Accreditation Guidelines for Educational/Training Institutions and Programmes in Public Health

Report of the Regional Consultation,
Chennai, India, 30 January – 1 February 2002

WHO Project: ICP O SD 002

World Health Organization
Regional Office for South-East Asia
New Delhi
September 2002
# CONTENTS

<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENT</td>
<td>v</td>
</tr>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>vii</td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>2. INAUGURAL SESSION</td>
<td>2</td>
</tr>
<tr>
<td>3. SUMMARY OF KEY PAPERS</td>
<td>4</td>
</tr>
<tr>
<td>4. TECHNICAL SESSIONS</td>
<td>7</td>
</tr>
<tr>
<td>4.1 Country Reports</td>
<td>7</td>
</tr>
<tr>
<td>4.2 Recommendations on Public Health Training and Education</td>
<td>16</td>
</tr>
<tr>
<td>4.3 Continuing Professional Development</td>
<td>26</td>
</tr>
<tr>
<td>4.4 Networking of Public Health Institutions</td>
<td>27</td>
</tr>
<tr>
<td>5. FRAMEWORK FOR ACCREDITATION OF TRAINING/EDUCATIONAL INSTITUTIONS</td>
<td>28</td>
</tr>
<tr>
<td>6. RECOMMENDATIONS</td>
<td>31</td>
</tr>
<tr>
<td>6.1 For Member Countries</td>
<td>31</td>
</tr>
<tr>
<td>6.2 For the WHO</td>
<td>32</td>
</tr>
<tr>
<td>Annexes</td>
<td></td>
</tr>
<tr>
<td>1. Programme</td>
<td>33</td>
</tr>
<tr>
<td>2. List of Participants</td>
<td>36</td>
</tr>
<tr>
<td>3. Course Comparisons</td>
<td>39</td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENT

The WHO Regional Consultation on Development of Accreditation Guidelines for Educational and Training Institutions and Programmes in Public Health was held at Chennai, India from 30 January 2002 to 1 February 2002, at Hotel Le Meridien, Chennai, in association with the Christian Medical College, Vellore, Tamil Nadu.

This Consultation was made possible through the efforts of many participants from the Member Countries of the SEA Region, the host collaborating institution, Christian Medical College, Vellore, with cooperation of the government of Tamil Nadu, Chennai, India, representatives from NGOs, leading state medical institutions and resource persons to whom WHO/SEARO expresses its sincere appreciation.
EXECUTIVE SUMMARY

The health sector of developing countries including those of the South-East Asia Region, are facing enormous challenges from rapid globalisation, increasing movement of people, and a changing economic scenario. There is no doubt about the rapid commercialisation of health services and education of health professionals, with the establishment of private training institutions and hospitals. The education and training of health professionals and health workers in the health sector, who are among the most globally mobile of all occupations and professions need to be further improved in qualitative and quantitative terms. Therefore, there is an urgent need to develop an established system of accreditation of these institutions in the South-East Asia Region to face the challenges of urgent and ever growing needs of the health sector of the developing countries amidst increasing globalisation.

The Regional Consultation on Development of Accreditation Guidelines for Educational/Training Institutions and Programmes in Public Health was organized in Chennai, India from 30 January 2002 to 1 February 2002. This consultation was intended to bring together the different country representatives in the South-East Asian Region in order to recommend a system towards the achievement and maintenance of comparable National standards of public health education in the educational and training institutions of these countries. Given below is an executive summary from a more detailed report of this consultation. More than 35 representatives including representatives from the Member Countries of South-East Asia, the local state government, institutions participated.

The main objectives of this Consultation were to: (a) review the status and update information on public health education/training at basic, mid and higher levels in terms of nature, relevance and quality; (b) formulate accreditation guidelines for public health educational programmes at different levels; and (c) devise and initiate networking of public health education/training institutions.

Representatives from each participating country presented the current status of public health training and accreditation systems in place. (Country tables and summaries of their profiles are listed in the following pages of the
Group discussions considered competencies at three levels of service delivery: at sub-centre, primary health care, and at district/provincial levels.

At the community level or sub-centre level (population of 5,000 or less): needs assessment, data collection/interpretation, surveillance skills, record-keeping and timely reporting, basic planning and management, health promotion, diagnosis/treatment skills and timely referrals were considered necessary. Recruits should have completed secondary schooling and received training lasting for 1½ to 2 years. Assessment should include teachers and students, should be concurrent and give priority to performance and skills. Training should be problem/practice-oriented, job/task-oriented with hands-on training and a balanced combination of theory and practice.

At the PHC level, (population between 30000 to 50000): community diagnostic skills, prevention and control of diseases of public health importance, supervising and monitoring health programmes, investigation and management of outbreaks for disease surveillance were necessary. Administrative and management skills recommended at this level were for managing health promotion and disease prevention activity, use of health information for management, implementing health legislation and influencing public health policy, designing/implementing IEC and promotion of environmental health. Human resource management skills as well as skills for addressing quality issues and its monitoring were recommended.

At the district/provincial or regional level: (population of more than 100,000): key competencies in the areas of public health, management, leadership, teaching and research were identified. Under each competency, specific skills that were expected of the members of a district team were identified and minimum competencies required at the district level were listed. All the groups recommended internal and external assessment including continuous self-monitoring and periodic evaluation of faculty and students.

On continuing professional development (CPD), it was recommended that the goal would be to improve delivery of health services at all levels. This would be done through a continuous process of acquiring knowledge and skills in response to the changing needs of the community. Formal and informal methods were needed, using innovation wherever possible. Efforts were needed to make training community-based, participatory and problem-solving, with greater use of information technology. CPD should be introduced as a policy in public health.
A framework consisting of guidelines for accreditation was developed to enable countries to formulate National standards. There was consensus that the public health institutions must have a mission statement and objectives, must describe an educational process to produce a public health professional, competent at various levels with an appropriate foundation for further training in public health, in keeping with the roles of the professionals in the health system. The institution must define what competencies its students should exhibit on graduation, including the relationship of such competencies to the diverse needs of society. The accreditation should also cover the following elements: curriculum models and instructional methods; staffing policy of the public health institutions; educational resources for the student population and for the delivery of the curriculum, including libraries, lecture halls, tutorial rooms, laboratories, computers and field practice area; description of methods used for assessment of their students; and a mechanism for programme evaluation.

The objective of networking was to improve competencies of the different training institutions. Sharing expertise, avoiding duplication of programmes, learning from failures and optimum utilization of existing resources were the other advantages. There was a demand for sharing information among countries, and a need for commencing a “consultative process” within the countries. Networking was seen as an investment. All public health institutions whether recognized or not, were to be given the opportunity to enter or be included in the network.

The Regional Consultation agreed on the following definition of public health institutions:

“Public health institutions (including Departments of Community/Social/Preventive Medicine) may be categorized as those institutions that provide education and training to current and future health workers (at all levels) who focus predominantly on the health of the population; have curricula that are mainly geared to dealing with community aspects of health care; provide leadership for continuing professional development; provide personnel who will be involved primarily in public health activities but may have some involvement in curative care predominantly at the primary health care level; function both in the public and private sectors of the health system; conduct research that has a direct or indirect effect on the health status of the community”.

The Regional Consultation made recommendations in order to strengthen accreditation mechanisms of public health education and training
institutions and networking for public health institutions in the Member Countries of the South-East Asia Region
1. INTRODUCTION

The WHO Regional Consultation on Development of Accreditation Guidelines for Educational Training Institutions and programmes in public health was held at Chennai, India from 30 January 2002 to 1 February 2002, at Hotel Le Meridien, Chennai, in association with the Christian Medical College, Vellore, South India.

This Consultation is a follow-up of a Regional Conference on Public Health in South-East Asia in the 21st Century had been organized earlier (1999) in Calcutta by the World Health Organization, Regional office for South-East Asia. The major outcome of this conference was the adoption of the 'Calcutta Declaration on Public Health', which sets forth strategies and directions for enhancing health development in the South-East Asia Region in the 21st Century. One of the important strategies and directions of the 'Calcutta Declaration is:

"Strengthen and reform public health education and training, and research, supported by networking of institutions and the use of information technology, for improving human resources development".

The Calcutta Conference reviewed the state of public health in countries of the South-East Asia Region. Its objective was to advocate the importance of public health for National, socioeconomic and political development, and to promote new strategies for developing sound public health systems in the 21st Century. The initiative brought together leaders in public health education, research and services from the South-East Asian countries, international experts, and representatives of bilateral and multilateral agencies. Issues and concerns in public health were discussed, with focus on the quality of the schools of public health, professional capacities, societal commitment, shrinking resources for health and the resultant need for greater efficiency and realization of National public health goals.

