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Distribution: General

Enhancing the Role of Medical Schools in STI/HIV and TB Control

Report of an Informal Consultation

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1. INTRODUCTION

HIV/AIDS and TB are both major health concerns in the South-East Asia Region. With three million new infectious cases and close to a quarter of a million deaths annually due to TB, the Region accounts for nearly 40 per cent of the global burden of tuberculosis. This Region is also home to 5 million people living with HIV/AIDS, second only to sub-Saharan Africa. Hard-won gains in overall health and life expectancy have been undermined by these twin epidemics.

National TB control programmes in the member countries in the Region have adopted the WHO-recommended strategy for TB control namely Directly Observed Treatment, Short-course (DOTS). However, there has been little or no coordination between the national programmes, the academia and the private health care providers. Moreover, in many countries, in-depth training in tuberculosis, HIV/AIDS and other public health priorities is not imparted as an integral component of a general medical education. At the same time, the private sector and academic institutions continue to treat a large proportion of patients with these illnesses, resulting in varying prescribing practices with no systematic documentation of treatment outcomes. This has led to the development of chronic cases and to continued spread of disease. The emergence of drug resistance and the advent of HIV in epidemic proportions have only sharpened the need for better coordination and collaboration between academic medicine and disease control programmes.

Medical schools can play an important role in the national efforts to manage patients and save lives. They are in a unique position to reach various levels of health care providers. They have the potential to create a new generation of medical professionals who have updated knowledge about priority communicable diseases such as HIV/AIDS and TB.

In view of this, the WHO Regional Office for South-East Asia (SEARO), in collaboration with the National Institute of Epidemiology (Indian Council of Medical Research) Chennai, organized an Informal Consultation on Enhancing the Role of Medical Schools in STI/HIV and TB control at Chennai, India from 5 to 7 July 2000. The meeting was attended by 19 participants including professors of Medicine and Community Medicine, deans of medical institutes and members of medical councils.

The objectives of the meeting were:

- (1) To review the situation of HIV/AIDS and tuberculosis globally and in the South-East Asia Region, including the role presently being played by medical schools in combating these diseases;
- (2) To deliberate on the roles that medical colleges could play in building capacity, service delivery and research;
- (3) To identify strategies and framework for enhanced involvement of medical schools in national HIV/AIDS and TB control programmes, and
- (4) To develop plans for follow-up action at national level.

2. OPENING SESSION

In his opening address, Dr Vijay Kumar, Director, Department of Communicable Diseases, WHO/SEARO, briefly touched upon the immense potential that medical schools could have on national HIV/AIDS and TB control programmes especially in the areas of training, research, service delivery and advocacy. Dr M.D. Gupte, Director, National Institute of Epidemiology, Chennai, welcomed the participants on behalf of the Director-General, ICMR, and reiterated the role medical schools could play in national control programmes through the training of future health professionals. Dr Jai P. Narain, Regional Adviser, HIV/STI Initiative and Stop Tuberculosis programme, WHO/SEARO, introduced the objectives of the consultation, the first of this kind at Regional level, to the participants.

Dr J.N. Pande, Professor of Medicine at the AIIMS, New Delhi (India) and Dr. Boonmee Sathapatayavongs, Professor of Medicine from the Mahidol University, Bangkok (Thailand) were formally elected Chair and co-Chair for the meeting (See Annex 1 and 2 for list of participants and programme).

3. OVERVIEW OF HIV/AIDS AND TB IN SOUTH-EAST ASIA: PROBLEMS AND RESPONSE

3.1 HIV/AIDS

The South-East Asia region today faces the major challenge of having to respond to a rapidly changing epidemic. The risk behaviour patterns and modes of transmission require that behavioural change interventions be implemented among populations with high-risk behaviour. Countries with significant numbers of HIV infections namely, India, Myanmar and Thailand as well as those currently with low levels such as Bangladesh, Bhutan, Maldives and Sri Lanka need to take urgent measures to combat HIV/AIDS.

