAARC TB Centre, Nepal
- Nuffield Institute for Health, Nepal
- Faculty of Medicine, Colombo, Sri Lanka
- National Programme for HIV/AIDS & STD control, Sri Lanka

SAARC

Training for Regional/District Level TB Programme Managers to strengthen their skills in Data Management



(Inaugural session of the training programme)

A two week training programme for regional/district level TB programme managers to strengthen their skills in data management was organized by SAARC TB Centre in Kathmandu from 27 Dec. 2002 to 9 January 2003. Dr. Md. M. Rahman, Epidemiologist coordinated the programme.

Dr. D. S. Bam, Director, SAARC TB Centre and Mr. Ahmed Sareer, Director, SAARC Secretariat jointly inaugurated the programme. Addressing the inaugural session Dr. Bam extended a warm welcome to the participants and facilitator in the programme. He expressed his sincere gratitude to the Governments of Member Countries for sending participants in this course and also

expressed his gratefulness to His Excellency Mr. Q. A. M. A. Rahim, Secretary General SAARC for providing regular guidance to the SAARC TB Centre for implementing the programmes. He also thanked Mr. Ahmed Sareer, Director, SAARC Secretariat for his strong support and regular guidance to organize the programmes.

Mr. Avijit Home Choudhury, Epi-Centre, Resource Person, WHO/SEARO gave his remarks as a facilitator in this programme.

Mr. Ahmed Sareer, Director, SAARC Secretariat addressed on behalf of SAARC Secretariat. He also conveyed the message of SAARC Secretary General and his well

wishes for the success of the training programme. He also thanked Dr. D. S. Bam and staff of STC for organizing very useful training programme for the Member Countries.

Dr. Md. M. Rahman, Epidemiologist delivered the vote of thanks and the programme was conducted by Dr. B. P. Rijal, Microbiologist, STC.

The training programme started with the brief presentation by Dr. D. S. Bam on Role of SAARC TB Centre in the management of Tuberculosis. The objectives, goal and methodology of the training were presented by Dr. Md. M. Rahman.

Objectives of the training:

- To improve/strengthen the knowledge and skills of the participants in computer use,
- To make the participants skills in data entry, analysis and report writing using Epi-Info software programme.

Goal:

The goal of the training programme was to make the TB programme managers able to manage or handle NTP data effectively thereby enabling them to provide accurate information, which will ultimately facilitate the preparation of "update SAARC Regional Report".

Training Materials:

Each participant were provided a desktop computer and the training manual/handouts on MS-Office, containing the introduction to computers & Windows along with the working with MS-Word, MS- Excel, MS-PowerPoint and Epi-Info. V 6.

Methodology:

In each session and components, there was orientation followed by the discussion. Every topic was summed up after discussions. The questions and answers session also played very important role during the training programme. Sufficient time was provided to the participants for their exercise in the computer. The session ending quiz was also there at the end of each day.

Every morning the facilitator started his orientation with the revision of previous day session.

Field Visit:

Participants visited Dhulikhel PHC and collected TB data on case-finding and treatment outcome. All the participants analyzed the collected data using Epi-Info statistical software and made a multimedia presentation on their reports.

The closing session was organized at the presence of Dr. Bam and Mr. Sareer on 9 Jan. 2003. At the beginning, the participants presented their skills obtained from this training, which was highly appreciated by the Directors, SAARC TB Centre and SAARC Secretariat.

Dr. Bam and Mr. Sareer jointly awarded certificates to the participants and facilitator.

On behalf of the participants, Dr. Mahjabeen Qamar, participant from Pakistan thanked Dr. Bam, Mr. Sareer, Mr. Avijit and all staff of the Centre. She expressed her satisfaction for excellent management of the training, hotel accommodation and friendly manner of the STC staff.

Mr. Avijit H. Choudhury, thanked all participants and staff for their dedication and hard work during the training course and

appealed to the participants for the use of their knowledge gained during the training in their daily work.

Mr. Ahmed Sareer, expressed his pleasure and urged to the participants that they should use their skills learnt in this training after resuming the work.

Dr. Bam thanked all participants and facilitator for their hard work to make success this programme smoothly. He extended his best wishes for the pleasant journey back to their home country.

The vote of thanks was delivered by Dr. Md. M. Rahman, Epidemiologist, STC.

List of the participants and facilitator:

Course Director:

Dr. D. S. Bam, Director, STC

Course Coordinator:

Dr. Md. M. Rahman, Epidemiologist, STC

Facilitator:

Mr. Avijit Home Choudhury, Epi-Centre Resource Person, WHO/SEARO, New Delhi.

Participants:

Bangladesh:

- Dr. Kausari Jahan,
Medical Officer
TB and Leprosy Control Programme,
DGHS, Mohakhali, Dhaka.
- Dr. Md. Al Mamun,
Medical Officer
National Institute of Cardiovascular
Diseases, Dhaka.

Bhutan:

- Mr. Kinlay Penjore,
Eastern Regional Referral Hospital,
Mongar.
- Mr. Leki Samdrup,
District Hospital,
Paro.

Nepal:

- Mr. Giri Raj Subedi,
Senior Public Health Officer,
District Health Office, Dang

- Mr. Badri Nath Gyawali,
Statistics Officer,
National TB Centre, Thimi,
Bhaktapur.

Pakistan:

- Dr. Mahjabeen Qamar,
District TB Coordinator,
Executive District Officer's Office,
Gujranwala.

Sri Lanka:

- Mr. K. K. Perera,
Medical Records Officer,
National Programme for TB Control
and Chest Diseases
Walisara.

Observer:

- Dr. S. C. Verma
Senior Chest Physician,
National TB Centre,
Thimi, Bhaktapur, Nepal.

Meeting for Epidemiological Network under SAARC-Canada Regional HIV/AIDS TB Project



(Representatives from different agencies and Directors of SAARC and STC)

As a preliminary step for the establishment of an epidemiological network link to the existing UNAIDS/WHO database project, a meeting was held on 1 Nov. 2002 at SAARC TB Centre, Thimi, Bhaktapur.

Dr. D. S. Bam, Director, STC welcomed the participants in the meeting and explained the need of the meeting along with its aim. The aim of the meeting was to establish regular exchange of information about TB and HIV/AIDS with UN agencies.

The objectives of the meeting were:

- * to discuss the possibilities of developing an arrangement and collaboration for a

epidemiological network and to have mechanisms for data exchange between NTPs, STC and UN agencies.

- * to facilitate the sharing of data and generation of regional analysis and reports related to TB and HIV/AIDS.
- * to build consensus for regular exchange of data among these organizations.

Dr. Bam presented an introduction of SAARC-Canada TB and HIV/AIDS Project and its achievements. Dr. Md. M. Rahman, Epidemiologist, STC explained current activities & future plans under the project and Mr. Paul Alexander, Epidemiologist, Health Canada presented the need for epidemiological networking among relevant

institutions and the need for STC being included as part of the existing HIV/AIDS database project in South Asia.

In the meeting, Dr. Usmani from UNFPA and UNAIDS, Dr. S. S. Mishra, Director, NCASC, HMG, Nepal and Ms. Carla Hogan, CCO, Kathmandu, spoke about the need of the network in this field.

Mr. Ahmed Sareer, Director, SAARC Secretariat highlighted SAARC's recent recognition of the importance of involvement of other expertise i. e. UN agencies and appreciated the meeting's initiatives and extended SAARC's full support in the activities of STC.

The following dignitaries participated in the meeting:

SAARC Secretariat:

Mr. Ahmed Sareer, Director

SAARC TB Centre:

Dr. D.S. Bam,
Director,

Dr. Md. M. Rahman,
Epidemiologist

Dr. B. P. Rijal,
Microbiologist

Dr. Mallika Samaratunga,
Research Officer

**Canadian Co-operation Office,
Kathmandu**

Ms. Carla Hogan Rufelds, CIDA
Representative

**SAARC-Canada Regional TB and HIV/
AIDS Project:**

Mr. Paul Alexander, Epidemiologist, Health
Canada

UNFPA

Dr. Farah Usmani, Advisor, Reproductive
Health & HIV/AIDS

WHO Nepal

Dr. Anton Fric, Medical Officer, WHO

Ministry of Health, HMG, Nepal

Dr. S. S. Mishra, Act. Director, AIDS and
STD Control.