Health sectors of the developing countries including those of the SEA Region face enormous challenges from rapid globalization, increasing movement of people, and a changing economic scenario. There is rapid commercialization of health services and education of health professionals with the establishment of private training institutions and hospitals. There is an urgent need to establish a system of accreditation of these institutions in the South-East Asia Region.
In recognition of the contributions made by the Community Health Department, Christian Medical College (CMC), Vellore to the training of public health in India, this consultation was held in Chennai, coordinated by CMC, which is currently designated as a WHO Collaborating Centre for Community-based Health Professions Education.

The main objectives of this Consultation were to:

1. To review the status and update information on public health education / training at basic, mid and higher levels in terms of the nature, relevance and quality;
2. To formulate accreditation guidelines for public health educational programmes at different levels, and
3. To devise and initiate networking of public health education/training institutions

The expected outcomes of the Consultation were to provide:

1. Updated information on the current status of public-health training in member countries of the SEA Region;
2. Broad guidelines for accreditation of institutions and programmes and
3. A foundation for early initiation and implementation of networking mechanisms for public health institutions and plans of actions for capacity-building of National institutions;

2. INAUGURAL SESSION

Dr George Chandy, Medical Superintendent of Christian Medical College and Hospital, Vellore, the host collaborating institution for this consultation, welcomed the participants. He emphasized the need for such consultations to improve the quality of training in public health and added that they would lead to establishing standards of training in public health institutions.

The inaugural address of Dr Uton Muchtar Rafei, Regional Director World Health Organization, South-East Asia Regional Office, was read out by Dr P T Jayawickramarajah, Scientist, Human Resources for Health, WHO/SEARO. The message from the WHO Regional Director, highlighted the significant contributions made by WHO since the 1980s, when it organized the Reorientation of Medical Education (ROME) in New Delhi, that
set in motion a series of activities in member countries of the South-East Asia Region to improve the training and practice of medicine. These activities in countries identified the rationale, directions and approaches that needed to be pursued vigorously. They also promoted innovations in health professions training and education for development of human resources for health.

With rapid globalization, the education and training of health professional and health workers in the health sector, who are among the most globally mobile of all occupations and professions need further qualitative and quantitative improvement. This tendency is accelerated by the technological revolution in information systems through Internet, which has the potential to provide a large quantum of information to everyone at all levels. As a consequence of these globalizing forces, the general public and students are now more informed and have the right to demand programmes equivalent or comparable to those offered overseas for their professional attainment. The development of standards and accreditation criteria by experts in health professions, in response to the question of quality, comparability, equivalence and minimum standards of professionals in public health in our Region is now more important and of high priority.

The message from the WHO Regional Director hoped that the consultation would address the above concerns. He also stressed the importance of public health schools in Member Countries reviewing their programmes in view of the growing complexity of global programmes in other countries, and aiming at improving those offered in this Region. This is necessary to develop excellence in health programmes to policy-making in health in their disciplines, and to be made compatible to changing global trends. The Regional Director, WHO wished that the discussions and deliberations would consider all categories of public health training programmes from community level educational programmes; pre-service training; continuing education; and post-graduate education. This regional consultation also comes as a follow-up of the fourth element listed in the “Calcutta Declaration” on public health focussed on “reform and networking of educational institutes in public health”.

The Consultation, was presided over by Hon’ble Mr Syed Munir Hoda, the Health Secretary to the Government of Tamil Nadu, Department of Health. The State Health Secretary, in his welcome address, mentioned the rapid advances made in the field of public health, with an increase in life expectancy and reduction in mortality due to communicable diseases. He noted that such workshops would sharpen the thinking process by stimulating
the minds of persons otherwise busy in their routine tasks. Setting standards, motivating staff and ensuring quality would be the challenges to public health of the future, he said.

Dr Anandakannan, Vice-Chancellor, Dr MGR Medical University, Chennai, in his address stressed the importance of public health training. Since a fifth of the doctors in the state of Tamil Nadu were employed by the government and were responsible for public health, they need to be well trained in this subject. Unfortunately, the departments of public health and preventive and social medicine in medical colleges were not equipped with manpower to take on this mantle. He also underlined the importance of integrating public health in all efforts in both the private and government sectors. He stressed the need to start MPH programme in all the universities with the collaboration of government, private institutions and WHO. Dr Vinohar Balraj from Christian Medical College ended the session with a vote of thanks.

Dr Suriya Wongkongkathep was nominated as the Chairman and Dr Jayaprakash Muliyil, as the Vice-Chairman. (See list of participants and programme at Annexes 1 and 2).

3. SUMMARY OF KEY PAPERS

Dr P T Jayawickramarajah in his presentation "Introduction: Accreditation Purpose and Process", gave the appropriate definition for accreditation, and its meaning as contained in the dictionary. He stressed the need for maintaining minimum standards and how accreditation could help in this endeavour. He said that the accreditation system for public health education in the US is conducted by an independent agency recognized by the Department of Education. In other countries such as Australia and New Zealand, it is the responsibility of the professional council and in the UK, of the General Medical Council.

The process of accreditation usually entails an institutional self-assessment, preparation of database, cataloguing of the programme and site visits by members of the accrediting body. Generally, this process is repeated at periodic intervals as decided by the accrediting agency concerned. In August 1999, the WHO Regional Office initiated a Regional Task Force on accreditation of higher educational institutions in health. The task force recommended: (1) activities to create awareness in assessing and assuring quality of education; (2) provision for capacity-building in quality
assurance of programme; (3) development of National standards, and (4) promotion of periodic self-study of institutions.

Dr Palitha Abeykoon, in his paper titled, “Continuing Education in Public Health” described Continuing Education to imply and include all of the learning experiences that are undertaken by any health worker until his or her retirement, and not merely the refresher courses that he or she may attend. All activities that help the health worker to maintain the competencies, or to add new ones related to health care constitute continuing education. This means that continuing education is concerned with a wide range of competencies and not merely knowledge, and will reflect the needs of society, to improve the health of its members.

The need for continuing education in public health is almost self-evident. Continuing education helps to maintain standards of work and overcome the deficiencies in the initial training, adapt work performance to resources available, reduce costs of health care and adapt work to changes in health care policy.

He recalled the five connotations that were historically given to public health ranging from “public sector and public action”, undertaken by the government and the community, through “non personal health services and preventive and promotive services, especially for the vulnerable, until the current population level application. Continuing education also helps public health workers to effect changes in health care status and accept new responsibilities on promotion and transfer. Most importantly, continuing education will enable them to further their own educational interests and fulfil their desire to learn.

There are a number of ways in which learning and training needs can be identified. These include an examination of the epidemiological situation of the area, undertaking community surveys, study of health service profiles, including the referral patterns, work studies and performance assessments, and health care audits. Other ways of determining training needs can be critical incident studies, diagnostic or formative assessments.

A number of considerations have to be borne in mind when designing and implementing continuing education programmes in public health. First is the fact that we are dealing with adult learners who do not often have a mandatory requirement to learn and update themselves. There would of course be a few who will be driven by a thirst for knowledge and for applying the best known practices in their work. This, unfortunately, is not the norm in
many developing countries. The second point to bear in mind is that continuing education can be very effective if made available and delivered “on the job” – and there are many ways of doing this. There is now an emerging trend in many countries where credits for continuing education are necessary to maintain membership in colleges and in academic associations. This is salutary trend but will not apply to all categories of public health personnel. In fact, ironically, those who require continuing education most are the ones who will not be motivated by this. All of this means that programme designers and managers will have to devise a judicious “carrot and stick” approach to enhance the levels of motivation. They will also have to make sure that the programmes on offer are relevant and address the real needs of the participants.

There is now a possibility to develop regional level programmes of continuing education in public health. Some of these could be distance education programmes that are accredited by a reputed university or other body. It will be worthwhile if international agencies such as the WHO could explore and facilitate such developments. It needs careful feasibility studies, possibilities for transfer of credits and the linkages with the incentive and reward systems within the respective countries.

Dr Abraham Joseph in his presentation "Public Health Education/ Training in Changing Times" stated the importance of identifying the public health needs of the local community. Most South-East Asian countries are facing the double burden of communicable as well as chronic diseases. He highlighted the importance of using appropriate learning and assessment methods.

He also stressed the importance of the learning environment as it plays a crucial role in acquiring skills and attitude. Since ‘primary health care cannot be taught in a vacuum’, a good proportion of the training should be community-based, specially to provide skills in health management. Unfortunately, most institutions of public health, both in developing and developed countries, have institution-based education programme. Recognizing the rapid changes taking place, the training also should be need-based and skill-based which is best developed in community based programme. The criteria for accreditation should include this aspect.