Experience shows that early and intense interventions have the greatest impact; this requires high political commitment for better resources and the forging of effective partnerships. There is a need to learn from more successful experiences in Member Countries and to replicate these in order to bring about social and behavioural change and to develop partnerships through international and intercountry collaboration. There has been a paradigm shift from a purely public health approach to effecting a broad-based multisectoral effort in the control of HIV/AIDS. Medical schools could additionally strengthen health system responses in the areas of STI management, blood safety, prevention of mother-to-child transmission as well as provision of care and social support for those living with HIV/AIDS.

The success of Thailand in responding to HIV shows that prevention does work. While the prevalence of HIV reported from antenatal clinics in Thailand is one per cent, the levels among males being conscripted into the defence services in Thailand was on the decline. This success could be attributed to several factors; high-level political commitment, effectively addressing the social stigma, public education campaigns through the effective use of the mass media, life skills education among young adults and adolescents and the promotion of the 100% condom programme in the country. The excellent public health infrastructure of the country also contributed to this success.

3.2 Tuberculosis

The South-East Asia Region carries the largest share of TB in the world today with 38% of the global burden of disease. Affecting the most productive age groups, TB has levied a tremendous cost on economic progress in the Region, amounting to 5-7 per cent of the gross domestic product of Member Countries. The social impact in terms of children having to give up schooling and take up employment in order to support parents affected by TB, and of women being rejected by their families, is colossal. The impact of TB together with the accompanying epidemic of HIV on the already over-burdened health systems in the Region includes increased case notifications, prolonged hospitalizations, higher death-rates, resultant lower cure rates and further loss of income.

The Region still lacks adequate resources, supplies and effective logistics to deliver health care to those who need it most. However, since the adoption of the DOTS strategy for TB control by the national TB control programmes in all Member Countries of the Region, much progress has been made. The paradigm shift in focus from diagnosis and case-finding to that of ensuring completion of treatment and the institution of a system of accountability has been key to success in many parts of the Region. There is an urgent necessity, therefore, to widely expand this successful strategy in order to ensure that existing tools are used effectively to adapt it to new challenges and further to improve it by developing better diagnostics, drugs and vaccines.

4. THE ROLE OF MEDICAL SCHOOLS IN STI/HIV AND TB CONTROL

The role of medical schools in national disease control cannot be denied. However, their participation in control programmes has so far been inadequate. The academia and practitioners lack consensus on the rationale and practices of national TB control programmes in Member Countries, largely on account of an absence of information and adequate involvement in these programmes. National control programmes, in turn, have not been successful in reaching out to medical schools and providing them with the necessary information to make useful contributions. A balance between the

teaching and practice of skilled individualized clinical interventions in hospital settings and strategies that are operationally suited and could be more widely practiced in diverse health settings must be achieved. Often these strategies are perceived wrongly by medical academia as having been simplified to the point of being largely ineffective. The medical faculty therefore still prefers to individualize treatment regimens over the broad-based approach advocated by the national TB programmes. As a result, the strengths of the DOTS strategy as practised by the national TB control programmes in terms of the use of microscopy for diagnosis, standardized treatment regimens, ensuring follow-up and accountability through recording and reporting, were being introduced in very few medical colleges. While there is a need to assess the validity of these perceptions, an attitudinal change must be effected to bridge the gap between internationally-accepted national programme strategies and what medical colleges would like to teach and practise in isolation in their own settings.

Similarly, medical faculties have so far kept themselves away from the national programmes developed for the control of HIV/AIDS and STI. This would need to change in order to effect changes in education policy and strategies and to impart holistic training to medical school students. Medical students have to be made aware of community concerns, especially sensitivities, attitudes and also issues relating to medical ethics. The concepts of prevention and care should include development of correct attitudes, communication skills, counselling, motivating and breaking bad news to patients. These skills are as important as clinical skills with respect to diagnosis and treatment. Medical faculty need to keep abreast with advances in the management of HIV/STI including the syndromic management of STI and of Highly Active Anti Retroviral Therapy (HAART) for HIV, post-exposure prophylaxis for accidental exposure, issues of mandatory testing and medical ethics and impart this knowledge to their students, while at the same time conveying the rationality and effectiveness of the national programme approach.