JICA (CTLHP)

Dr. Takashi Yoshiyama, Chief Advisor

One day workshop

To develop public private linkage and involvement of medical colleges in TB control, SAARC TB Centre organized one-day workshop, jointly with NTP Nepal, at Bharatpur Medical College, Chitawan on 21 Dec. 2002.

The workshop was inaugurated by Dr. D. S. Bam, Director, SAARC TB Centre and chaired by Prof. A. C. Patowari, Principal, College of Medical Sciences.

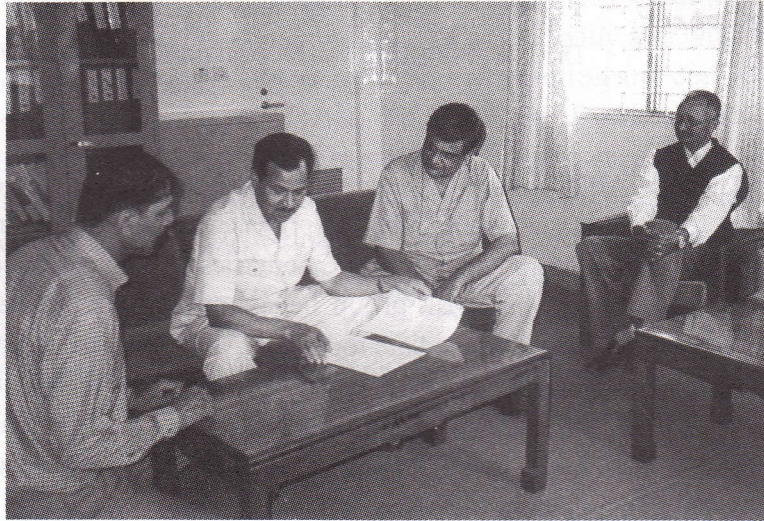
Dr. Bam presented paper on experiences of DOTS in the SAARC Region and Involvement of Medical Colleges and Private Sector in TB control.

Dr. Md. M. Rahman, Epidemiologist, STC highlighted on TB and HIV/AIDS in SAARC Region and Impact of HIV on TB control programme.

The workshop was participated by around 250 participants.

Audit of the Accounts of STC

The annual accounts and the related statements of the SAARC TB Centre for the year 2001 were audited by the Joint Audit Team (JAT), 2001, comprising of Mr. Tanweer Ahmed, Director General, Office of the Auditor General of Pakistan Islamic Republic of Pakistan and Mr. Manor Kumar Bhandari, Director, Office of the Auditor General, the Kingdom of Nepal, from 7 to 8 September 2002. The audit was carried out in accordance with GAAS.



STC's support to NTP review of Member Countries:

One of the objectives of the STC is to support NTPs of the Member Countries. If any of the Member Country requests STC to support review programme, the professionals of STC are always ready to accept the proposal. Accordingly, Nepal, NTP Review 2002 was supported by STC.

NTP Nepal conducted an International Review from 24 to 31 October 2002. The purpose of the review was to monitor and assess progress in implementing DOTS in Nepal, to provide technical and operational advice to the NTP for improving TB control

measures in Nepal and to assess the management mechanism in NTP and develop recommendations for sustaining of the NTP. The review programme was participated by the experts from LHL, JICA, DFID, NATA, Nuffield Research Team, BNMT, INF, NSL, WHO and STC.

The professionals from STC Dr. B. P. Rijal, Microbiologist, Dr. Md. M. Rahman, Epidemiologist and Dr. Mallika Samaratunga, Research Officer visited different places of Nepal for the review of the TB control programme.

HIV/AIDS and HIV/TB Co-epidemic within SAARC Region Countries-Why are SAARC Countries at Risk?

Dr. D. S. Bam*, Dr. Md. M. Rahman*, Mr. P Alexander#, Dr. D Sutherland#,
Dr. M. Samaratunga*, Dr. B. P. Rijal*

The HIV/AIDS epidemic is a recent occurrence in South Asia and while infection prevalence is low within South Asian (SAARC countries), the presence of high-risk group behaviours warrant urgent and immediate focus. SAARC region comprises the countries India, Pakistan, Sri Lanka, Bangladesh, Nepal, Bhutan, and Maldives and such countries possess the large population numbers and ingredients necessary for exponential increase in HIV, TB, and the HIV/TB co-infection. For example, high-risk groups such as commercial sex workers, injection drug users (who share needles), men who have sex with men, sexual activity involving multiple partners, migrant workers etc. all exist to put this region at particular risk for morbidity and mortality from HIV and the encroaching HIV/TB co-infection. The reality is that the HIV infection varies between countries and within countries, yet the challenge now becomes keeping those with elevated rates stable or even reducing them, and keeping the low rates suppressed. The challenge comes in light of the fact that the trend is an increasing one within SAARC region (Figures 1 & 2).

SAARC region has one of the fastest spreading HIV/AIDS epidemics globally, with India revealing a doubling of infections from 1994 to 1998. SAARC county inhabitants are just as vulnerable as Africans for they may be just as poor or just as illiterate. Similarly, evidence suggests that inhabitants of SAARC region countries lack the awareness and education regarding risky behaviours that limits the success of prevention and control strategies.² Over 50% of SAARC populations are under

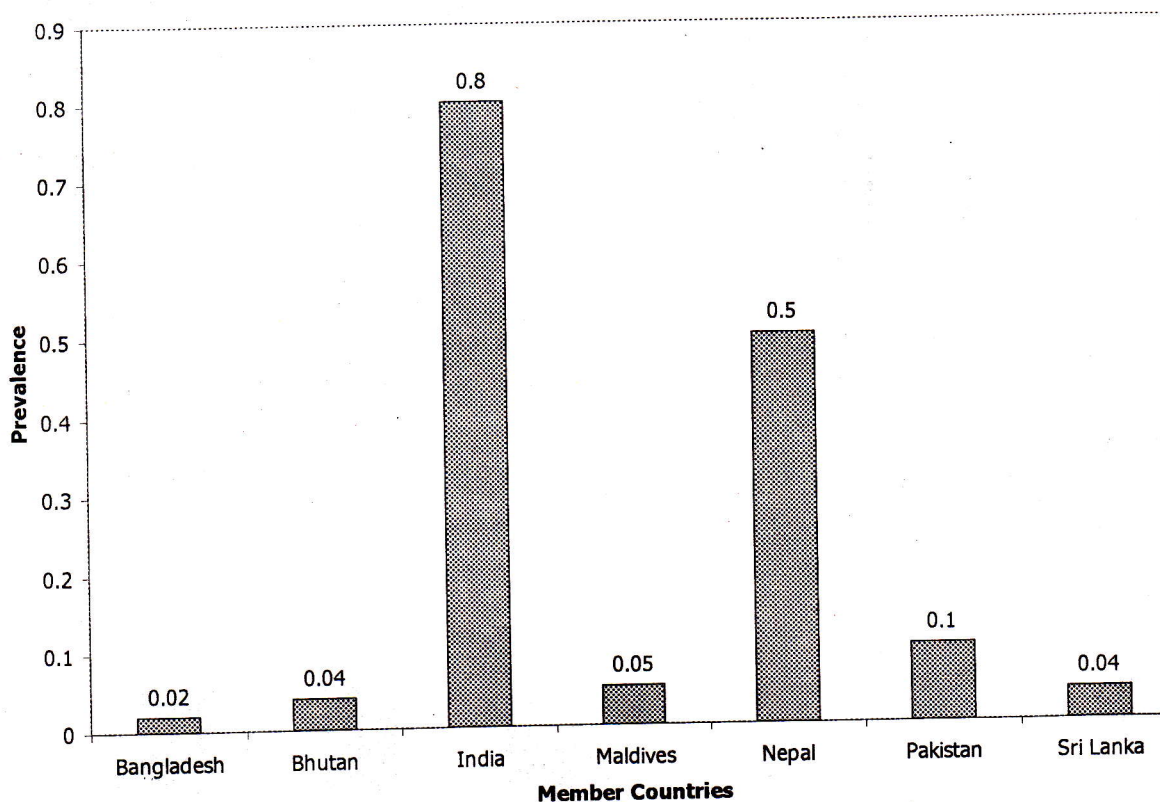
the age of 25 years (Figures 3-8). There is a disturbing trend within SAARC region of increased infections in young people less than 25 years of age. Some persons in this age group engage in risky sexual behaviours. The risk factors for explosive growth of HIV infection exist within SAARC countries e.g. large commercial sex trade and low condom use; injection drug use; lack of HIV awareness; lack of blood safety; high mobility; extensive poverty; high illiteracy; trafficking of women and young girls within the sex trade; and the low and unequal status of women.³ The predominant methods of transmission within SAARC region (75-80% via unprotected sex in MSM, CSWs and 10% via injection drug use), the elevated levels of risk and vulnerability, and the existing low response capacities, therefore positions South Asia for more rapid and further spread of HIV infection. Low national HIV prevalence rates within South Asian nations are deceiving for the danger rests within the high-risk groups that are revealing dramatically elevated and very troubling levels of infection.

