Strengthening Public Health Infrastructure, with Emphasis on Education and Practice
CONCLUSIONS

The ultimate aim of the South-East Asia Public Health Initiative is to ensure that all countries in the Region have in place well-trained public health professionals who can provide the necessary leadership for publicly-funded health systems. It reiterates that investment in the public health workforce is crucial, that only public health professionals can effectively bridge the gap between the current emphasis on clinical services and provision of a wide range of multi-disciplinary and multi-sectoral approaches to improve the health of whole populations. It maintains that a public health perspective has the greatest possibility of meeting the health needs of countries in a rapidly evolving development context. While medical care can reduce the incidence of death and disability, it is public health with its focus on population-based health promotion and disease prevention activities that will sustain healthy and economically-productive communities.

WHO has assumed leadership in the field of public health training and capacity building by organizing a number of regional conferences, intercountry meetings and informal meetings in the five-year period since the Calcutta Declaration. While a number of steps have been taken that have advanced some of the earlier recommendations, several obstacles mentioned above inhibit further expansion and development of public health in the Region. To move this initiative forward more work needs to be done at the highest policy levels within Member States with demonstrable commitment.
Health Assembly. These regulations will help in better management of outbreaks of “new” communicable diseases such as avian influenza and SARS.

7. RECENT PROGRESS

An in-house Technical Working Group has developed a background paper on Public Health Initiative while a Strategic Advisory Group (SAG) has also been established under the auspices of the Regional Office, with a remit to provide strategic advice to the Regional Director on the development of the initiative and assist in mobilizing resources. SAG met in November 2004 to develop a framework for public health education. Its observations and recommendations went beyond education. A number of constraints were identified at the outset. These included the observation that very few public health professionals were in positions of power in many Member States; many health systems, both public and private, were over-medicalised; and few countries have statutory and regulatory requirements governing the placement of formally trained public health professionals in public health positions. The main recommendations were to address these obstacles. In addition, SAG proposed a set of actions to commission workforce studies on which to base future actions. These studies included essential public health functions, accreditation, and benchmarking to allow comparisons between Master’s courses in public health. SAG proposed the setting up of an evaluation and monitoring system to enable continual review of performance of institutions. For the revival of public health education, SAG called for action targeting public health institutes focusing on evidence-based requirements and supply, accreditation, curriculum revision, and capacity building of faculty. It also recommended collecting detailed information from all schools of public health in the Region, including the “art of politics” as part of the educational process, establishing baseline costs of training and deployment of public health professionals, and development of a compendium of all public health regulations within each country for the purpose of policy analysis.

The Regional Office has recently embarked on the process of enumerating the public health workforce. Every country office has been sent a template for review and adaptation. Some work has already begun on detailing existing public health legislation in the Region. Very recently, work has commenced on a protocol for enquiring into the essential public health functions in Member States. The South-East Asia Public Health Initiative roadmap has been drawn. The initiative will be given further impetus by the forthcoming World Health Report 2006, Working for Health with the World Health Day theme Human Resources for Health Development.

8. ROLE OF GOVERNMENTS

Governments, through public policy (not simply health policy), have a special responsibility to ensure basic conditions for healthy living and for making healthier choices the easier choices. Government decisions with regard to economy, social policy, taxation, employment, education, urban and rural planning, food production, water supply, waste disposal etc. have major effects on the health of individuals and populations. Collectively, all of this has the potential to produce a healthy public policy. It calls for a high profile stewardship function for health in general and public health in particular. It is in effect a shift from a “national sickness service” to a “national health service”. Necessary actions include:

1. Affirming that public health professionals are mandatory for public health posts, particularly at senior administrative levels, and putting in place

SUMMARY

Public health is the “the art of applying science in the context of politics”. Its actions are collective in nature and aimed at a sustained population-wide improvement in health. Its mission is to improve the health of populations and reduce health inequalities. Public health professionals should be in a position to provide the leadership necessary for health development. Unfortunately, in most of the countries in this Region, this is not so. These professionals are inadequately trained, and lacking in motivation and status within the system. Public health systems too are either not functioning optimally or are in a state of decline due to lack of resources, political commitment and leadership. In many Member States, there is a lack of strong national policies supportive of public health with an increasing share of the health budget going to clinical services. It must be acknowledged that in many countries within this Region the public health service is in some disarray.