WHO could have a role in initiating this collaboration between medical institutes and national programmes. It could also facilitate further dialogue and consensus at country level, disseminate information on successful country experiences in terms of the impact of DOTS on cure rates achieved, deaths averted, reversal of trends of MDR-TB, and through providing technical and teaching materials for country level training programmes.

As current textbooks of medicine do not cover the principles and practices of national control programmes which compound the problem, the guidelines developed by WHO could considerably aid the teaching of HIV/AIDS in medical schools. Similarly, the WHO guidelines could help to update the medical curriculum to include the teaching of tuberculosis as a core subject.

Medical schools need to practice evidence-based medicine in order to teach, make contributions to and develop future guidelines for national control programmes. In order to improve the relevance of teaching, medical institutions should redefine their mission statements and make necessary modifications to unify teaching and practice. Most importantly, the medical schools must also practice the national policies and strategies for combating HIV and TB.

5. COUNTRY STATUS AND EXPERIENCES

To a questionnaire on the level of involvement of medical schools in national control programmes and on the status of teaching on HIV/AIDS in Medical Schools in the Region, the following responses were made:

| | Yes | No |
|-------------------------------------------------------------------------------------------------------------|-----|----|
| General | | |
| 1. Do medical schools participate in national programme planning? | 4 | 9 |
| 2. Do medical schools participate in evaluating national programmes? | 5 | 8 |
| 3. Is there collaboration with national programmes? | 5 | 9 |
| 4. Do medical schools participate in building the technical/managerial expertise of medical practitioners ? | 9 | 1 |
| HIV/AIDS and STI | | |
| 1. Is HIV/AIDS part of the Medical School curriculum ? | 11 | |
| 2. Is the syndromic management of STD taught in medical schools in your country? | 12 | |
| 3. Are there questions in the examination/assessment on syndromic management of STD ? | 10 | 2 |
| 4. Are behavioural aspects taught ? | 11 | 1 |

| | Yes | No |
|----------------------------------------------------------------------------------|-----|----|
| Tuberculosis | | |
| 1. Is DOTS part of the medical school curriculum ? | 11 | 1 |
| 2. Is operational research on TB carried out ? | 6 | 5 |
| 3. Are medical students exposed to DOTS in the field ? | 7 | 2 |
| 4. Are there questions in the examination/assessment on DOTS? | 9 | 3 |
| 5. Are medical schools involved in political advocacy for TB ? | 2 | 11 |
| 6. Are medical schools involved in developing technical policies on TB? | 2 | 11 |
| 7. Would you be interested in establishing a DOTS centre in your medical school? | 12 | |

5.1 Bangladesh

Bangladesh has undertaken several initiatives under the Health and Population Sector Programme (HPSP) for the delivery of health through an essential service package (ESP). The health infrastructure in Bangladesh provides for one health facility for every 6,000 population. To meet this need, medical institutions in Bangladesh has to train a large number of health personnel; more than 50 per cent of training institutes in Bangladesh are in the private sector. There is, therefore, an urgent need to establish a system of quality assurance for medical training. Medical institutes in Bangladesh have so far not been involved in the national communicable diseases control programmes. This must be remedied through a comprehensive curriculum review and appropriate changes in course content and teaching/learning methodology.

5.2 India

In India, some initiatives towards involving medical institutes in national control programmes have been made. However, these are very limited and yet to receive widespread recognition or acceptance. An alliance between public health and medical education should be forged in order to do this. Medical schools are expected not only to teach and provide care, based on sound rationale and evidence from operational and behavioural research, but

also to provide assistance to national programmes in the areas of policy-making, situational analysis and monitoring. There is also a need to adopt new teaching/learning methods and to reach out additionally to interns, postgraduates, family practitioners and medical officers already in service. Medical curriculum should be modified to make teaching more relevant to the needs of national control programmes. Training courses should, however, include all national health programmes rather than focusing on individual programmes. The best period to orient medical graduates to national programmes might be during the twelve-month period of internship when they were compulsorily posted in rural areas for a period of three months. Strategies and planning need to be disseminated in a step-wise manner from region to country and subsequently to district levels in order to achieve better coordination. In the State of Gujarat (India) through involvement in the "Vatsyayan Kendras" and "Matru Raksha Camps" members of the medical faculty help in training workers, monitoring DOTS and in improving community awareness on HIV/AIDS.