TB prevention and control remains a tremendous challenge globally with 2 billion persons infected with *Mycobacterium tuberculosis* and 40% of cases within South-Asia.^{4,5} HIV continues to have a destructive impact on TB epidemiology worldwide with TB being the most opportunistic infection associated with HIV. HIV infection is the strongest risk factor for TB infection becoming active TB disease, speeding the progression from latent or

recently acquired infection to active clinical disease. If HIV status is negative, lifetime risk of developing TB is 5-10%; but if positive, then lifetime TB risk is 50%. HIV adversely affects TB DOTS and other control programs, which are and would be unable to cope with increasing TB burden. In South Asia, areas with highest rates of HIV are also reporting greatest increases in

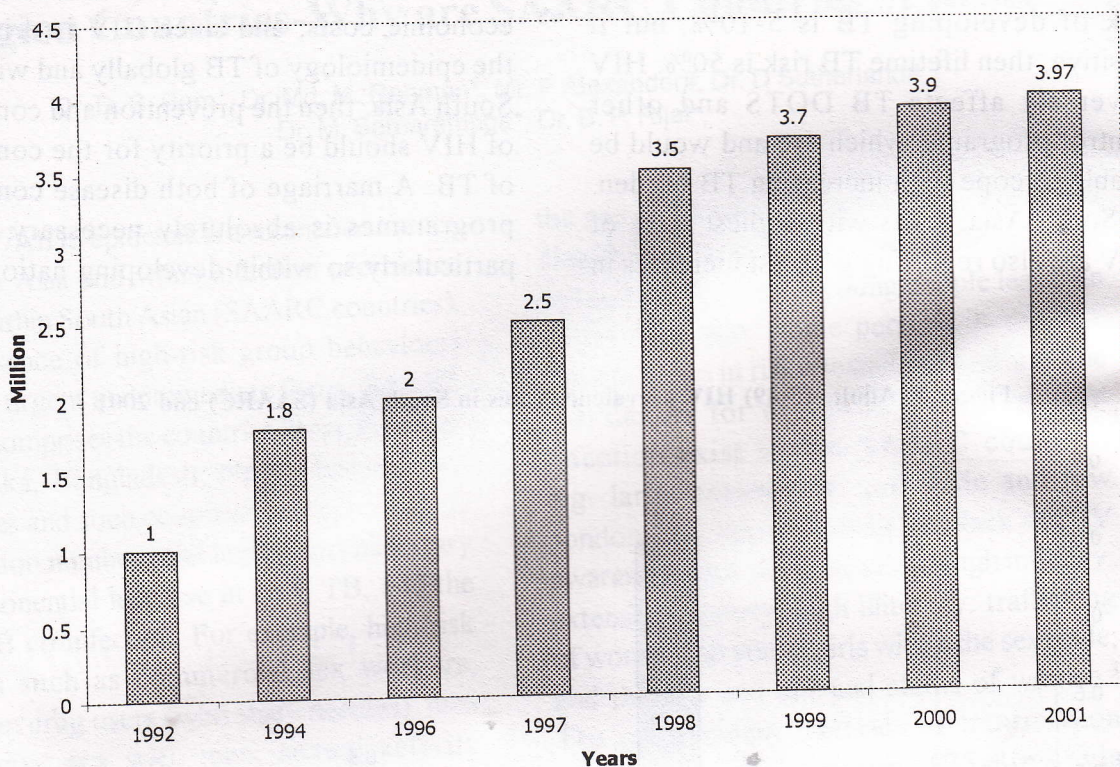
TB cases. Since HIV carries tremendous morbidity, mortality, and associated economic costs, and since HIV is driving the epidemiology of TB globally and within South Asia, then the prevention and control of HIV should be a priority for the control of TB. A marriage of both disease control programmes is absolutely necessary and particularly so within developing nations.

Figure 1: Adult (15-49) HIV prevalence rates in South Asia (SAARC) end 2001



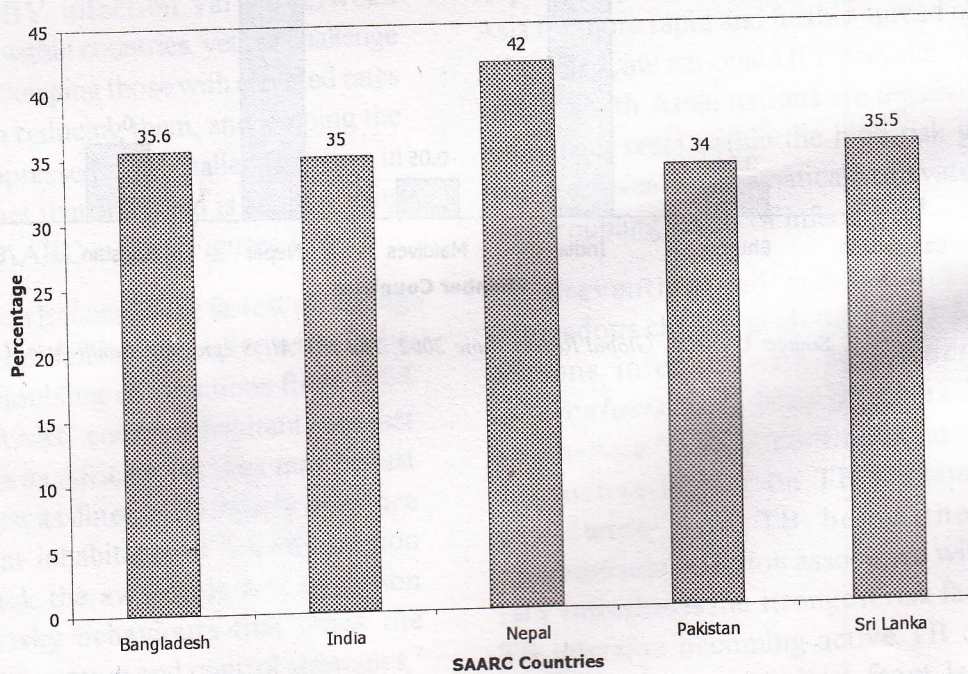
Source: UNAIDS, Global Report, June 2002, The HIV/AIDS epidemic, South Asia, UNICEF, 2001