In the face of such a daunting situation, the WHO Regional Office for South-East Asia has taken decisive action. Setting the agenda was the landmark Calcutta Declaration of 1999 which recognized the need for expertise in public health and capacity building as an essential requirement for health development. The South-East Asian Public Health Initiative, led by the Regional Director, Dr Samlee Planbangchang, is a powerful effort to re-invigorate public health in the Region. The overarching goal of this initiative is to have a strengthened public health capacity in the Member States that can provide strategic directions for planning, implementation and management of an efficient and an effective public health service. Alongside strengthening public health education, this initiative aims in the long-term to strengthen the overall public health infrastructure, services and management within the broader context of health systems development. While there have been noteworthy achievements, some obstacles inhibit further expansion and development of public health in the Region. These obstacles are structural and functional in addition to factors that relate to the position of public health as a key area of input within the health system. Even in countries where it is regarded as a separate discipline, there is no requirement to have a formal qualification for employment in the public health arena. Public health has a poor image and is still considered as a “drop-out” specialty. The structural issues relate to the lack of sufficient public health positions within the health infrastructure and the almost complete absence of a career structure. Even where there are sanctioned positions, they are often filled by persons untrained in public health. Functionally too, there are obstacles as governments traditionally focus on disease rather than health thereby diverting very little of available funds to public health. Many public health practitioners on the ground are not adequately trained and there is little quality assessment or performance monitoring of their work. To move this initiative forward, more work needs to be done at the highest policy levels within Member States with demonstrable commitment from governments.
1. INTRODUCTION

The effective functioning of any health system requires an effective public health service. Such a service is essentially multidisciplinary in nature and the workforce has prime responsibility for delivering non-personal, population-based health care within or at times outside the traditional health sector. It is acknowledged that in many countries within this Region this responsibility is not being adequately met and the public health service is in some disarray. In all Member States, curative care has taken centrestage and consumed the lion’s share of resources, while in some countries public health has been neglected. To address the prevailing situation, the WHO Regional Office for South-East Asia has formulated specific objectives to enhance national capacity in human resources through education and training support and promote public health infrastructure through workforce development.

This paper will highlight the crucial place of public health in health development and the importance of human resources while emphasizing the current deficiencies and actions needed to remedy the situation. In particular, it will look at the constraints that exist in most countries in this Region and suggest what could and must be done by governments at country level. It will also dwell on the stewardship function of ministries of health in providing “public good” services that usually do not attract investment from the private sector.

Firstly, we need to be clear about what is meant by public health. It can be defined as the "collective action for sustained population-wide improvement in health". Its mission is to improve the health of populations and reduce health inequalities. It is vital that we understand and appreciate this definition and mission of public health and not be confused with the often-used term “public health services” (especially by the media) referring mainly to state-funded hospital services.

Next, we must have as clear an idea as possible of what constitutes public health workforce. It is important to appreciate that the public health workforce as defined in this paper is not that part of the health workforce employed in the public sector. The public health workforce comprises "human resources who are providing non-personal health services to protect and promote the health of populations". It is characterized by its diversity and complexity, with people from a wide range of occupational backgrounds working in both public and private sectors. This workforce may also be considered under the twin headings public health professionals and public health workers.

Finally, in this section, it is pertinent to look briefly at the essential public health functions. These are a "set of fundamental activities that address the determinants of health, protect a population’s health, and treat disease". In addition to population-based functions, they include clinical interventions needed for the treatment of diseases of public health significance, such as tuberculosis, and delivery of immunization for children. It is important to note that these functions cut across all sectors, and not just the health sector, although ministry of health is the key player in terms of making sure that these activities are delivered by some means.
All countries in the SEA Region are committed to the goals and targets set in the strategy document, “Health for all in the 21st century,” endorsed by the Fifty-first World Health Assembly, and also in the UN Millennium Development Agenda. In the late 1990s, the Regional Office for South-East Asia embarked on a journey, now referred to as the South East Asia Public Health Initiative: 2004-2008. This was a genuine effort to re-invigorate public health in the Region. Setting the agenda was the landmark Calcutta Declaration (1999), adopted at the Regional Conference on “Public Health in South-East Asia in the 21st Century” attended by public health experts of international repute. It recognized the need for expertise in public health and capacity building as an essential requirement for health development. The main purpose of this conference was to review the state of public health in the Region and outline strategies to guide future direction. This meeting declared that public health is an essential discipline for health development and that the public health leadership is required to formulate policies and implement actions. It also emphasized that all public health specialists require needs-based training linked to appropriate career paths and incentives. It affirmed that strengthening and reforming public health education and training, and research supported by networking of institutions and the use of information technology is essential. This declaration is now five years old and while it has done much to set the agenda, it is mainly the political goals that have not been addressed. At country level in particular, much requires to be done. It needs commitment from governments and health ministries to explicitly support public health as an essential discipline, affirm that public health professionals are mandatory for public health posts, and have appropriate career structures in place.