5.3 Indonesia

In Indonesia, medical schools are beginning to participate in tuberculosis control as a part of the national movement called "Gerdunas TB". The movement is an integrated approach to controlling TB through broad partnerships involving various government departments, NGOs as well as the private sector.

5.4 Myanmar

The undergraduate and postgraduate medical curricula in Myanmar cover various aspects of HIV/STI and TB. Various departments in the medical schools in Myanmar have devoted a number of hours to the teaching of STI/HIV and TB, with emphasis on behavioural sciences and reviewed learning and evaluation strategies to do so. The syndromic management for STI and the DOTS strategy for TB control have been introduced in the curriculum and also in the final evaluation at the end of training.

5.5 Nepal

The B.P. Koirala Institute of Medical Sciences at Dharan was the first institute in Nepal to set up a DOTS teaching centre in Nepal. Concerted efforts have been made to orient training to the perceived needs of the community and to the principles of the national control programmes. Students are taken on field visits to Government-run DOTS centres in a district where the Institute provides technical support jointly with a local NGO. Other innovations are the introduction of community medicine, and clinical postings from the first year of the MBBS curriculum. Interns are posted for six months at district-level hospitals and for the remaining six at the Institute. The Institute has introduced interactive modular training and teaching methods based on techniques such as Problem-based Learning (PBL) for the teaching of STI/HIV and TB control in an integrated manner involving various departments.

5.6 Sri Lanka

The Faculty of Medicine affiliated to the University of Colombo, has introduced behavioural sciences and community orientation along with introductory sessions on clinical sciences in teaching from the first year of undergraduate education and this is continued till the final year. Ethical considerations, attitudes, disease control including universal precautions and the principles followed by the national AIDS and TB control programmes are part of the core curriculum. The new curriculum was introduced five years ago. The teaching/learning methods consist of lectures, laboratory practicals, hospital attendance, fixed learning modules, small group discussions, problem-based learning sessions, assignments, field visits, student-centred seminars and inter-disciplinary activities. During examinations it is ensured that 70 per cent of core curriculum contents are evaluated through the use of OSCEs (Objective structured clinical examinations) and OSPEs (Objective structured practical examinations) , (MCQs) Multiple Choice Questions, and (SAQs) Short Answer Questions. National programme staff are also invited to deliver lectures to medical students. An integrated approach to teaching has been developed by the various teaching departments. These changes were effected by making adjustments in the existing curriculum. within a period of one year and well within the guidelines of the Sri Lankan Medical Council.

5.7 Thailand

Medical teaching on STI/HIV and TB in Thailand is overwhelmingly clinically oriented and speciality-based, and teaching on national control programmes is not included in the curriculum. Thailand faces constraints similar to the other Member Countries in SEAR in addressing the role that medical schools have to play in national control programmes. The dichotomy between medical education and public health needs to be addressed in view of the fact that the country needs more medical graduates to undertake family practice. Thailand is trying to promote family practice as a speciality.

6. ENHANCING THE ROLE OF MEDICAL SCHOOLS

6.1 What should Medical Schools do?

The shift in emphasis from solely addressing clinical aspects of control to addressing community aspects which has taken place over the past two decades calls for including basic information on TB control into the curricula of medical and nursing schools. There is a need to orient students to national control programme policies, include practical field training, managerial and problem-solving skills, supervisory and evaluative techniques as well as social aspects of health delivery to the community, while at the same time, imparting the scientific rationale for these changes in disease management. In order to meet health system challenges including health sector reform, pre-service training must include an expanded scope of education, not only for doctors but also for other health personnel.