Dr Don Bandaranayake in his presentation "Recent Trends in Accreditation Programmes in Public Health Institutions" stated that the accreditation system is well recognized and established in many parts of the world including some developing countries. He referred to the efforts made
by the WHO in developing a global consortium for the accreditation and development of medical schools and the inclusion of "social accountability" in the list of assessment criteria. A paper published in 1997 by the Association of American Medical Colleges (AAMC) identifies some 48 standards for teaching, learning, and evaluation in medical schools that have been adopted by the Liaison Committee for Medical Education (LCME) as the basis for their accreditation system. Similar standards could be used for the accreditation of Public Health Institutions (PHI) with some additions to capture their special missions and goals.

Having explicitly defined and described what public health is, he suggested that accreditation criteria should include the roles and responsibilities of PHIs that derive from the definition. For example, in assessing the involvement of PHIs with "organized efforts of society" the criteria must include an assessment of the leadership role played by them in helping build self-help groups, and evidence of partnership development with community organizations, government, NGOs and private agencies. It should also include an evaluation of the contribution the PHI has made to developing and helping in the implementation of healthy public policies. Furthermore, since PHIs must necessarily maintain close links with the community, one important purpose of accreditation, that of "safeguarding the public", must be considered as a prime responsibility and issue for assessment of performance. In conclusion, he indicated that PHIs should have an obligation to demonstrate ideal public health practice, in addition to providing quality education, and enable students to be a part of such activities.

4. **TECHNICAL SESSIONS**

Technical sessions consisted of country reports and Group work by participants.

4.1 **Country Reports**

Representatives from each participating country presented the current public health training/accreditation systems in place. Summaries of their profiles are listed below:

| Table. Current public health training/accreditation profiles in SEAR countries |
### Bangladesh

<table>
<thead>
<tr>
<th>Institute</th>
<th>Type of courses</th>
<th>Level</th>
<th>Years of training</th>
<th>Entry level</th>
<th>Accreditation Yes/No &amp; who (board)</th>
<th>National/ International</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute of Health Technology - 7</td>
<td>Paramedics/ Technician</td>
<td>Basic/Middle</td>
<td>2</td>
<td>10th grade</td>
<td>University/ Council</td>
<td>National</td>
</tr>
<tr>
<td>Nurses Training Centre – 25</td>
<td>General Nursing &amp; Midwifery</td>
<td>Basic</td>
<td>3</td>
<td>10th grade</td>
<td>Nursing Council</td>
<td>National</td>
</tr>
<tr>
<td>Lady Health Visitors training Centre – 13</td>
<td>Midwifery</td>
<td>Basic</td>
<td>1.5</td>
<td>10th grade</td>
<td>-</td>
<td>National</td>
</tr>
<tr>
<td>Medical College - 33</td>
<td>M.B.B.S</td>
<td>Undergraduate</td>
<td>6</td>
<td>12th grade</td>
<td>University/ Medical Council</td>
<td>National/ International</td>
</tr>
<tr>
<td>College of Nursing - 1</td>
<td>B.Sc (Nursing)</td>
<td>Undergraduate</td>
<td>2</td>
<td>Nursing Diploma</td>
<td>University/ Nursing Council</td>
<td>National</td>
</tr>
<tr>
<td>Dental College - 7</td>
<td>BDS</td>
<td>Undergraduate</td>
<td>4</td>
<td>12th Grade</td>
<td>Council</td>
<td>National/ International</td>
</tr>
<tr>
<td>National Institute of preventive and Social medicine – 1</td>
<td>MPH/M.Phil/ Ph.D</td>
<td>Post-graduate</td>
<td>1/2/3</td>
<td>Graduate</td>
<td>University</td>
<td>National/ International</td>
</tr>
<tr>
<td>National Institute of Public Health, Nutrition and Food Science - 1</td>
<td>Public Health Nutrition</td>
<td>Basic</td>
<td>3-6 months</td>
<td>12th Grade/ M.B.B.S</td>
<td>-</td>
<td>National</td>
</tr>
</tbody>
</table>

### Bhutan

<table>
<thead>
<tr>
<th>Institute</th>
<th>Type of courses</th>
<th>Level</th>
<th>Years of training</th>
<th>Entry level</th>
<th>Accreditation Yes/No &amp; who (board)</th>
<th>National/ International</th>
</tr>
</thead>
<tbody>
<tr>
<td>Royal Institute of Health Sciences, National Institute of Traditional Med.</td>
<td>Dip in District Health management &amp; supervision</td>
<td>Dist Health Supervisory Officer</td>
<td>1</td>
<td>Cert. in Health Sciences (2-yr HA course)</td>
<td>NO (all recognized by Royal Civil Service Commission)</td>
<td>National</td>
</tr>
<tr>
<td></td>
<td>Cert. In midwifery &amp; nursing</td>
<td>ANM</td>
<td>2</td>
<td>10th grade</td>
<td>NO</td>
<td>National</td>
</tr>
<tr>
<td></td>
<td>Cert. in Health Sciences</td>
<td>Health Assistant</td>
<td>2</td>
<td>10th Grade</td>
<td>NO</td>
<td>National</td>
</tr>
<tr>
<td></td>
<td>Cert. in Dental Health &amp;</td>
<td>Dental Hygienist</td>
<td>2</td>
<td>10th Grade</td>
<td>NO</td>
<td>National</td>
</tr>
<tr>
<td>Institute</td>
<td>Type of courses</td>
<td>Level</td>
<td>Years of training</td>
<td>Entry level</td>
<td>Accreditation Yes/No &amp; who (board)</td>
<td>National/International</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------</td>
<td>-------------</td>
<td>-------------------</td>
<td>-------------</td>
<td>-----------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Hygiene</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cert. in Ophthalmic Sciences</td>
<td>Ophthalmic Assistant</td>
<td>2</td>
<td>10th Grade</td>
<td>NO</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td>Cert. in Malaria Surveillance &amp; Microscopy</td>
<td>Malaria technician</td>
<td>1</td>
<td>10th Grade</td>
<td>NO</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td>Bachelor of Traditional Med &amp; Surg</td>
<td>Trad Physician</td>
<td>5</td>
<td>12th Grade</td>
<td>NO</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td>Dip Traditional Med</td>
<td>Trad Clinical Assistant</td>
<td>3</td>
<td>10th Grade</td>
<td>NO</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td>Dip Clinical Med</td>
<td>Asst Clinical Officer</td>
<td>1</td>
<td>Cert Health Sciences (2-yr HA course)</td>
<td>NO</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td>Dip Gen Nursing &amp; Midwifery</td>
<td>Staff Nurse</td>
<td>3</td>
<td>12th Grade</td>
<td>NO</td>
<td>International</td>
<td></td>
</tr>
</tbody>
</table>

**India**

180+ Medical Colleges (Government & Private), Autonomous and Pvt. Institutions

M.B.B.S;

Total of 4.5 years. 385 Hours are allocated for Social & Preventive Medicine training (130 Hours of theory, 255 hours of practical). In addition the students undergo three months compulsory internship.

10+2 Recognized by Medical Council of India
<table>
<thead>
<tr>
<th>Institute</th>
<th>Type of courses</th>
<th>Level</th>
<th>Years of training</th>
<th>Entry level</th>
<th>Accreditation Yes/No &amp; who (board)</th>
<th>National/International</th>
</tr>
</thead>
<tbody>
<tr>
<td>S5* Medical Colleges (Govt &amp; Pvt), Autonomous and Pvt. Institutions</td>
<td>Degree (MD in SPM or Community Medicine)</td>
<td>Three years</td>
<td>M.B.B.S;</td>
<td>Recognized by Medical Council of India</td>
<td>National/International</td>
<td></td>
</tr>
<tr>
<td>13+ Medical Colleges (Government &amp; Private), Autonomous and Pvt. Institutions</td>
<td>Diploma in Public Health</td>
<td>Two years</td>
<td>M.B.B.S;</td>
<td>Recognized by Medical Council of India</td>
<td>National/International</td>
<td></td>
</tr>
<tr>
<td>Sri Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram</td>
<td>Master in Public Health (MPH)</td>
<td>Two Years</td>
<td>Graduation of any discipline</td>
<td></td>
<td>Affiliation to Foreign University</td>
<td></td>
</tr>
<tr>
<td>Jawahar Lal Nehru University</td>
<td>Masters in Community Health</td>
<td>Two years</td>
<td>Graduation of any discipline</td>
<td></td>
<td>Deemed University</td>
<td></td>
</tr>
<tr>
<td>All India Institute of Public Health &amp; Hygiene</td>
<td>MD in Public Health; Diploma in Public Health</td>
<td>PhD</td>
<td>Three Years Two years Three-Five Years</td>
<td>M.B.B.S M.B.B.S; Graduate in any discipline (preferably Science)</td>
<td>Recognized by Medical Council of India</td>
<td>National/International</td>
</tr>
<tr>
<td>National Institute of Health &amp; Family Welfare, New Delhi</td>
<td>Certificate Course &amp; In-Service Training</td>
<td>In-service training</td>
<td>Three months</td>
<td>M.B.B.S; (Deputy and/or Chief Medical Officer of district)</td>
<td>Supported by Ministry of Health &amp; Family Welfare</td>
<td>National/International</td>
</tr>
</tbody>
</table>