At an intercountry meeting organized by the Regional Office in Chennai in January 2002, accreditation guidelines were developed for public health institutes (PHIs), and guidelines and a plan of action formulated for networking of PHIs. The main recommendations also included the requirement to introduce continuing professional development as a policy requirement for public health professionals and other public health practitioners. The Regional Office also organized a successful international Executive Programme on Public Health in November 2002 collaborating with the University of Padjajaran in Indonesia. Invitees from PHIs of Member States recommended the development of a standardized curriculum package and prototype course materials with a view to establishing a regional Masters in Public Health programme.

An informal consultation on ‘Future Directions in Public Health, Calcutta and Beyond’ was held in December 2003. The overall objectives were to review the progress made since the Calcutta meeting, identify constraints, and set the future agenda for strengthening health systems in general, and public health in particular, in the countries of the Region. The recommendations of this meeting included the formation of public health councils in each Member State and the establishment of an academic network in South-East Asia. Mahidol University in Thailand was chosen as the secretariat for the South-East Asia Public Health Educational Institutions Network (SEAPHEIN). It was officially launched on World Health Day, 2004. The first annual meeting, a three-day workshop on development of core competencies for public health education with a focus on public health emergencies and gender, was held in Bangkok in April 2005.

The “South-East Asia Public Health Initiative, 2004-2008” is a significant step towards strengthening public health in the Region. This initiative aims to achieve the following five major goals:

1. Position public health high on regional and national agendas, and make it a priority issue to generate strong commitment by national policy-makers.

2. CURRENT HEALTH SCENARIO IN THE SEA REGION

It is necessary to briefly review the current health scenario, both in the global context as well as within our Region, in order to fully appreciate what skills an appropriately trained public health workforce can provide to improve health status. Rapid economic development with increasing social and economic inequalities alongside globalization and environmental change has brought about a shift in disease trends and risk profiles. Overall, the Region accounts for an appreciable amount of the global disease burden due at least in part to the large size of the population as well as its comparatively low socioeconomic profile. It is now acknowledged that the main obstacle to human development is poverty and that investment in health can contribute to its reduction.

The continued intensity of some diseases (HIV/AIDS, malaria, dengue, hepatitis, diabetes, coronary heart disease), the resurgence of other communicable diseases (tuberculosis, plague, vaccine preventable diseases) and the emergence of new ones (SARS, Asian bird-flu, mad cow disease, foot and mouth disease) has stretched the already weakened health systems often resulting in sub-optimal response. An increasing burden of noncommunicable diseases, mental illness, and incapacity due to injuries and violence has added to the problem. In some countries of the Region (Bangladesh, Nepal), exposure to arsenic in water remains a major environmental health problem with dire consequences. It is estimated that one third of all maternal and under-5 deaths in the world still occur within this Region. Rapid population growth, unplanned urbanization, increasing environmental degradation, recurrent earthquakes, and the recent tsunami disaster have posed additional public health challenges. The vast disruption and disability caused by such catastrophic events has demanded a rapid and meaningful response from public health services working hand in hand with other sectors.

3. THE ROLE OF PUBLIC HEALTH

The challenges mentioned above cannot be addressed by medical care services alone. They require multi-disciplinary and multi-sectoral approaches and social as well as health care interventions. They call for empowering communities and establishing functional links with other development sectors. They require leadership and commitment. Public health professionals, by the very nature of their education and training, should be in a position to provide this. Unfortunately, in most of the countries of this Region, this is not so. Public health systems are either not functioning optimally or are in a state of decline due to lack of resources, political commitment and leadership. Public health practitioners, often inadequately trained, poorly paid, lacking in motivation and support, without proper career opportunities, are more interested in supplementing their income by doing clinical work.

Overall, in most countries, the capacity of the public health workforce has not kept pace with modern concepts and new challenges while the neglect of the public health system has compounded the problems. In many countries, there is either no legislation governing the appropriate employment of trained public health professionals or any regulations that may exist are ignored in order to allow clinically-trained personnel to occupy key public health positions. In many Member States, there is a lack of strong national policies supportive of public health with an increasing share of the health budget going to clinical services. There is, in addition, a lack of physical infrastructure to deliver public health services to both urban and rural populations.
4. PUBLIC HEALTH EDUCATION AND PRACTICE