The concept of a “five-star doctor” has to be introduced. The role of doctors has to be expanded from being solely care-providers to being decision-makers, communicators, community leaders and managers. In addition to being academicians and clinicians, medical professionals of the future would have to adapt to changing environments in order to build partnerships with NGOs, the private sector, policy-makers and other stakeholders in the health sector.

The initiative taken by the national TB programme in Bangladesh as early as 1993, in training medical officers and laboratory technicians has

contributed to its success. The precepts of teaching HIV and TB control in the medical curriculum in Myanmar complied with the guidelines of the national programmes and included principles of the DOTS strategy, field training and behavioural science, including pre- and post-test counselling. In Sri Lanka, medical academia had approached national programme managers to train medical students as a result of which care and counselling for patients with HIV was introduced. This has resulted in medical schools becoming involved in developing guidelines for and in the review committee of the NSACP.

Medical schools could play a strategic role through technical and managerial capacity-building, operational and basic research, and by monitoring progress to supplement national control efforts. They have a lead role in advocacy at the highest level for enhanced resources and in creating a network between all stakeholders such as the government, health professionals, medical councils, the private sector, communities and the media, in order to inculcate a sense of ownership. Through their traditional roles in training and continuing medical education, they could improve the technical expertise available within national programmes. Similarly, through setting standards for diagnosis and treatment, including quality assured laboratory services, and provision of specialized care, they could enhance the profile of national programmes. Their role in research is key to improving existing strategies and practices. Institutional involvement could also lead to extending medical care beyond the traditional purview of hospitals and to creating supportive environments in the community to provide a continuum of care for patients with TB and HIV.

WHO assistance in formulating curriculum content and improving teaching methods through the use of standardized modules with the help of international faculty and experts has contributed significantly to training. The technical contribution of WHO in conducting intercountry training courses and producing teaching materials on disease control, clinical management including the syndromic approach to STI, counselling, leadership and strategic management and communication was appreciated. The training of various cadres of health personnel at the international level is expected to initiate a cascading effect through one level training the level below it in a similar manner.

In summary, the role of medical schools is not only to teach national policies and strategies on HIV/AIDS and TB control but also to practise them. Broad areas where medical schools could be included are education/training, service, research and advocacy, as also participation in national programme planning and evaluation and coordination with other stakeholders.

6.2 How could the Role of Medical Schools be enhanced?

(1) HIV/AIDS and Sexually-Transmitted Infections

(a) Education/Training

Academicians must be included in the planning and evaluation of national AIDS programmes to bring about appropriate changes in curriculum and continuing medical education. The training needs at three levels, the undergraduate, postgraduate and the in-service practitioners must be assessed. Undergraduates should be taught basic management and care and the need to refer cases beyond their level of competence, while specialized care and management could be taught at postgraduate level.

Besides imparting knowledge on disease management and control, mechanisms must be evolved to develop specific learning objectives with an emphasis on building capacity in communication, management and counselling skills through reviewing and revising curriculum and evaluating the changes. Training should include discharge planning, referral and community involvement. HIV/AIDS and STI should be a part of the core curriculum and questions on these subjects should be included in the assessment.

(b) Service

Medical institutes should continue to be models for quality care, and in addition, should teach and practice national policies. They should be involved in developing strategies on blood safety including the rational use of blood, and in developing materials for IEC at health care settings such as antenatal clinics, STI facilities and blood banks. In addition to clinical management, they should be involved in developing a system of follow-up and referral for patients presenting to medical institutes. Issues such as voluntary counselling, post-exposure prophylaxis, standard precautions, confidentiality and safe hospital waste disposal should also be addressed.

(c) Research

Through dialogue with the national AIDS programmes, medical schools could identify research priorities and develop generic protocols on HIV/AIDS and STI for social, behavioural and operational research and to improve research capacities at country level. They could be involved in basic research, identification of antigen variability and virus types, test kit evaluation and quality management. They should also develop a network to disseminate research data to national AIDS programmes and help in HIV surveillance.