Figure 2: Trends in number of people living with HIV/AIDS In India, 1992-01



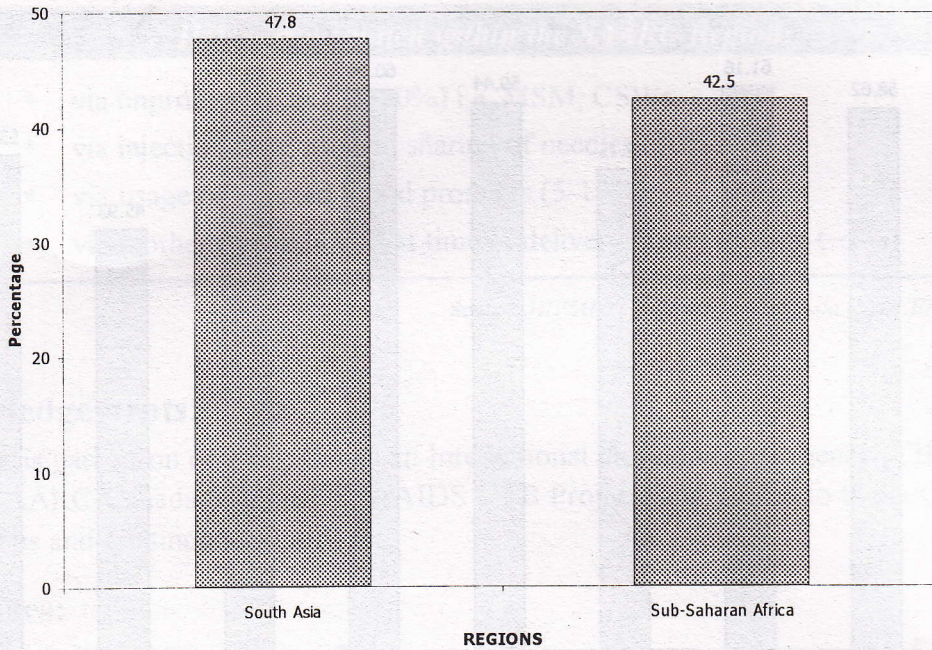
Source: NACO, *The HIV/AIDS epidemic, South Asia*, UNICEF, 2001

Figure 3: South Asia: Proportion of Population below National poverty line, 1998



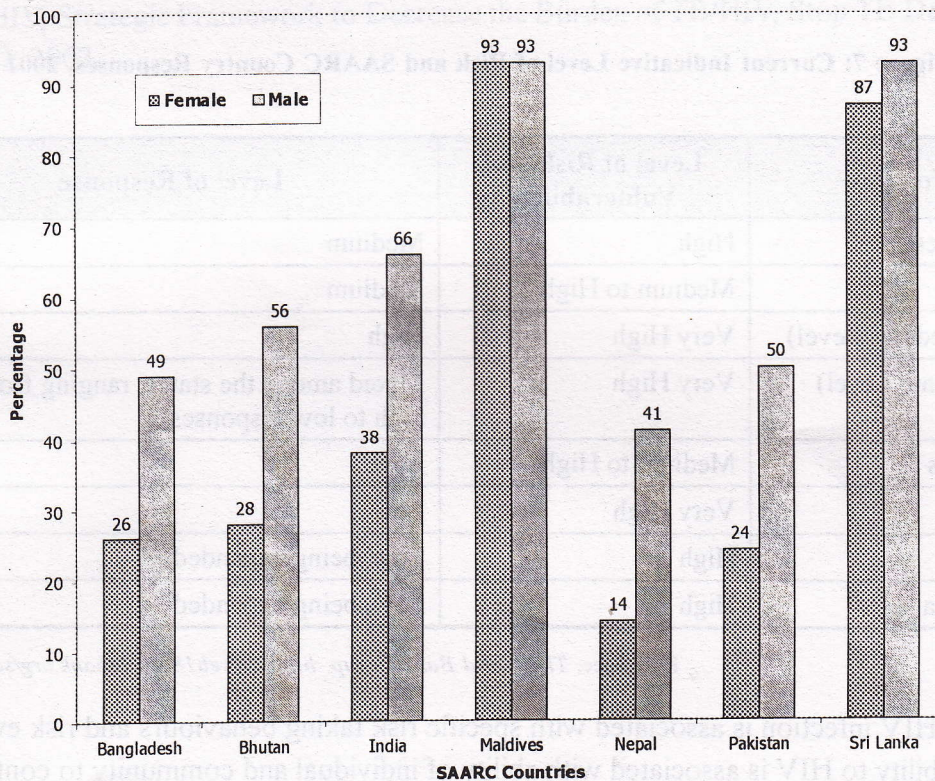
Source: *Human Development in South Asia, 1998 UNDP. The HIV/AIDS epidemic, south Asia*, UNICEF, 2001

Figure 4: South Asia – Adult Literacy, 1998



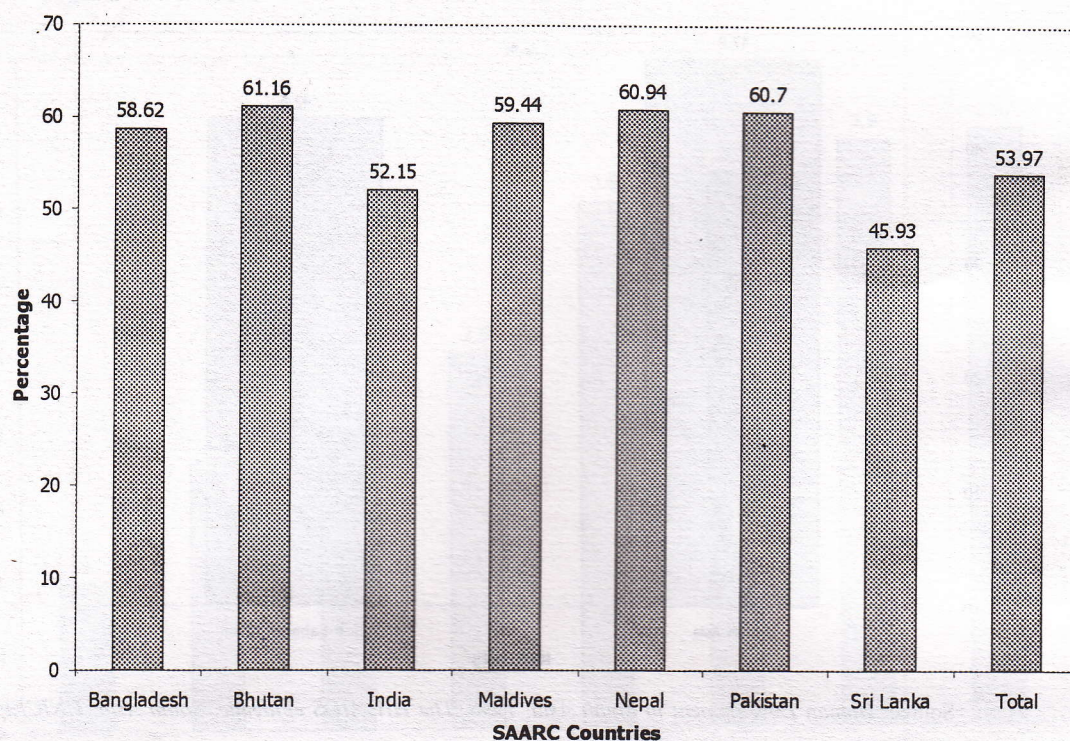
Source: *Human Development in South Asia, 1998. The HIV/AIDS epidemic, South Asia, UNICEF, 2001*

Figure 5: Female literacy rates in SAARC Member Countries, 1998.



Source: *Human Development in South Asia, 1998 UNDP, The HIV/AIDS epidemic, South Asia, UNICEF 2001*

Figure 6: Percentage of SAARC country population below 25 years, 1998



Source: *Human Development in South Asia, 1998, UNDP. The HIV/AIDS epidemic, South Asia, UNICEF, 2001*

Figure 7: Current Indicative Level of Risk and SAARC Country Responses, 2001

Country	Level of Risk and Vulnerability	Level of Response
Bangladesh	High	Medium
Bhutan	Medium to High	Medium
India (Federal Level)	Very High	High
India (State Level)	Very High	Mixed among the states, ranging from high to low responses
Maldives	Medium to High	Low
Nepal	Very High	Low
Pakistan	High	Low, being expanded
Sri Lanka	High	Low, being expanded

Reference: *The World Bank Group, <http://Inweb18.worldbank.org/sar/sa.nsf/299>*

1. Risk of HIV infection is associated with specific risk taking behaviours and risk events.
2. Vulnerability to HIV is associated with ability of individual and community to control and cope with risk of HIV infection.