* Out of 180+ Medical Colleges, these are offering Postgraduate degree in SPM or Community medicine. All medical colleges offer bachelor’s degree in Medicine and Surgery (M.B.B.S). Public health training is part of the undergraduate training and also of internship. (Based on information available with MCI (Website))

Networking of Institutions: No formal networks exist as of date. Recently a consortium of institutions in community health (of approximately 25 Medical Schools) has been instituted with its Secretariat at National Institute of Health & Family Welfare, New Delhi.
### Accreditation Guidelines for Educational/Training Institutions and Programmes in Public Health

<table>
<thead>
<tr>
<th>Institute</th>
<th>Type of courses</th>
<th>Level</th>
<th>Years of training</th>
<th>Entry level</th>
<th>Accreditation Yes/No &amp; who (board)</th>
<th>National/ International</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nursing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>478 + ANM Training Institutes</td>
<td>Certificate</td>
<td>Two Academic Years</td>
<td>High School</td>
<td>Yes (by Govt; Not by any Council)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11+ Schools of Nursing</td>
<td>BSc &amp; MSc in Public Health Nursing</td>
<td>One Year</td>
<td>10+2</td>
<td>Recognized by Nursing Council of India</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42 + Health &amp; FW Training institutes</td>
<td>Health Supervisor (Certificate course)</td>
<td>Six Months</td>
<td>ANM with 2 years experience</td>
<td>Recognized by Government</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| Indonesia | | | | | | |
| 187 - Vocational health school | Nursing, Dental Nursing, Asst Pharmacist, Health analyst | 3 yrs | Jr high school | Yes (Ministry of Health Man power Education) | National |
| 1 - Dip I programme | Tech Blood Transfusion | 1 yr | Sr high school | Yes (Ministry of Health Man power Education) | National |
| 634 - Academy (dip III programme) | Nursing, dental nursing, midwifery, nutrition, environmental health, asst pharmacist, food &amp; drug analyst, health analyst, physiotherapy, speech ther., | 3 yrs | Sr high school | Yes (Ministry of Health Man power Education) | National |</p>
<table>
<thead>
<tr>
<th>Institute</th>
<th>Type of courses</th>
<th>Level</th>
<th>Years of training</th>
<th>Entry level</th>
<th>Accreditation Yes/No &amp; who (board)</th>
<th>National/International</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 - Undergraduate programme</td>
<td>S1 Nursing, pharmacist and public health</td>
<td>4</td>
<td>Sr high school</td>
<td>D3 related</td>
<td>Yes (Ministry of Education)</td>
<td>National</td>
</tr>
<tr>
<td>7 - School of Public Health</td>
<td>S1 Masters in public health, Masters in Hosp Admin.</td>
<td>2</td>
<td>S1 related</td>
<td>S2 related</td>
<td>Yes (Ministry of Educationn)</td>
<td>National</td>
</tr>
<tr>
<td>Maldives</td>
<td></td>
<td></td>
<td>S1 related</td>
<td>S2 related</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty of Health Sciences</td>
<td>Diploma Primary Health Care</td>
<td>Primary level</td>
<td>2 + ½ yr internship</td>
<td>GCE ‘O’ level + entrance test</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diploma Nursing &amp; midwifery</td>
<td>Secondary level</td>
<td>3 yrs</td>
<td>GCE ‘O’ level + entrance test</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community Health Worker</td>
<td>Secondary level</td>
<td>1½ yr +½ yr internship</td>
<td>10th grade + entrance test</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family Health Worker</td>
<td>Primary level</td>
<td>6 months</td>
<td>7th grade</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Institute</td>
<td>Type of courses</td>
<td>Level</td>
<td>Years of training</td>
<td>Entry level</td>
<td>Accreditation Yes/No &amp; who (board)</td>
<td>National/ International</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>----------------------------------------------</td>
<td>------------------</td>
<td>-------------------</td>
<td>--------------</td>
<td>-----------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td><strong>Myanmar</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institute of Medicine (3)</td>
<td>Level I Pub Health Supervisor Gr II</td>
<td>Level II Pub Health Supervisor Gr I</td>
<td>6 months</td>
<td>10th Grade post- PHS II</td>
<td>Myanmar Med Assn</td>
<td>National</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institute of Dental Medicine (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>National</td>
</tr>
<tr>
<td>Institute of Nursing (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>National</td>
</tr>
<tr>
<td>Institute of Com Health (1)</td>
<td>Dip Public Health</td>
<td>Masters Public Health</td>
<td>1 yr</td>
<td>M BBS + 2 yrs service Above or post- dip</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 yrs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lady Health Visitor Training school (1)</td>
<td>Lady Health Visitor</td>
<td></td>
<td>1 yr</td>
<td>Certificate for midwifery</td>
<td>Asso of Health Assistants</td>
<td>National</td>
</tr>
<tr>
<td><strong>Nepal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institute of Medicine, Tribuvan University, Kathmandu</td>
<td>Bach Pub Health</td>
<td>Masters Pub Health</td>
<td>3</td>
<td>10th + 2½ yrs in science related discipline. Graduate + 3 yrs</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BPKIHS</td>
<td>MD Com Med</td>
<td></td>
<td>3</td>
<td>M BBS</td>
<td>Nepal Medical Council</td>
<td></td>
</tr>
<tr>
<td>Trade School</td>
<td>Basic &amp; middle level health workers</td>
<td>ANM, AHW, CHW, HA</td>
<td>⅓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>⅓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>⅔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institute</td>
<td>Type of courses</td>
<td>Level</td>
<td>Years of training</td>
<td>Entry level</td>
<td>Accreditation Yes/No &amp; who (board)</td>
<td>National/ International</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>----------------------------------</td>
<td>---------</td>
<td>-------------------</td>
<td>-------------</td>
<td>-----------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>National Institute of Health Sciences</td>
<td>Public health midwives</td>
<td>Basic</td>
<td>1½</td>
<td>Yes</td>
<td>JGCE ‘A’ Level</td>
<td>National</td>
</tr>
<tr>
<td></td>
<td>Public health inspectors</td>
<td>Basic</td>
<td>1½</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public health nursing sister</td>
<td>Basic</td>
<td>1</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Asst Medical Officer</td>
<td>Basic</td>
<td>2½</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supervising public health midwife</td>
<td>In-service</td>
<td>3 months</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supervising public health Inspector</td>
<td>In-service</td>
<td>2 weeks</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Med officers of health</td>
<td>In-service</td>
<td>5 weeks</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional training centres</td>
<td>Public health midwife</td>
<td>Basic</td>
<td>18 months</td>
<td>Yes</td>
<td>JGCE ‘A’ Level</td>
<td>National</td>
</tr>
<tr>
<td></td>
<td>Public health inspector</td>
<td>Basic</td>
<td>18 months</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Health Bureau</td>
<td>Public health midwives</td>
<td>In-service</td>
<td>1 to 2 weeks</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public health inspectors</td>
<td>In-service</td>
<td>1 to 2 weeks</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Med officers of health</td>
<td>In-service</td>
<td>1 to 2 weeks</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public health nursing sister</td>
<td>In-service</td>
<td>1 to 2 weeks</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Education Bureau</td>
<td>Public health midwives</td>
<td>In-service</td>
<td>1 week</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public health inspectors</td>
<td>In-service</td>
<td>1 week</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health education officers</td>
<td>In-service</td>
<td>1 to 2 weeks</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institute</td>
<td>Type of courses</td>
<td>Level</td>
<td>Years of training</td>
<td>Entry level</td>
<td>Accreditation Yes/No &amp; who (board)</td>
<td>National/ International</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------------------------------------</td>
<td>-----------</td>
<td>-------------------</td>
<td>-------------------------</td>
<td>------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Epidemiological Unit</td>
<td>Public health inspectors</td>
<td>In-service</td>
<td>1 to 2 weeks</td>
<td>No</td>
<td>No</td>
<td>National</td>
</tr>
<tr>
<td></td>
<td>Med officers of health</td>
<td>In-service</td>
<td>1 to 2 weeks</td>
<td>No</td>
<td>No</td>
<td>National</td>
</tr>
<tr>
<td>Nurses Training School</td>
<td>Nurses training</td>
<td>Basic</td>
<td>3 yrs</td>
<td>Yes</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public health inspectors</td>
<td>In-service</td>
<td>1 to 2 weeks</td>
<td>No</td>
<td>No</td>
<td>National</td>
</tr>
<tr>
<td>Post-basic training school</td>
<td>Management training</td>
<td>In-service</td>
<td>3 months</td>
<td>No</td>
<td>No</td>
<td>National</td>
</tr>
<tr>
<td></td>
<td>Tutor training</td>
<td>In-service</td>
<td>1 yr</td>
<td>No</td>
<td>No</td>
<td>National</td>
</tr>
<tr>
<td>Medical colleges</td>
<td>MBBS</td>
<td>Basic</td>
<td>GCE 'A' level</td>
<td>Yes</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td>Post-grad institute</td>
<td>MSc (Community Med)</td>
<td>High</td>
<td>Post-degree</td>
<td>Yes</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MD (Community Med)</td>
<td>High</td>
<td>Post-degree</td>
<td>Yes</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>Chiangmai</td>
<td>Middle</td>
<td>6</td>
<td>High school</td>
<td>Yes</td>
<td>National</td>
</tr>
<tr>
<td></td>
<td>MD (Community Med)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MPH (health promotion)</td>
<td></td>
<td>1</td>
<td>Bachelor, professional</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chulalongkorn</td>
<td>Middle</td>
<td>1</td>
<td>Professional Degree.</td>
<td>Yes</td>
<td>National</td>
</tr>
<tr>
<td></td>
<td>MPH</td>
<td>High</td>
<td>4</td>
<td>Yes</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ph.D.</td>
<td>Higher</td>
<td>4</td>
<td>Yes</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chulalongkorn</td>
<td>Middle</td>
<td>1</td>
<td>Yes</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MPH</td>
<td>Higher</td>
<td>4</td>
<td>Yes</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td>Hua-chiew</td>
<td>B.S. in PH</td>
<td>Middle</td>
<td>1</td>
<td>Yes</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td>Khon Kaen</td>
<td>B.S. in PH</td>
<td>Lower</td>
<td>4</td>
<td>Yes</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td>Mahidol</td>
<td>B.S. in PH</td>
<td>Lower</td>
<td>4, 2-2</td>
<td>Yes</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td>Mahasarakham</td>
<td>B.H.S (PH)</td>
<td>Lower/</td>
<td>4</td>
<td>Yes</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td>Mahidol</td>
<td>B.PH., B.S.</td>
<td>Lower</td>
<td>4</td>
<td>Yes</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MPH, Dr.PH</td>
<td>Middle,</td>
<td>1, 4</td>
<td>Yes</td>
<td></td>
<td>Natiomal/ International</td>
</tr>
</tbody>
</table>
### Institute | Type of courses | Level | Years of training | Entry level | Accreditation | National/ International
--- | --- | --- | --- | --- | --- | ---
Naresuan | MPH | Bachelor, professional | 1 | Yes National
Prince Songkhla | MD (com med) | 6 | Yes National
Thammasat | B.H.S (PH) | Lower/middle | 4 | High school | Yes National
Ubonrajathani | B.PH. | 4 | High school | Yes National
Walailak | B.PH. | 4 | High school | Yes National