(d) Others

Medical schools must be represented in national AIDS committees and relevant sub-committees and coordinate activities with other stakeholders such as NGOs, the private medical sector and professional bodies such as medical associations. They have a role to play in advocacy for political commitment, resource mobilization, development of technical policy and social mobilization, promoting care and compassion for people living with AIDS and in securing basic human rights including the right to access health care.

National programmes could assist through information-sharing and provision of guidelines and materials in order to involve medical schools in planning and evaluation. They should assist in orienting medical school faculty to policies and practices being adopted, on a regular basis. The role of WHO is to advocate for an enhanced role for medical schools, provide information materials and ensure adoption of best practices. WHO could facilitate country-level meetings to forge partnerships, mobilize resources and provide financial support and assistance in priority research areas.

(2) Tuberculosis

It was appreciated that while there is scope for improvement, the DOTS strategy is the best available for TB control within the context of national programmes at the present time. Through active involvement in national programmes, medical schools could contribute significantly in the following areas:

(a) Service delivery

Designated medical faculty could be oriented to national programmes through a process of dialogue followed by the setting up of a task force and working groups comprising of members from medical academia and national programmes. Medical faculty could thus be involved in planning, implementing and evaluating control programmes. Medical institutes could either adopt existing DOTS centres or establish DOTS clinics within their precincts through the allocation of suitable staff and infrastructure while continuing to provide tertiary-level care for complicated and referred patients. They should involve themselves in setting standards for diagnosis and treatment and in assisting with quality-assured laboratory services including drug resistance testing.

(b) Teaching

Medical schools should provide learning opportunities to medical students in all aspects of tuberculosis, with particular reference to diagnosis and management, in accordance with the national TB control programme guidelines. They should also impart appropriate knowledge, skills and attitudes to primary care doctors, chest specialists, basic scientists, researchers, nurses, laboratory technicians and community health workers. This should be done through curricular reform and development of suitable training materials. WHO has a critical role to play in advocating the need for commitment to and resources for the implementation of the above strategies to policy-makers and in providing technical assistance to medical schools is critical in order to achieve these objectives.

(c) Research

Medical schools should undertake both basic and operational research in order to improve the efficiency of the national TB control programmes and to develop newer diagnostic, treatment and preventive strategies for TB control including vaccine research. It is equally important to develop linkages with all partners and stakeholders to promote utilization of research findings.

(d) Advocacy

Medical schools are in a unique position through endorsing and practicing the policies of national TB control programmes to create a consensus among medical professionals and the public as to the practices to be adopted as well as to advocate for an equitable allocation of resources for TB control.

7. TRAINING METHODS AND EVALUATION

Medical faculty should adapt training strategies to the learning needs of today's medical school entrants, whose individual capacities to learn new information may vary in terms of the time taken or methods adopted. Learning is always faster when it is meaningful, directly related to practice, and facilitated by feedback. Motivated learners who have a background to which they add new information benefit the most; hence basic training must be comprehensive. Curriculum frameworks range from discipline-based through integrated system-based and problem-based curricula to completely self-training modes such as participation by students in workshops, projects and self-study groups. One very useful teaching tool that has been developed is the PMP (Patient Management Problem).

In the areas of evaluation, it is important to consider the pre-requisites for developing a medical professional, examine the right components of the curriculum in the context of a composite whole, as well as to assess overall competence. There has been a change from the traditional concept of the examination as the final barrier to a pattern of regular continuous assessment with feedback during training. Objective-structured clinical and practical examinations in order to assess not only knowledge, but also practical skills and attitudes are preferred to the traditional essay type model of assessment. Assessment should be done not only by the teaching faculty, but also by peers and other health professionals. The merits of newer evaluation techniques over traditional end-of-semester examinations require that medical training institutes adopt these. In order to continuously improve the content and process of training, a system of feedback from students as well as from the medical councils is necessary. It is also important to guide newly-trained

graduates according to their capacities into the different fields of medicine, so as to achieve the best balance between the provision of specialized services and basic health care. Introducing a system of re-accreditation for in-service and private practitioners could also contribute to raising the standards of health care in the Region.