Figure 8: Methods of transmission of HIV within SAARC countries, 2001.

<i>HIV is transmitted within the SAARC Region:</i>	
*	via unprotected sex (75-80%) i.e. MSM, CSWs,
*	via injection drug use and sharing of needles (10%)
*	via usage of infected blood products (5-10%)
*	via mother to child (VT) at time of delivery/breast feeding (~1%)

Source: *HIV/AIDS epidemic, South Asia, UNICEF, 2001*

Acknowledgements:

This paper is part of an ongoing Canadian International Development Agency (CIDA) funded project (SAARC-Canada Regional HIV/AIDS – TB Project) and wishes to thank CIDA for its generous and continued support.

References:

1. UNAIDS, Global Report, June 2000
2. The HIV/AIDS epidemic, South Asia, UNICEF, 2001
3. The World Bank Group. <http://Inweb18.worldbank.org/sar/sa.nsf/299>
4. WHO Report 2002, Global TB Control, WHO Communicable Diseases
5. TB/HIV, Strategic Framework to Decrease the Burden of TB/HIV, Stop TB Department, WHO, 2002.



Low Prevalence ≠ Low Risk for HIV within SAARC Region: Appearances can be deceiving

Dr. D. S. Bam*, Dr. Md. M. Rahman*, Mr. P. Alexander#, Dr. D. Sutherland#

The human immunodeficiency virus (HIV) infection and the resulting clinical acquired immunodeficiency syndrome (AIDS) are pandemic globally and presents the global medical and public health communities with one of the most significant of challenges. No other disease impacts on and increases human suffering to the degree that HIV/AIDS does. The epidemic has mushroomed globally into an unforeseen and unpredicted nightmare. The morbidity and mortality costs to societies are staggering, and when coupled to the economic costs, may well exact an irrecoverable toll on many global nations. The HIV infection reveals varying patterns of transmission and evidence suggests that the impact globally has disproportionately affected the more vulnerable and marginalized persons within societies e.g. women, persons living in impoverished conditions, commercial sex workers, injection drug users, and men who have sex with men.¹ The facts are clear and staggering, with 95% of HIV infected persons living in less industrialized, developing nations.² These are the very nations that simply do not possess the resources to cope. The public health implications are horrendous. What has occurred, will be dwarfed by what lurks on the horizon and particularly so with the accumulating evidence of exploding HIV-TB co-infection epidemics.

Asia presents tremendous challenges to global public health in terms of HIV/AIDS with more than 7 million persons infected with HIV as of the end of 2001, new infections increasing by 17% during 2000.^{3,4} The HIV/AIDS epidemic is a recent occurrence in South Asia (SAARC region) and while HIV prevalence is low within some SAARC countries, the presence of high-risk group behaviours warrant urgent and immediate focus as to the future growth potential of HIV infection. Despite ongoing programmes, the HIV/AIDS epidemic continues to spread within Asia and particularly within SAARC region countries. The fact is that Asian countries (and particularly SAARC region nations) possess the population base that could become millions of new cases and even where infection rates are low within the general population.

While Asia's absolute HIV/AIDS burden and mortality still stands below numbers on the African continent, what frightens the global public health community is that the underlying mechanisms for farther and faster confluence of HIV/AIDS are in place within Asia. These factors include the much larger population numbers, and the movement of Asians across borders for work (migrant laborers), to trade goods, and for sexual pleasure. Such mobile populations may engage in high-risk sexual and drug-taking behaviors (in many instances such dislocation promoting risky behaviors), acting as 'bridges' dispersing HIV from one population to another. Cultural taboos pertaining to sexual activity and the discussion

1 SAARC TB Centre (STC), Thimi, Nepal*

2 Centre for Infectious Disease Prevention and Control, Health Canada, Ottawa#

of sex exists within Asian countries, and thus makes difficult the exchange of prevention information or the negotiation of safer practices. Cultural mores also allow men to have many sex partners and frequent commercial sex establishments. The challenge is compounded by poverty and little formal education which makes for low levels of awareness regarding HIV risks and prevention among the general public.⁵

South Asian nations (SAARC region) presently show low prevalence levels (<1%). These figures can be misleading. Specific subgroup populations (e.g. MSM, IDUs, CSWs) may have HIV prevalence levels as high as 50%. Low general population prevalence rates within India (0.8%), Nepal (0.5%), and Bangladesh (<0.1%)⁶ for example, conceal serious and devastating localized epidemics in various areas, underscoring that national HIV prevalence data can hide the full story of the epidemic. The fact is that several HIV epidemics are being witnessed among specific high-risk subgroups within SAARC countries. Troubling and serious localized HIV epidemics are occurring within injection drug user groups (IDUs), men who have sex with men (MSM), and commercial sex worker groups (CSWs) and their partners.

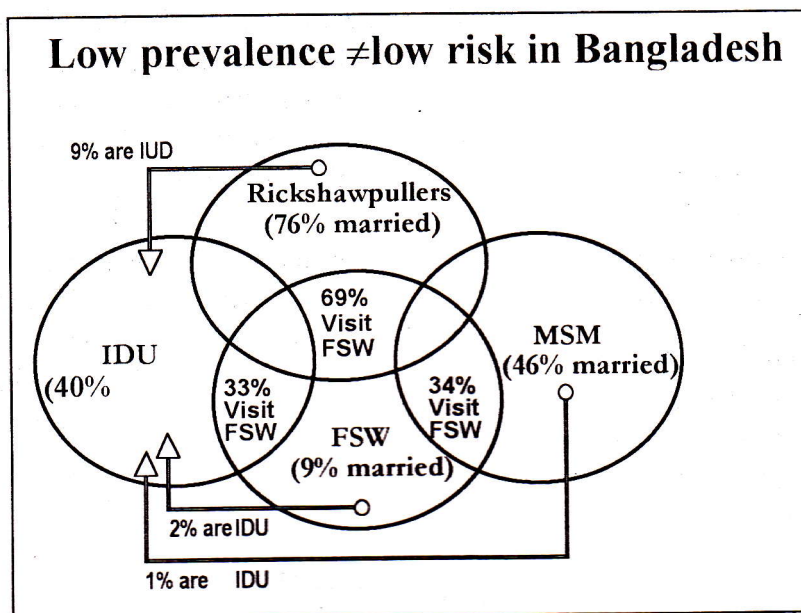
The Asian nation of Indonesia is an example of how insidious and how suddenly a HIV/AIDS epidemic can manifest.⁷ Despite a decade of low 'general' population prevalence

rates, Indonesia is now revealing substantially higher rates among sex workers, injection drug users, and blood donors. For example, HIV prevalence among injection drug users in one drug treatment center in Jakarta, increased from 15% in 2000 to over 40% in mid-2001. This highlights the alarming fact that where high-risk behavior exists, the epidemic will eventually turn up. Nepal provides another example of increasing prevalence within high-risk groups in short time periods. HIV prevalence rates among injection drug users in Kathmandu exploded from 2.2% in 1995 to more than 50% in 1998 (some estimates suggestive of prevalence rates as high as 68% within this high-risk group).⁶

Critical to controlling and preventing HIV/AIDS from developing into major epidemics is to keep the infection rates less than one percent within the general population. The epidemic needs as little as three to four years to shift from high-risk groups into the general population. SAARC countries may still have a window of opportunity to change the course of what is unfolding due to HIV. The key within SAARC region is action now and this urgency must center on high-risk groups (MSM, CSWs, IDUs, migrant workers etc.). This focus will help countries within SAARC region avoid making a grave mistake by regarding low general population HIV prevalence as a favorable country and regional situation.



Figure 1: Interactions of high-risk groups in Bangladesh, 2002.⁸



Acknowledgements

This paper is part of an ongoing Canadian International Development Agency (CIDA) funded project (SAARC-Canada Regional HIV/AIDS-TB project) and wishes to thank CIDA for its support.