Note: A few countries in the above country tables have included basic medical (MBBS) and Nursing (BN, BSc.N*) where public health is taught as a discipline or an integrated subject.

### 4.2 Recommendations on Public Health Training and Education

Public health training takes place at different levels. Unless the training of health professionals working in all these areas was addressed simultaneously, it was considered that the desired effect would not be achieved.

The public health training needs of three levels were identified. "sub-centre", or "community level", the “primary health centre” level or “district level” and the “provincial or regional level”. Since these terminologies are used with different meanings, the three levels were re-defined by the size of the population to make comparisons easier.

1. The “community level” or “sub-centre” level provides health service to a population of 5000 or less.
2. The “primary health centre” provides health services to a population between 30 000 to 50 000.
3. The “district level” provides health services for a population of more than 100 000. This level can be applied to provincial or regional level in some countries.
(1) Sub-Centre level

Generic skills and competencies

At the sub-centre level, health workers\(^1\) were considered to be the first level functionaries. These functionaries were expected to have essential attitudes such as empathy, ability to listen and communicate and develop specific technical skills.

Using each country's experience, the group could show that there were similarities in the skills required by workers in different countries. Technical skills in the following areas were considered essential:

- Community needs assessment including high risk identification;
- Data collection and interpretation, facilitating the surveillance system;
- Record-keeping and timely reporting;
- Basic planning and management;
- Health promotion;
- Providing specific protection;
- Diagnostic and treatment skills with timely referrals;
- Community-based rehabilitation;
- Disease control of local importance and
- Women's issues and gender concerns.

Eligibility criteria

The group recommended that workers at the sub-centre level be recruited locally from districts, after completion of secondary schooling and put through training lasting for 1 ½ to 2 years. For those in service, a bridge course be established.

Curriculum: Nature and design

The following guiding principles were recommended for the design and teaching of the curriculum. It should be

- problem/practice oriented;
- job/tasks oriented;

\(^1\) (Health Worker: Country specific nomenclature such as community health worker, family health worker, lady health visitor, assistant nurse midwife, to be used.)
➢ focussed on hands-on training;
➢ balanced combination of theory and practice with appropriate apportionment of time;
➢ an integrated curriculum with emphasis on attitudinal skills and nurturing and supportive supervision, and
➢ strengthen supervisory and managerial skills.

Faculty/Teachers
➢ A trainee-tutor ratio of 10-15:1 was suggested.
➢ Teachers should have received training to be teachers, with experience/exposure in field situation and experience in carrying field studies.
➢ Teachers should have received training to at least one level above the course they have to impart training to. There should be core faculty and extended faculty.

Teaching/learning resources
Besides adequacy of infrastructure (money, materials and manpower), the continued professional development for staff from the private and government sector and provision for National Teachers Training Centres for SEAR countries were discussed and recommended.

Teaching/learning methods and processes
Besides lectures, emphasis should be laid on site visits to field, health facilities, and hospitals for demonstration and participatory observation, on-the-job practical training and focus on active learning, close to reality using simulation, and role-plays.

Monitoring and assessment
A basic requirement was that a plan for monitoring and assessment should be in place with an emphasis on improving quality.

Assessment was needed for both students and teachers including, internal and external assessment.

Continuous assessment of skills and performance were considered necessary and to be given higher weightage rather than terminal assessment.
(2) PHC level

The categories of persons who would need training to work in a 30 to 50000 population would include: medical officer, public health nurse, district level public health officer and allied health supervisors. Some of the allied health personnel are country-specific in nomenclature, usually at a basic degree level of competence.

Generic skills and competencies

At the PHC level, (30 to 50000 population), the group identified skills needed under three main categories: (i) Technical skills; (ii) Administrative and management skills, and (iii) Self-development skills.

Technical skills were needed in areas relating to:

- community diagnosis and health promotion; prevention and control diseases of public health importance; supervising and monitoring health programmes; investigation and management of outbreaks, and disease surveillance.

Administrative and management skills were needed:

- to manage health promotion and disease prevention activity; to use of health information for management; implement health legislation; influence public health policy; provide cooperation between health and other sectors; design and implement IEC; implement ongoing continuing in-service training; manage human resources; address quality control issues and set up systems to monitor quality; mobilize the community to participate and use local resources for public health programmes effectively; initiate action to promote environmental health and report on circumstances that may be hazardous to the environment; take proactive steps towards women’s issues, and initiate and participate in applied research.

Self development skills such as accessing and utilizing information from different sources, particularly in using the Internet and a computer are also necessary.

These guidelines were suggested for staff functioning at PHC level such as the medical officer, public health nurse and allied health supervisors.
Eligibility criteria

Institutions involved in training public health categories such as medical officer, public health nurse must clearly state criteria for eligibility / admission to the course.

Curriculum design

The curriculum to be designed should consist of all essential competencies; it should be community-oriented, flexible, dynamic and sensitive (culturally and gender-wise), and based on needs assessment.