A change from traditional lecture- and system-based teaching to more interactive methods must be made in order to meet the training/learning needs of today's medical students. An integrated, problem-based, student-centred approach to training must be adopted. While the current medical curriculum is overburdened, this could be critically examined to prioritize the contents at the cost of omitting less important issues and adopting an overall integrated approach. The period of internship could be utilized to better orient new medical graduates to community needs, basic health services and in particular, to priority national control programmes.

The training needs of in-service practitioners need to be properly assessed and practicing physicians provided updates on newer advances through continuing medical education programmes and other modalities such as distance learning; this is crucial in view of the fact that the private health sector is by far the largest provider of health care in the Region. Some examples of how this had been done in Member Countries are available, one such being the initiative taken by the National AIDS Research Institute (NARI) in India.

Major impediments perceived in achieving the full potential of training were lack of staff, time constraints within the existing curriculum, need for compartmentalization, relatively small number of patients and insufficient information on national programmes. The difficulty in linking teaching to clinical and field practice in a relevant manner had further resulted in a lack of motivation both to learn and to teach. Teaching faculty should therefore be oriented both to newer concepts in education and to changes in national programme strategies on a regular basis and a task force formed to prepare lesson plans for the teaching of STI/HIV and TB in order to provide ownership to medical academia.

Proposed activities at country level

| Activities * | BAN | IND | INO | MMR | NEP | SRL | THA |
|----------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|
| Medical Curriculum Review | √ | | √ | | | √ | |
| Establishment of Task Force to enhance role of Medical Schools | √ | √ | | | √ | √ | √ |
| Integrated teaching of HIV/AIDS/STI in all medical schools | √ | √ | | | | √ | √ |
| Establishment of DOTS Centres | √ | √ | √ | | √ | | |
| Assessment of perceptions of Medical Practitioners | | √ | | √ | √ | | |
| CME Programmes for practitioners | √ | √ | √ | | √ | | |

*** Others**

1. Orientation of medical school faculty to national control programmes
2. Development of lesson plans on HIV/STI & TB
3. Operational research on provision of DOTS in urban areas
4. Formation of HIV/AIDS Committees
5. Evaluation of the involvement of medical schools in national programmes for HIV/AIDS/STI and TB
6. Institution of internship training programme (module based) in Gujarat, India.

Being major and complex health concerns, HIV/AIDS and TB should form part of the core content of medical curricula in medical institutes in the Region. Concerted collaborative efforts are required to bring about appropriate changes in the medical curriculum. Several participants gave examples of how this had been done through innovative teaching modalities at their teaching facilities, but suggested that more efforts were needed to have them widely accepted and replicated at national levels. A critical appraisal of available resources must be made in order to operationalize many of the concepts that had been brought out.

8. CONCLUSIONS AND RECOMMENDATIONS

The meeting recognized that the growing burden of HIV/AIDS and TB in the Region calls for a broad-based multisectoral response and that, in this regard, medical schools have a crucial role to play in strengthening national control programmes. Vigorous follow-up actions are required urgently at country level,

and by national AIDS and TB control programmes, WHO and other stakeholders to enable medical schools to play a full and active role in combating STI/HIV and TB. At the country level, there is an urgent need to focus on STI/HIV prevention and care and the DOTS strategy for the effective management and prevention of transmission of TB. It is imperative to impart the appropriate knowledge and skills and to bring about attitudinal changes among future doctors to enable them to manage HIV/AIDS/STI and TB both at individual, family and community levels. The role of the future doctor extends beyond being a care-provider to being an effective communicator, counsellor and manager and to lead and mobilize the community in matters related to health. The role of medical schools within the context of STI/HIV and TB should include teaching, service delivery, research and advocacy, as well as active participation in national programme planning, implementation and evaluation.