References :

1. MMWR.(CDC). The global HIV and AIDS epidemic, 2001;50:434-439. *JAMA* 2001;285 (24):3081-3085.
2. UNAIDS. The Report on the global HIV/AIDS epidemic, June 2000. UNAIDS, Geneva, 2000.
3. UNAIDS. The Report on the Global HIV/AIDS Epidemic.2001 Barcelona Report. <http://www.unaids.org/barcelona/presskit/report.html> (accessed on 8/26/2002).
4. Stalking a Killer. As they lay dying *TIME*, September 30,2002. p.54-61.
5. Larson HJ, Narain JP. Beyond 2000. Responding to HIV/AIDS in the new millennium. World Health Organization 2001. Regional Office for South-East Asia, New Delhi, India.
6. UNICEF/UNAIDS, 2001. South Asia. The HIV/AIDS epidemic. UNICEF Regional office for South Asia.
7. UNAIDS. The Report on the global HIV/AIDS epidemic, 2002.
8. Bangladesh BSS (Slide # ASIA97). UNAIDS/WHO. July 01, 2002. <http://www.timeasia.com>

Ambulatory DOTS Experience in Anuradapura District, Sri Lanka

Waidyaratne, R. A. D. K. M Deepthinie.¹

Introduction:

Implementation of DOTS (Directly Observed Treatment Short course) strategy in the management of tuberculosis patients, in Anuradapura district started on September 1 1999. Since then, several modules for DOTS have been tested to suit specific conditions of the locality and needs of local people. This has returned an interesting and encouraging outcome of good DOTS coverage as well as a better cure rate.

In Sri Lanka, Anuradapura is the largest district by extent, covering an area of 7219 square kilometers. The district shared a long stretch of border with the war-torn Northern and Eastern provinces. One of the major constraints faced by the local people is the relatively poor public transport system. Out of the district population of 782462 (*source: National Census 2001*) the majority are peasants and casual manual workers. Poverty associated with chronic alcoholism and tobacco addiction, poor housing and nutritional deficiencies, characterize the cross-section of the social and health status of the people of Anuradapura district.

Under these circumstances poor compliance to drug treatment by diagnosed TB patients was one of the significant problems faced by local health care providers in the past. The district Chest Clinic, despite limited resources and facilities, undertook the challenge of implementing DOTS.

¹ District Tuberculosis Control Officer
Chest Clinic, Anuradapura, Sri Lanka

Method:

Having considered the all-specific circumstances that influence the patient compliance and the resources available, following steps were adopted which carefully selected in dealing with the patients.

1. Once the diagnosis of Tuberculosis was made, patients were admitted to the TB ward of the General Hospital, Anuradapura, for the initial phase of treatment and until DOTS is arranged.
2. Their hospital stay was utilized for health education of the patients and their family members. Patients were educated individually about TB in general and the value of DOTS in its treatment. Since all members of their house-holds and other close family members were got down for routine "contact investigation" that opportunity was utilized to educate them as well, about DOTS and the value of helping TB patients to comply with treatment.
3. During the period of hospital stay, the most suitable DOTS provider for each and every patient was identified, taking into account patient's best interests and convenience. They were:
 - a) Health institutions (Hospital, Dispensary, DDHS/MOH office etc.)
 - b) Field health workers (PHNS, PHI, FHWW, person in charge of MI room in Army / Navy / Air Force camps)
 - c) Health workers living in the neighbourhood

- d) Health volunteers
 - e) Distinguished, reliable persons in the locality, who were not health workers but were ready to devote themselves to help the patients on our request, and they were trustworthy of maintaining patient's confidentiality. (School Principals, Teachers, Samurdi Officers, Grama Niladaris etc.)
 - f) For young children- their parents
 - g) For disabled people- one of the family members
4. Then arranged to send the drugs to the DOTS provider. To overcome difficulties caused by transportation problems, it was arranged to issue a two-month supply of anti TB drugs, at a time. This proved to be beneficial.
- 4.1 Who was employed to transport drugs?
- 1. PHI of the chest clinic
 - 2. During the mobile clinics- DTCO
 - 3. Drivers of hospital ambulances
 - 4. Occasionally patient's relatives
- 4.2 Following procedure was carefully adopted during the delivery of drugs:
- i. All the drugs were put in separately labeled containers with screw caps (done by Nurse/PHI under supervision of DTCO)
 - ii. Patient's name, name of the drug, administration instructions were written on the containers with permanent ink.
 - iii. Prepared drug containers were showed to the patients at the chest clinic and they were clearly instructed (and demonstrated when necessary)
- how, when and how long should they continue drugs.
- iv. *TUBERCULOSIS TREATMENT CARD* (Form:TB 01) was filled in triplicate and DOTS providers copy together with an instruction leaflet and other relevant information, was sent with the drugs.
 - v. It was ensured that the DOTS provider received the drugs before discharging the patient from the hospital.
5. When the patient was ready to be discharged from ward, the next of kin or other responsible adult relative and the patient were got down to chest clinic on the day of discharge. A repeat health education was conducted, especially about treatment of TB. The patient's copy of the form TB 01, *Tuberculosis follow up card* (Form TB 02) and a leaflet about TB are handed over to the patient.
6. The patients were reviewed at the end of intensive phase of treatment. Usually they were advised to come with a responsible family member or a relative on this occasion
- For the patients who wish to continue DOTS with the same DOTS provider in the continuation phase, the next two months drug supply was given.
- For those who find inconvenience to go to the same DOTS provider, the services of an accompanying family member was utilized as the new DOTS provider for the continuation phase of treatment.
7. A letter of appreciation is sent to the DOTS provider as a routine.

- d) Health volunteers
 - e) Distinguished, reliable persons in the locality, who were not health workers but were ready to devote themselves to help the patients on our request, and they were trustworthy of maintaining patient's confidentiality. (School Principals, Teachers, Samurdi Officers, Grama Niladaris etc.)
 - f) For young children- their parents
 - g) For disabled people- one of the family members
4. Then arranged to send the drugs to the DOTS provider. To overcome difficulties caused by transportation problems, it was arranged to issue a two-month supply of anti TB drugs, at a time. This proved to be beneficial.
- 4.1 Who was employed to transport drugs?
- 1. PHI of the chest clinic
 - 2. During the mobile clinics- DTCO
 - 3. Drivers of hospital ambulances
 - 4. Occasionally patient's relatives
- 4.2 Following procedure was carefully adopted during the delivery of drugs:
- i. All the drugs were put in separately labeled containers with screw caps (done by Nurse/PHI under supervision of DTCO)
 - ii. Patient's name, name of the drug, administration instructions were written on the containers with permanent ink.
 - iii. Prepared drug containers were showed to the patients at the chest clinic and they were clearly instructed (and demonstrated when necessary)

how, when and how long should they continue drugs.

- iv. *TUBERCULOSIS TREATMENT CARD* (Form:TB 01) was filled in triplicate and DOTS providers copy together with an instruction leaflet and other relevant information, was sent with the drugs.
 - v. It was ensured that the DOTS provider received the drugs before discharging the patient from the hospital.
5. When the patient was ready to be discharged from ward, the next of kin or other responsible adult relative and the patient were got down to chest clinic on the day of discharge. A repeat health education was conducted, especially about treatment of TB. The patient's copy of the form TB 01, *Tuberculosis follow up card* (Form TB 02) and a leaflet about TB are handed over to the patient.
6. The patients were reviewed at the end of intensive phase of treatment. Usually they were advised to come with a responsible family member or a relative on this occasion

For the patients who wish to continue DOTS with the same DOTS provider in the continuation phase, the next two months drug supply was given.

For those who find inconvenience to go to the same DOTS provider, the services of an accompanying family member was utilized as the new DOTS provider for the continuation phase of treatment.

- 7. A letter of appreciation is sent to the DOTS provider as a routine.

OUTCOME :

It was recorded 91.1% DOTS coverage in 2000, and achieved a cure rate of 94.49% with 0% default rate.