Faculty

It was suggested that the faculty should be public health specialists, multidisciplinary, with a mix of field and academic experience.

Composition

- Public health specialist
- Multidisciplinary specialists
- Faculty with experience and skills in teaching
- Mix of faculty with academic and field-based experience

Number

Minimum number adequate to maintain teacher student ration 1: 10 in all disciplines. The faculty recruitment should be transparent and there should be an ongoing assessment, which should include service output, educational achievement, research and faculty development activities.

Teaching/learning resources

- Teaching methods should be learner-centred, self-directed, balanced between theory and practicals and mentoring should be available. Monitoring and assessment should be periodic, teaching processes should be assessed; results should be used to improve teaching.
The basic infrastructure should include a library with current books and journals, facilities for use of the computer/Internet and an adequate supply of AV teaching aids/materials.

Field practice area should be accessible, the institution should have a good rapport with community and the infrastructure should be adequate for field work. There should also be a good liaison/partnership between the government and NGOs involved in public health.

Teaching learning methods/process should have a/an:

- good balance between theory and practical sessions; approach which is learner centred, encouraging self-directed learning; system that encourages active learning; sequence of learning activity, from simple to complex ideas; agreed proportion of time devoted to field based methods; mentoring – where trainee works with a practising public health person of same vocation, through empowerment approach.

**Monitoring/assessment**

- Monitoring of students and faculty should be periodic and focus on knowledge/skills/attitudes of students with periodic assessment of the course/programme.

- Faculty performance should be assessed by the administration, peers, self and students.

- Assessment should include methods/processes used in the course, outcome/relevance of each component of the course assessed, with a written system of monitoring, and assessment of skills

- Results/Outcomes of monitoring must be used to improve training. The environment should be conducive for the acceptance of results of monitoring/feedback in a constructive manner.

**Courses identified** - MBBS, MD (basic degree), BN, BScN, BPH etc.
(3) District/Provincial or Regional level  
(Population 50 000 – less than 200 000)

The group developed a comprehensive list of competencies for the higher category of health workers that could be used across different countries. They usually belong to the professional group with advanced educational qualifications and experiences. The lists of skills needed at the district level and above were categorized under the following competencies:

Public health competency
- Planning, implementation, supervision, and coordination of disease control activities;
- Organization of district-level surveillance programme including response to outbreaks and emergencies;
- Monitoring environmental safety, and
- Implementation of public health laws

Managerial competency
- Conducting needs assessment
- Prioritizing health problems
- Setting up objectives and targets
- Organizing reporting systems
- Interpreting HMIS and critically evaluating data
- Evaluating programme quality and effectiveness
- Health manpower planning and human resource management
- Mobilizing community participation
- Targeting resources to make health care initiatives equitable
- Explaining scientific information to lay public
- Preparation of budget

Leadership competency
- Carrying out district level programme planning
Facilitating PHC level programme planning
Facilitating inter-sectoral coordination
Explaining scientific information to decision-makers and opinion leaders
Organizing in-service training programmes
Carrying out cost analysis of health care inputs

**Teaching competency**
- Organizing teaching learning sessions for professional students
- Identifying curriculum content and needs
- Identifying appropriate teaching methods
- Teaching how to learn
- Facilitating the learning process
- Training the trainers
- Training future teachers

**Research competency**
- Expertise in epidemiology and biostatistics
- Critically evaluating data
- Identifying gaps in knowledge
- Enunciating Research questions
- Designing and implementing studies
- Carrying out health systems research and sensitivity analysis
- Understanding efficiency and carrying out cost effectiveness studies
- Preparing research papers
- Organizing dissemination of research results
- Carrying out meta-analysis
Under each competency, specific skills that were expected of the members of a district team were listed. The difficulty faced by individual countries to have such highly skilled personnel at the district level was deliberated and hence the group agreed that the individual country may vary the level/number of skills that could be managed in the different geographies of the Region.

The group identified the minimum competencies required at the district level and suggested that the course bridge the academic and service divide, with uniformity in achieving credit transfers. The courses identified at this level were MPH, MSc, MD, M Phil and PhD. Core and optional units were identified (See Annex 3) the courses were left flexible so that part-time and distance learning options were available. Teaching methods and processes required that the 50% of the study was field-based. Self-directed learning, and team training were some of the other methods suggested. Effort should be made to bridge the academic/service divide.

Internal and external assessment were suggested, including continuous self-monitoring and periodic evaluation of faculty by students. Externally conducted examinations would be a method of measuring the progress. There should be uniformity across countries, thus achieving credit transferability between accredited institutions nationally and internationally.

**Courses identified**  M PH; M Sc.; M D; M Phil.; Ph D

**Curriculum content**

**Core units**

- Epidemiology
- Biostatistics
- Research methods
- Environmental health
- Public health laws
- Health planning and management
- Population sciences (Sociology, social work, anthropology, demography)
- Health information management systems
Optional units

- Maternal and child health
- Reproductive health
- Nutrition
- Occupational health
- Health economics
- Policy analysis
- Public health microbiology/Parasitology
- Medical entomology
- Health systems development
- Disaster preparedness/Response
- Advanced biostatistics

Curriculum design

Could be a residential course or part time - credit-based programme or distance learning format.

Faculty and teachers

Qualifications

PhD, MD (Community Medicine) or Masters’ degree with three years’ research/teaching experience and published papers.

Experience

Experience in public health services may be equated in a proportion of one year of research to three years in public health experience.

Teaching methods and processes

Field based study, Case studies and Didactic teaching, self directed learning, Integrated teaching, Adult learning methods, Team training, Portfolio learning
Resources

- Field practice Area: to consist of urban areas, semiurban area, rural area, and urban slums.
- Material resources to include: Public health laboratory, computers and web access, library with adequate books and journals, and teaching aids. Institutional linkages may be considered for specific faculty.

Monitoring

Internal

Continuous self-monitoring in class room/field and project monitoring were suggested. Periodic evaluation of faculty by students.

External

Monitoring should be considered using examinations and progress measurement.

Assessments

Methods: multiple assessment methods to be used such as MCQ, short answers (these may be optional, but should be kept to a minimum), projects and practicals.

Requirements

- Content validity of the method to be ensured
- Credit for internal assessment
- Every area of the competency grid should be assessed at some point in time.

4.3 Continuing Professional Development

The group suggested that the goal would be to improve delivery of health services at all levels. The following objectives were identified to achieve this goal:
The public health workers/professionals should be able to: maintain acquired knowledge and skill; upgrade knowledge and skill in response to changing needs of community at large; acquire new skills, and develop cadre/pool of resource people—e.g., trainers of trainees.

Formal and informal methods to use innovatives techniques wherever possible in order to make training community-based, participatory and problem-solving, innovative methods to be used with greater use of information technology. CPD should be introduced as a policy in public health using innovation.

In the discussion that followed, the group felt that in the current context, continuing education be used for updating the knowledge and skills to serve the community better, and not for re-certification or re-registration.

4.4 Networking of Public Health Institutions

The objective of networking was for improving competencies of the different training institutions. Sharing expertise, avoiding duplicating programmes, learning from failures and utilizing existing resources to the maximum were the other advantages. Intra-country core groups and a regional working group will be formed. The WHO Regional office would identify one institution, which will then disseminate information and facilitate the first network meeting. The network will share strengths and skills.

Therefore, there was a demand for sharing information among countries. There was also a need for commencing “consultative process” within the countries. Networking was seen as an investment. All public health institutions whether recognized or not, were to be given the opportunity to enter or be included in the network.

There was a note of caution that networking is not the only method for improving public health. It was reiterated that it should be initiated from within the representative countries and that public health education should lead to a change in practice. One or two institutions in the Region with expertise were to develop a website to show what has been achieved. To begin with, websites provided by schools in Thailand to be used to maximum advantage. Credit transfers were to go beyond the Region.
5. **FRAMEWORK FOR ACCREDITATION OF TRAINING/EDUCATIONAL INSTITUTIONS:**

**Suggested criteria for accreditation**

Based on the recommendations of the World Federation for Medical Education, the following guidelines were suggested:

**Mission and objectives**

The institution must define its mission and objectives and make them known to its constituency. The mission statements and objectives must describe an educational process to produce a public health professional, competent at various levels with an appropriate foundation for further training in public health, in keeping with the roles of the professionals in the health system.

The institution must define what competencies its students should exhibit on graduation, including the relationship of such competencies to the diverse needs of society.

**Curriculum models and instructional methods**

The institution must define the curriculum models and instructional methods employed (discipline, system, skill based etc.) on the basis of sound educational principles.