Let us now consider the links between education and practice in public health focusing initially only on medical schools and postgraduate public health institutes. Currently in many Member States, medical graduates who enter the specialty of public health face major handicaps in comparison to other specialties. They commence their journey by starting on the back foot, as in this Region, the specialty has not yet gained its deserved status. It is still considered as a “drop-out” specialty that supposedly remains an easy option when entry into other specialties has failed. This is in direct contrast to what obtains in most developed countries where the competition to gain entry into training programmes in public health is intense, and the specialty attracts many of the best young graduates. Postgraduate public health institutions in general are handicapped by poor facilities, outdated curricula and disinterested staff. Curricula in use do not address the new challenges. They do not provide for exposure to policy-makers or mechanisms, and include minimal training in leadership. Such institutes produce inadequately trained professionals who do nothing to elevate the status of the specialty. There are exceptions, but these are few in number.

In the field of nursing, most of the above observations are valid. In many health care situations, nurses are indeed the front-line workers who have already demonstrated their expertise and capabilities. While the status of traditional public health nursing has declined in all countries of the Region, new nursing initiatives in management and leadership have been taken. These however are mainly in the clinical fields. Few nursing curricula, if any, have specific provision for public health education and training. It is time for all postgraduate courses in public health in the Region to accommodate nurses and suitably qualified allied health professionals, as is done in most developed countries. Since public health is a multidisciplinary specialty, it is advantageous for future professionals to be educated and trained in a multi-professional setting. Some Member States (e.g. Thailand and Nepal) already provide for multi-professional education in public health.

An intercountry consultation on allied health professionals (AHP) services and education, held in Thailand in 2000, clearly identified the importance of these categories of health workers, particularly in providing primary health care. The consultation highlighted the relative neglect of these categories in the areas of basic and continuing education, career opportunities and research. Existing educational programmes are in the main out-dated and conducted predominantly, and often inappropriately, by doctors in hospital settings. There is scanty evidence of a public health emphasis in most curricula. There is little doubt that public health service can be enriched by appropriate education, training and deployment of well-trained AHP's in most Member States.

5. REGIONAL OVERVIEW OF PUBLIC HEALTH EDUCATION AND SERVICE

There is considerable variation in both academic and service sectors in public health across Member States. A comprehensive picture, especially from the service sector, is not available. A common characteristic is the inability to respond to changing needs in public health due to underestimation of their complexities. All countries with medical schools have included public health in their curricula. Overall, 8 of the 11 countries currently have postgraduate courses in public health. Bhutan and Maldives have improved the public health input in their basic educational programmes, while Timor-Leste has only short-term strategies for training nurses. In DPR Korea, the Institute of Public Administration provides some training in public health. In general, while new schools of public health are being established, there are acute shortages of teaching staff in the specialty in most countries. Accreditation measures have yet to be implemented in many Member States. Deployment to the service sector is poorly managed and career structures have not been attended to. The following table summarises the information available.

Table - Current status of public health education and training in SEA Region

<table>
<thead>
<tr>
<th>Country</th>
<th>Under-graduate</th>
<th>Medical Postgraduate</th>
<th>Nursing (Pub. health in curricula)</th>
<th>Allied health professionals</th>
<th>Other courses features, facts etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>Yes</td>
<td>NIPSOM</td>
<td>MPH, MPhil, PhD</td>
<td>Community health nursing only</td>
<td>2 para-medical schools and NIPORT Private sector expansion. Shortage of academics</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Yes</td>
<td>50+ PhPh 7 Schools</td>
<td>Bachelor Masters Doctoral</td>
<td>Yes, some mention Can enrol on MPH Several hospitals, PHH-oriented</td>
<td>9 PHIs + 40 private sector shortage of academics.</td>
</tr>
<tr>
<td>Myanmar</td>
<td>Yes</td>
<td>ICH</td>
<td>Bachelor Diploma Masters</td>
<td>Mainly community health nursing Institute of Paramedical Sciences, Mandalay + several hospitals 1997-Diploma in Hlth Adm. 2002-Health Mgt. Diploma</td>
<td></td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>Yes</td>
<td>PGIM</td>
<td>Masters Doctoral degrees</td>
<td>Minimal input NIHs for many categories. PHH-oriented UCFM Dip. in Health systems development. Integrated curriculum.</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>Yes</td>
<td>16 PHIs</td>
<td>Diploma Masters MPhil MD PhD</td>
<td>Yes, at basic and post-basic levels. Mahidol has public health programme Mainly hospital-based training. Not PHC-oriented Multi-disciplinary. Some PHIs of international repute.</td>
<td></td>
</tr>
</tbody>
</table>

6. WHO INITIATIVES IN THE SEA REGION

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