In 2001 the DOTS coverage was 94.3%

It is noteworthy that the habit of frequent and regular supervisory visits to DOTS providers and TB patients by DTCO and PHI has contributed very much to the success of DOTS

in Anuradapura District. Those supervisory visits however, would not have been made easy unless for the detailed documentation of the location of the patients, supported by sketch maps of the locality with important landmarks, during the first registration. In addition, motivation of the DOTS providers and thorough health education to the patients and their family members also contributed immensely to the successful DOTS implementation in Anuradapura district.

Staff situation of District Chest Clinic, Anuradapura:

• District Tuberculosis Control Officer (DTCO)	1
• Nurse	1
• Public Health Inspector (PHI)	1
• Medical Laboratory Technologist (MLT)	1
• Microscopist	1
• Attendants	2
• Labourers	3

Explanations of Some Words And Abbreviations:

Samurdi Officer - A special welfare officer based in each village in Sri Lanka.

Grama Niladari - A public administration officer, working at village level.

MI Room - Medical Investigation Room: (A kind of small medical centre in Armed Forces camps)

DDHS - Divisional Director of Health Services

MOH - Medical Officer of Health

PHNS - Public Health Nursing Sister

PHI - Public Health Inspector

FHW - Family Health Worker

DTCO - District Tuberculosis Control Officer

ACKNOWLEDGMENTS

Proper implementation of DOTS is not an easy task. It requires honest dedication to the job by each member of the chain. It must be gratefully mentioned that, the members of Chest clinic Staff, particularly the Nurse, PHI, and minor staff members and the vast majority of field health staff of Anuradapura district are extending their services to make this effort a success.

Correspondence to:

Dr. Deepthinie Waidyaratne
District Tuberculosis Officer
General Hospital
Anuradapura
Sri Lanka.

OUTCOME :

It was recorded 91.1% DOTS coverage in 2000, and achieved a cure rate of 94.49% with 0% default rate.

In 2001 the DOTS coverage was 94.3%

It is noteworthy that the habit of frequent and regular supervisory visits to DOTS providers and TB patients by DTCO and PHI has contributed very much to the success of DOTS

in Anuradapura District. Those supervisory visits however, would not have been made easy unless for the detailed documentation of the location of the patients, supported by sketch maps of the locality with important landmarks, during the first registration. In addition, motivation of the DOTS providers and thorough health education to the patients and their family members also contributed immensely to the successful DOTS implementation in Anuradapura district.

Staff situation of District Chest Clinic, Anuradapura:

• District Tuberculosis Control Officer (DTCO)	1
• Nurse	1
• Public Health Inspector (PHI)	1
• Medical Laboratory Technologist (MLT)	1
• Microscopist	1
• Attendants	2
• Labourers	3

Explanations of Some Words And Abbreviations:

Samurdi Officer - A special welfare officer based in each village in Sri Lanka.

Grama Niladari - A public administration officer, working at village level.

MI Room - Medical Investigation Room: (A kind of small medical centre in Armed Forces camps)

DDHS - Divisional Director of Health Services

MOH - Medical Officer of Health

PHNS - Public Health Nursing Sister

PHI - Public Health Inspector

FHW - Family Health Worker

DTCO - District Tuberculosis Control Officer

ACKNOWLEDGMENTS

Proper implementation of DOTS is not an easy task. It requires honest dedication to the job by each member of the chain. It must be gratefully mentioned that, the members of Chest clinic Staff, particularly the Nurse, PHI, and minor staff members and the vast majority of field health staff of Anuradapura district are extending their services to make this effort a success.

Correspondence to:

Dr. Deepthinie Waidyaratne
District Tuberculosis Officer
General Hospital
Anuradapura
Sri Lanka.

Abstracts

Treatment of New Pulmonary Tuberculosis Patients: what do allopathic doctors do in India?

R. Prasad, R. G. Nautiyal, P. K. Mukherji, A. Jain, S. Singh, R. C. Ahuja

INT J TUBERC LUNG DIS 6(10):895-902, 2002.

Setting:

Out- and in-patient services of the Department of Tuberculosis and Chest Diseases at King George's Medical College, Lucknow, India.

Objective:

To analyze the prescribing patterns of allopathic doctors for treatment of new cases pulmonary tuberculosis (PTB), and to compare their practices with the current national and World Health Organization (WHO) recommendations.

Design:

A consecutive case series. Tuberculosis treatment practices of 449 primary doctors who had prescribed treatment for PTB to 218 patients were analyzed.

Results:

Thirty-three different drug combination regimens were prescribed by 449 primary doctors. Approximately 45% (95% CI 41.5-49.9) of doctors did not practice the current NTP/WHO recommended drug regimens.

Overall 75% (95% CI 70.4-78.8) of doctors made prescription errors with respect to one or more aspects of treatment, including treatment duration (64.5%) and drug dosages (30%). The most frequent prescription error was treatment for longer than necessary (60.2%; 95% CI 55.5-64.8). Overall, both chest specialists and non-chest specialists made prescription errors with almost equal frequency (77.5% vs. 72.2%, $p=0.228$). The majority of the doctors (70.2%; 95% CI 65.7-74.5) used fixed dose formulations of two to four drugs.

Conclusion:

For effective tuberculosis control, strategies for targeted continuing medical education and auditing of the practices of all doctors need to be implemented without delay.

Bacteriological follow-up of tuberculosis treatment: a comparative study of smear microscopy and culture results a the second month of treatment:

H. Ramarokoto, H. Randriamiharisoa, A. Rakotoarisaonina, T. Rasolovavalona, V. Rasolofo, S. Chanteau, M. Ralamboson, B. Cauchoix, D. Roktonramarina.

INT J TUBERC LUNG DIS 6(10):909-912, 2002

Setting:

Significance of a positive bacillary examination of sputum at 2 months of treatment in relation to the viability of the bacilli and the final treatment result.

Objective:

To compare the results of smear microscopy and sputum culture at the second month of tuberculosis treatment and to follow the progress of the patients.

Methods:

Follow-up 297 patients with smear positive pulmonary tuberculosis in Madagascar, 152 of whom were smear positive at 2 months of treatment and 145 smear negative. The number of bacilli was recorded as were the culture results and the final outcome of treatment.

Results:

Among the 152 patients who were smear positive at the second month, 77 (51%) were culture negative, there were 12 (8%) treatment failures and four relapse (4.6%). Among the 145 smear-negative patients, 22 (51%) were culture positive, of which one was a treatment failure (1%).

Conclusion:

The majority of failures and relapses were observed in the group of smear positive patients. It is important to reinforce the surveillance of these patients in order to reduce the number lost to follow up. Furthermore, a positive smear microscopy at the end of the second month is not sufficiently specific for early identification of treatment failures. It is preferable to wait until the fifth month, as the great majority of patients who are positive at 2 months achieve cure. The treatment strategy currently recommended in Madagascar is satisfactory.

Risk factors for transmission of Mycobacterium tuberculosis from HIV-infected tuberculosis patients, Botswana.

T.A. Kenyon, T. Creek, K. Laserson, M. Makhoa, N. Chimidza, M. Mwasekage, J. Tappero, S. Lockman, T. Moeti, N. Binkin.

INT J Tuberc Lung Dis 6(10):843-850, 2002.

Objective:

To identify risk factors for transmission of Mycobacterium tuberculosis from patients with tuberculosis and human immunodeficiency virus (HIV) infection in Botswana.

Design:

Transmission was studied in 210 children aged <10 years (contacts) of unknown HIV status exposed to 51 adults with tuberculosis (index cases), including 41/49 (83.7%) with HIV infection.

Methods:

Data collected on index cases included demographics, clinical and social characteristics, sputum, HIV and CD4 lymphocyte results. Tuberculin skin testing was performed on contacts and their parent or guardian was interviewed. A positive test was defined as ≥ 10 mm induration. Skin test results were compared with results obtained from a population survey of children of similar age from the same community.