**Role of behavioural and social sciences and medical ethics**

The institution must identify and incorporate in the curriculum the contributions of the behavioural sciences, the social sciences and medical ethics that provide the knowledge, concepts, methods, skills and attitudes necessary for effective communication, decision-making and implementation of public health programme.

**Role of skills**

The institution must ensure that students acquire knowledge of public health, management sciences and skills (including communication skills) necessary to assume management responsibility upon graduation. Ability to perform skills should be given priority than mere acquisition of knowledge.
Curriculum structure, composition and duration

The institution must describe the content, extent and sequencing of courses and other curriculum elements, including the balance between the core and optional content.

Faculty position and recruitment

The institution must have a staff development policy. It must provide justification for numbers, and subject expertise for recruitment of teachers in terms of qualifications, experience and research capabilities, as appropriate for the course. The recruitment policy shall as a minimum, outline the adequate balance of skills required to deliver the curriculum, including the balance between medical and non-medical academic staff, as well as the ratio between full-time and part-time staff.

Assessment methodology

The institution must define and describe the methods used for assessment of their students, i.e. the balance between formative and summative assessment methods, the number of examinations and other tests, the balance between written and oral examinations, the use of special types of examinations.

Admission policy

The institution must have a well-defined admission policy document for all courses.

Student support and counselling

A programme of student support and counselling must be offered by the institution.

Physical facilities

The institution must ensure that it has sufficient educational resources for the student population and for the delivery of the curriculum, including libraries, lecture halls, tutorial rooms, laboratories and computers, of field practice area.
Pedagogy expertise

The institution must have a policy on teaching and learning methodology and the use of educational expertise in curriculum development, instruction and evaluation.

Exchange with other educational institutions

The institution must establish a mechanism for programme evaluation, and ensure that basic data about the public health programme is available through monitoring of the curriculum and of student progress, and ensure that programme evaluation addresses identified concerns.

Student performance

Student performance (average study duration, scores, pass and failure rates, success and dropout rates) must be analyzed in relation to the curriculum.

Organisational structure

At the outset, a group of faculty members must, as a curriculum committee, be given the authority to design and manage the curriculum.

Interaction with health sector

The institution must have constructive interaction with the health and health-related sectors of society, government and NGOs.

Continuous renewal of the public health school

As a dynamic institution, it must initiate programmes and procedures for regular reviewing and updating of its fundamentals, structure and activities.
6. **RECOMMENDATIONS**

Based on the overall discussions, plenary sessions, and group work, the following recommendations are made in order to strengthen human resources development in public health through education, training and research:

6.1 **For Member Countries**

(1) A mechanism for reviving current status of all public health training institutes should be established using evidence-based criteria in relation to numbers, distribution, skill-mix, career advancement opportunities etc.;

(2) A focal point/steering committee should be set up to oversee further development of existing programmes for education and training of public health personnel, based on the guidelines agreed at the consultation and;

(3) The guidelines developed at this consultation should be used to develop National Standards for Accreditation;

(4) Regulatory bodies should be developed or existing ones strengthened for accreditation of all institutions contributing to education and training of PH personnel;

(5) Adequate representation and participation of appropriate PH personnel in strategic National health planning and policy making should be ensured;

(6) Managerial capacity and leadership capabilities of PH personnel should be strengthened;

(7) Intra - and inter-country networks for sharing information and resources both within and outside the SEA Region should be developed and maintained commencing with the Web page introduced by Thailand;

(8) Partnerships with other government sectors, NGOs, private organizations, and the community in developing PH services and training institutions should be developed;
6.2 For WHO

(1) The development and utilization of an accreditation system for public health institutions based on internationally endorsed criteria enabling equivalence between member countries should be supported;

(2) Regional networking of public health institutions for capacity building and research on issues of public health importance should be facilitated;

(3) Regional exchange programmes for faculty and students to facilitate learning from “best examples” in PH education and training, and practice should be supported.
Annex 1

PROGRAMME

30 January 2002

Inaugural Session

0830 - 0900 hrs  Registration of Participants
0900 - 0945 hrs  Inauguration

Welcome
Dr George Chandy, Medical Superintendent
Christian Medical College & Hospital

Message from Dr.Uton Muchtar Rafei, Regional Director for
South-East Asia
(Read out by Dr P.T. Jayawickramarajah
RA-HRH, WHO/SEARO)

Inaugural Address
Mr Syed Munir Hoda, IAS, Secretary to Government
Health & Family Welfare, Tamil Nadu

Special Address
Dr Anandakannan, Vice-Chancellor, Dr.M.G.R.Medical
University, Chennai

Inauguration by the Chief Guest

Introduction of Participants

Nomination of Chairman / Rapporteur

Vote of Thanks

Dr Vinohar Balraj, Academic Registrar, Christian Medical
College, Vellore.

1000 - 1040 hrs  “Introduction: Accreditation: Purpose and Process”
Dr PT Jayawickramarajah RA-HRH, WHO/SEARO

“Public health education/Training in changing times
Professor Abraham Joseph, CMC, Vellore

“Recent Trends in Accreditation Programmes in Public Health
Institutions”

Dr. Don Bandaranayake, WHO Consultant, WHO Nepal

Session 2:  Plenary Session - Country Presentations and
discussions
discussions

1100 - 1110 hrs  Bangladesh
1110 - 1115 hrs  Bhutan
1115 - 1125 hrs  DPR Korea
1125 - 1135 hrs  India
1135 - 1145 hrs  Indonesia
1145 - 1200 hrs  Discussions on Country Presentations
1330 - 1340 hrs  Maldives
1340 - 1400 hrs  Myanmar
1400 - 1410 hrs  Nepal
1410 - 1420 hrs  Sri Lanka
1420 - 1430 hrs  Thailand

Session 2: Group Work

1530 - 1700 hrs  Contents of public health training in the following three areas:
Group 1: Nurses including midwives and allied health sciences
Group 2: Undergraduate medical training
Group 3: Postgraduate training and MPH

31 January 2002

Session 3

0900 - 0915 hrs  Students Assessment
Dr P T Jayawickramarajah
0915 - 1000 hrs  Group work (contd.)
1030 - 1130 hrs  Presentation by the Groups
1130 - 1200 hrs  Plenary discussions on Group work

Session 4

1330 - 1500 hrs  Group work
Group 1: Teaching methods
Group 2: Assessment methods
Group 3: Infrastructure facilities including physical, faculty etc.
1530 - 1630 hrs  Preparation of Guidelines and Presentation by the Groups
1630 - 1700 hrs

Plenary session

1 February 2002

**Session 5**

0900 - 0915 hrs
Continuing Education in Public Health by Dr Palitha Abeykoon

0915 - 1000 hrs
Group Work

Group 1: Focus on Continuing Medical Education

Group 2: Accreditation System

Group 3: Networking

1030 - 1115 hrs
Plenary Presentations and Discussions

1115 - 1200 hrs
Plenary: Preparation of Plans of Actions for Networking for Public Health Accreditation Programmes

**Session 6**

1330 - 1400 hrs
Plenary Presentations and Discussions

1400 - 1430 hrs
Concluding sessions
Annex 2

LIST OF PARTICIPANTS

Bangladesh
Prof (Dr) Falahuzzaman Khan
Director (Medical Education)
Directorate-General of Health Services
Mohakhali, Dhaka
Tel: 8802-8825400 (O); 8802-7711291 (R)

Dr M. Ahmadur Rahman
Professor of Epidemiology
National Institute for Preventive and Social Medicine (NIPSOM)
Mohakhali, Dhaka
E-mail: Cheril07@yahoo.com
Tel: 8802-8821236, 8829442 (O); 8802-8616972 (R)

Bhutan
Mr Rinchen Namgayal
Personnel Officer, Health Department
Thimphu
E-mail: rinam@druknet.net.bt
(Tel: 975-2-321314 (O); 975-2-325891 (R)

India
Mr S K Rao
Director (Medical Education)
Ministry of Health and Family Welfare
Nirman Bhawan, New Delhi
E-mail: Rao-kamesh@hotmail.com
(Tel: 91-11-3019579; 91-11-6873712 (R)

Dr M. C. Kapilashrami
Director
National Institute of Health and Family Welfare
Munirka, New Delhi
(Tel: 91-11-618696)

Dr Jayaprakash Muliyil
Vice Principal
Christian Medical College
Vellore 632002
Tamil Nadu
(Tel: 91-416-262603, Ext.4202 (O)

Indonesia
Mr Suprijadi, SKM
Pusdiknakes
Centre for Health Manpower Education
Ministry of Health
Hang Jebat III, Street F.3
Kebayoran Baru,
Jakarta
Fax: 62-21-7260485
Tel: 62-21-72794442; 62-21-84996664