The following recommendations were made:

(1) Medical Schools should:

- (a) Teach and practice policies and strategies recommended by national AIDS and TB control programmes;
- (b) review and update existing curricula, in collaboration with medical educationists, to ensure the teaching of STI/HIV and TB prevention and control as a part of the core curriculum in undergraduate and postgraduate training;
- (c) actively participate in need-based CME programmes for medical practitioners; this should include briefing on the magnitude of the problem and current national control policies, strategies and practices;
- (d) develop training materials on HIV/AIDS/STI and TB designed to meet the training needs of future health professionals and adopt appropriate evaluation strategies;
- (e) participate in formulating national policies and programmes as well as in programme evaluation;
- (f) assist national programmes in identifying research priorities, developing protocols, building research capacity and carrying out research activities to improve existing national programme, strategies and practices with special emphasis on education and training;

- (g) play an active role in ensuring political commitment at all levels for increased allocation of resources;
- (h) promote the dissemination of national policies and strategies among health personnel;
- (i) assist national programmes through developing materials for information, education and communication to address factors affecting the health-seeking behaviour among communities especially with regard to HIV/STI and tuberculosis, and
- (j) establish a mechanism for continuous assessment and evaluation to ensure quality assurance mechanism for medical education and care pertaining to HIV/STI and TB.

(2) National Programmes should:

- (a) set up a task force or a working group comprising representatives from medical schools, national programmes and other stakeholders to advise and monitor activities relating to the role of medical schools in education and practice with respect to national AIDS and TB control programmes;
- (b) develop a mechanism to actively collaborate with medical schools through sharing of information and a process of continuous dialogue;
- (c) actively involve medical schools in planning, implementation and evaluation of national programmes;
- (d) orient medical faculty on a regular basis, on HIV/AIDS and TB control policies, strategies and best practices;
- (e) provide technical support to medical schools by sharing documents relating to policy guidelines, epidemiological data and internationally accepted policies and practices for TB and HIV control, and
- (f) ensure the representative and active participation of medical schools in national AIDS committees and in relevant sub-committees.

(3) WHO and other organizations should:

- (a) provide technical support to medical schools through technical expertise and dissemination of teaching and advocacy materials to medical schools on HIV/AIDS/STI and TB to Member Countries;
- (b) advocate with policymakers, medical professional and national programmes for greater participation of medical schools in combating HIV/AIDS/STI and TB;
- (c) monitor and facilitate activities relating to education, training and research in medical schools in the Member Countries;
- (d) provide financial support to organize country-level meetings, support the establishment of DOTS centres at medical schools and for operational research in priority areas;
- (e) document and disseminate successful initiatives and experiences of medical school involvement in Member Countries, and
- (f) assist national TB and HIV/AIDS programmes in resource mobilization.

(4) Medical Councils should:

- (a) Facilitate and supervise the changes required in medical curricula to meet the evolving needs of priority national control programmes such as HIV/AIDS and tuberculosis, taking into consideration the burden of disease.

Annex 1

LIST OF PARTICIPANTS

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Dr Nani Nair
Short-term Professional (Tuberculosis)

Annex 2 PROGRAMME

| | 0900 to 1300 hrs | 1400 to 1700 hrs |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Day 1 Wednesday | <p>Welcome and Introductions – Dr Vijay Kumar</p> <p>Overview of HIV/AIDS in South-East Asia: <i>Problems and Response</i> – Dr Jai P. Narain</p> <p>Overview of TB in South-East Asia: <i>Problems and Response</i> – Dr Nani Nair</p> <p>Role of Medical Schools in HIV/AIDS and TB Control – Dr Jai P. Narain</p> | <p>Experiences from Medical Schools in the Region – Country Presentations</p> |
| Day 2 Thursday | <p>Introduction of publication “Teaching HIV/AIDS in Medical Schools” – Prof. B. Sathapatayavongs</p> <p>Introduction of draft guidelines on teaching TB in Medical Schools – Prof. J.N. Pande</p> <p>Education Strategy and Evaluation – Dr Palitha Abeykoon</p> | <p>GROUP WORK: (Groups I, II and III)</p> |
| Day 3 Friday | <p>Presentations and Discussion of Group Work</p> <p>Country-specific plans and follow-up actions to introduce/enhance role of Medical Schools in HIV/TB</p> | <p>– Conclusions and Recommendations</p> <p>– Closing</p> |