Results:

A positive skin test was found in 12.1% of exposed children compared with 6.2% in the community ($p=0.005$). Of the infected children, 22 (78.6%) were contacts of a close female relative. The risk of transmission

Objective:

To compare the results of smear microscopy and sputum culture at the second month of tuberculosis treatment and to follow the progress of the patients.

Methods:

Follow-up 297 patients with smear positive pulmonary tuberculosis in Madagascar, 152 of whom were smear positive at 2 months of treatment and 145 smear negative. The number of bacilli was recorded as were the culture results and the final outcome of treatment.

Results:

Among the 152 patients who were smear positive at the second month, 77 (51%) were culture negative, there were 12 (8%) treatment failures and four relapse (4.6%). Among the 145 smear-negative patients, 22 (51%) were culture positive, of which one was a treatment failure (1%).

Conclusion:

The majority of failures and relapses were observed in the group of smear positive patients. It is important to reinforce the surveillance of these patients in order to reduce the number lost to follow up. Furthermore, a positive smear microscopy at the end of the second month is not sufficiently specific for early identification of treatment failures. It is preferable to wait until the fifth month, as the great majority of patients who are positive at 2 months achieve cure. The treatment strategy currently recommended in Madagascar is satisfactory.

Risk factors for transmission of Mycobacterium tuberculosis from HIV-infected tuberculosis patients, Botswana.

T.A. Kenyon, T. Creek, K. Laserson, M. Makhoa, N. Chimidza, M. Mwasekage, J. Tappero, S. Lockman, T. Moeti, N. Binkin.

INT J Tuberc Lung Dis 6(10):843-850, 2002.

Objective:

To identify risk factors for transmission of Mycobacterium tuberculosis from patients with tuberculosis and human immunodeficiency virus (HIV) infection in Botswana.

Design:

Transmission was studied in 210 children aged <10 years (contacts) of unknown HIV status exposed to 51 adults with tuberculosis (index cases), including 41/49 (83.7%) with HIV infection.

Methods:

Data collected on index cases included demographics, clinical and social characteristics, sputum, HIV and CD4 lymphocyte results. Tuberculin skin testing was performed on contacts and their parent or guardian was interviewed. A positive test was defined as ≥ 10 mm induration. Skin test results were compared with results obtained from a population survey of children of similar age from the same community.

Results:

A positive skin test was found in 12.1% of exposed children compared with 6.2% in the community ($p=0.005$). Of the infected children, 22 (78.6%) were contacts of a close female relative. The risk of transmission

increased with the degree of sputum smear positive for acid-fast bacilli among female index cases (10.8% if smear 0+, 9.3% if smear 1+, 29.4% if smear 2+, 44% if smear 3+, $p < 0.001$). In multivariate analysis, severe immunodeficiency (CD4 lymphocyte count < 200 cells/mm³) among HIV infected index cases was protective against transmission (OR 0.08, 95% CI 0.01-0.5, $p = 0.006$)

Conclusion:

The intensity of exposure to tuberculosis patients and the degree of sputum smear positive for acid fast bacilli remain important risk factors for transmission of *M. tuberculosis* during the era of HIV. However, tuberculosis patients with advanced AIDS may be less infectious than patients in earlier stages of AIDS.

Frequency of recurrence among MDR TB cases 'successfully' treated with standardized short course chemotherapy.

G.B. Migliori, M. Espinal, I. D. Danilova, V. V. Punga, M. Grzemska, M. C. Raviglione.

INT J TUBERC LUNG DIS 6(10):858-864 2002.

Setting:

Ivanovo Oblast, Russian Federation, 300 km north-east of Moscow, where a pilot DOTS TB control programme was implemented in October 1995.

Objective:

To determine the frequency of TB recurrence among MDR (multidrug-resistance) patients who achieved treatment 'success' on standard short-course chemotherapy.

Methods:

All patients with MDR tuberculosis, defined as resistance to at least isoniazid and rifampicin, who were declared "cure" or "treatment completed", were identified using the district register and traced whenever possible. Eligible patients underwent medical examination and if necessary, chest radiography testing. If the patient had died, the relatives were interviewed to try to determine the reasons for death.

Results:

Of 18 patients eligible for analysis, five (27.8%) were documented to have recurrence (two of seven patients resistant to HRSE, one of five patients resistant to HRS and two of six patients resistant to HR). Patients receiving the Category I regimen were more likely to relapse than those receiving the Category II regimen (40% vs. 12.5%). The median time to relapse was 8 months, 2.46 recurrences were observed in 100 person-months (3.17 in category I and 1.3 in category II patients).

Conclusion:

The frequency of TB recurrence among MDR-TB patients declared "cured" after short course chemotherapy is high. Improvement in treatment success after revival of programme related pitfalls in the treatment delivery process, must incorporate methods for early detection of MDR, along with adequate treatment regimens including second line drugs. Culture based bacteriological confirmation at the end of treatment is recommended.

Sex differences in Tuberculosis in Hong Kong

M. Chan-Yeung, K. Noertjojo, S. L. Chan, C. M. Tam.

INT J TUBERC LUNG DIS 6(1):11-18 2002

Setting:

The Hong Kong Tuberculosis and Chest Service, Department of Health, Hong Kong.

Objective:

To examine sex differences in the rate and clinical manifestations of tuberculosis in Hong Kong.

Design:

Notification rates of tuberculosis during the past five decades were obtained from the Hong Kong Tuberculosis and Chest Service, Department of Health, Hong Kong. In addition, all patients registered with the Chest Service for treatment of tuberculosis in 1996 were studied.

Results:

The rate of tuberculosis during the past five decades was consistently higher in men than

in women, irrespective of age group. The sex difference in rates was highest among those aged over 60 years. In 1996, a higher proportion of women had extra pulmonary tuberculosis than men, the main site of involvement was the lymph nodes. More women completed treatment at 12 months and fewer women missed treatment appointments. A higher proportion of men had relapse pulmonary disease that was more extensive, a history of previous default from treatment and co-morbid illness.

Conclusion:

There are sex differences in the rates and clinical manifestations of tuberculosis in Hong Kong. Study of sex differences is essential for targeting prevention programmes at groups at higher risk.



Welcome News

STC Visit:

- Hon'ble Dr. Upendra Devkota, Minister of Health, His Majesty's Government of Nepal visited SAARC TB Centre on 31 Oct. 2002. He observed the activities carried out by the Centre. He also observed an exhibition organized in STC premises. The Director, STC briefed the objectives, functions and achievements of the Centre. Hon'ble Minister appreciated the efforts made by the Centre to control TB and TB HIV co-infection in the Region.
- Dr. Hasan Sadiq, Chairman, Governing Board, STC visited SAARC TB Centre on 21 November 2002. He observed the activities of the Centre.
- Mr. Ahmed Sareer, Director, SAARC Secretariat, visited STC on 2 occasions during the year 2002. On 1st Nov. for the meeting with WHO/UNAIDS personnel for development of epidemiological network and on 27 Dec. 2002 and 9 January 2003 during inauguration of training on data management and its closing session.

Proposed Programmes

1. Public awareness, Advocacy & Partnership Programmes on Tuberculosis Control by incorporating the following activities:
 - World TB Day, SAARC Charter Day
 - Partnership programmes with School & Media
 - Involvement of Medical colleges, Pharmaceuticals & Industries
 - Preparation/publication and distribution of guidelines/modules for the partnership programme.
2. Programme under SAARC-Health Canada Regional TB and HIV/AIDS Project:
 - Workshop of Nodal Officers of Member Countries and other stakeholders to develop modalities for epidemiological networking and workshop to develop a uniform format for sending reports to TB & HIV/AIDS networking.
 - Joint workshop with WHO and UNAIDS to discuss technical issues in relation to TB & HIV/AIDS data collection, analysis and interpretation
 - Workshop on development of research protocol on gender issues related to TB and HIV/AIDS.



Book Post

postage stamp

If undelivered please return to:
SAARC Tuberculosis Centre
P.O.Box 9517, Kathmandu,
Thimi, Bhaktapur, Nepal