Mr Iskandar Wahidiyat
National Accreditation Board
for Higher Education
Jl. Jendral Sudirhan
Jakarta Building C, Depdiknas, Fl. XI
Jakarta
E-mail: wahidi@pacific.net.id
Fax: 21-75818672, Tel: 62-21-7695803

Maldives
Dr Abdul Azeen Yoosuf
Director General Health Services and
Member, Maldives Accreditation Board
Ministry of Health
Maldives
E-mail: dgh@health.gov.mv
Azeen-yousuf@hotmail.com
Tel: 960-324523, 960-77268
Myanmar
Dr Hla Shein
Lecturer (Disease Control)
Institute of Community Health
Magway
Dr Khin Khin
Lecturer (Preventive and Social Medicine)
Institute of Dental Medicine
Mandalay

Nepal
Dr Bimala Shrestha
Head, Department of Community Medicine and Family Health
Institute of Medicine, Tribhuvan University
Maharajgunj Campus
E-mail: bimala@mos.com.np
Fax: 977-1-418186
Tel: 977-1-521662 (R); 977-1-424860 (O)

Dr Paras K. Pokharel
Assistant Professor
Department of Community Medicine
B P Koirala Institute of Health Sciences
Dharan
E-mail: maniparas@hotmail.com
(Tel: 977-21-21546 (R); 977-25-21017 Ex. 2626 (O); Ex.3061 (R)

Sri Lanka
Dr Stanley de Silva,
Deputy Director General (ET & R)
Department of Health Services
Colombo 10

Dr (Mrs) S D de Silva
Director, National Institute of Health Sciences
Kalutara

Thailand
Dr Suriya Wongkongkathep
Director, Praboromarajchanok Institute of Health Manpower Development,
Office of the Permanent Secretary, Ministry of Public Health
E-mail: suriya@health.moph.go.th
Fax: 66 2 5901917; Tel. 66 2 5901924

Dr Chanuantong Tanasugarn
Deputy Dean in International Relation
Faculty of Public Health
Mahidol University
E-mail: phctn@mahidol.ac.th
Fax: 66 2 24644284
Tel. 66 2 2455521; 66 2 2457195

Mrs Wacharin Tanyanont
College of Public Health
Chulalongkorn University
Thailand

Temporary Advisers
Dr Palitha Abeykoon
Kandy,
Sri Lanka

Dr Abraham Joseph
Professor and Head
Community Health Department
Christian Medical College
Vellore
India
E-mail: chad@cmcvellore.ac.in;
abrahamjosepha@yahoo.com
(Tel: +91-416-26203 / 22210, Extn.4280 (O); 0416-263478 (R)
Fax: 91-416-262268

Observers
Dr Vinohar Balraj
Professor
Community Medicine
Christian Medical College
Vellore
E-mail: vinohar@cmcvellore.ac.in
(Tel: +91-416-262603, Extn.4207 (O); +91-416-263143 (R)

Dr Vasanti
Directorate of Public Health
Chennai
E-mail: vasanthinarasimhan@hotmail.c
(Tel: +91-44-4345381 (R)
Report of the Regional Consultation

Dr Manjula Dutta  
Professor of Epidemiology  
Dr MGR Medical University  
Anna-Salai, Guindy  
Chennai  
E-mail: manjuld@yahoo.com;  
manjulada@gmail.com  
(Tel: 91-44-2200713; 91-44-4351104)

Dr A. Nalini  
Prof. Curriculum Development  
Dr MGR Medical University  
Anna-Salai, Guindy  
Chennai  
(Tel.: 2355120 (O); 6266787 (R))

Dr Ramachandran  
National Institute of Epidemiology  
Chennai

Dr D K Srinivasa  
Rajiv Gandhi University for Health Sciences  
Bangalore  
E-mail: dks@rguhhs.nic.in  
(Tel: 91-80-6768743 (R); 91-80-6545733 (O))

Dr Arvind Kasthuri  
Additional Professor  
Community Medicine Department  
St. John’s Medical College  
Bangalore

Secretariat

Dr P.T. Jayawickramarajah  
Scientist, Human Resources for Health  
WHO/SEARO  
New Delhi

Dr Don Bandaranayake  
Medical Officer-HRH  
WHO Kathmandu  
Nepal

Dr Duangvadee Sungkhobol  
Regional Adviser, Nursing and Midwifery  
WHO/SEARO  
New Delhi

Mr Arvind Mathur  
National Professional Officer  
WHO New Delhi  
India

Mr Sunil Nandraj  
National Professional Officer  
WHO New Delhi  
India

Mr VK Varma  
Human Resources for Health  
WHO SEARO

Mr C Samuel  
Christian Medical College,  
Vellore

Local Organizing Committee

Professor Abraham Joseph (Convener)  
Dr Jayaprakash Muliyil  
Dr Vinohar Balraj  
Mr C Samuel

Page 38
### Annex 3

**COURSE COMPARISONS**

<table>
<thead>
<tr>
<th></th>
<th>MPH</th>
<th>M.Sc.</th>
<th>MD</th>
<th>M.Phil/PhD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Duration</strong></td>
<td>18 months</td>
<td>Two years</td>
<td>Three years</td>
<td>3 – 5 years</td>
</tr>
<tr>
<td><strong>Product</strong></td>
<td>Public health practitioners</td>
<td>Public health practitioners and researchers</td>
<td>Public health practitioners, teachers and researchers</td>
<td>Researchers and teachers who also practise public health, and define policy</td>
</tr>
<tr>
<td><strong>Tasks</strong></td>
<td>Health promotion, disease prevention and programme management</td>
<td>Health promotion, disease prevention and Programme management, HMIS and research</td>
<td>Teaching and practising public health, Assisting in policy setting, Research programme planning</td>
<td>Research, Critical analysis, and policy setting Strategic planning</td>
</tr>
<tr>
<td><strong>Entry criteria</strong></td>
<td>A basic degree in medical, dental, nursing, veterinary or allied medical sciences. A basic degree in social sciences, or biostatistics with two years' experience in the health sector</td>
<td>A basic degree in medical, dental, nursing, veterinary or allied medical sciences. A master's degree in social sciences, or biostatistics with one year's experience in the health sector</td>
<td>MBBS or equivalent undergraduate medical degree</td>
<td>A postgraduate degree Or Undergraduate degree with five years' research experience</td>
</tr>
<tr>
<td>Content</td>
<td>MPH</td>
<td>M.Sc.</td>
<td>MD</td>
<td>M.Phil/PhD</td>
</tr>
<tr>
<td>---------</td>
<td>-----</td>
<td>-------</td>
<td>----</td>
<td>------------</td>
</tr>
<tr>
<td></td>
<td>Course work (one year) practicals as necessary simple project work 3 – 6 months</td>
<td>Course work (one year) practicals as necessary and full research project work for one year</td>
<td>Course work, practicals and full research project work for three years, to run concurrently Teaching skills compulsory</td>
<td>Course work (one year) and full research project work for two to three years which either contributes new knowledge or shows new ways of applying existing knowledge</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course work</th>
<th>Core units – 8</th>
<th>Core units – 8</th>
<th>Core units – 8</th>
<th>To be decided on individual basis, depending on the topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional units 3 - 5</td>
<td>Biological basis for health for non science students</td>
<td>Optional units 3 - 5</td>
<td>Biological basis for health for non science students</td>
<td>Infections and non infectious disease epidemiology control programmes</td>
</tr>
</tbody>
</table>

| Evaluation | Internal, external and project | Internal, external (Essays and short notes) and dissertation | Internal, external (Essays and short notes) in content areas and dissertation | Methodology skills, content, thesis, seminars and open viva |
The guidelines are intended to improve the quality of the institution as well as to guide it to become a Model Training Institution (MTI). The guidelines are based on various TVET quality components at the institution level, for which there are a series of indicators. Finally, the guidelines aim to help TVET institutions to achieve the vision of government. The guidelines and indicators are to ensure that TVET institutions meet minimum standards for MTI status. The guidelines and indicators, and training quality audit standard defines the quality characteristics required for TVET institutions in order to become MTIs. 2.2 Objectives of the MTI Standard Guidelines. The public healthcare system in India evolved due to a number of influences from the past 70 years, including British influence from the colonial period. The need for an efficient and effective public health system in India is large. Public health system across nations is a conglomeration of all organized activities that prevent disease, prolong life and promote health and efficiency of its people. Indian healthcare system has been historically dominated by provisioning of medical care and neglected