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Role of medical education in addressing the current health challenges

Report of the regional meeting
Bangkok, Thailand, 13–15 June 2012

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The role of medical education in addressing the current health challenges

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Regional Office for South-East Asia

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Executive summary

The Regional Meeting on the "Role of medical education to address the current health challenges" was conducted on 13–15 June 2012 in Bangkok, Thailand. The general objective of the meeting was to strengthen undergraduate medical education to equip its graduates, in order to effectively address the health challenges in the South-East Asia (SEA) Region. There were altogether 72 participants comprising public health and medical education experts from all 11 countries of the SEA Region, regional human resources for health (HRH)-related networks and the World Health Organization (WHO) in the meeting.

There is a global concern that education of health professionals, including medical education, is not keeping pace with health and other challenges that transform the health-care environment. Special efforts are now given to reform the education of health professionals, in order to improve the quality, relevance and social accountability of the health professional schools and their graduates to meet the challenges of the 21st century.

The countries in the SEA Region are confronted with numerous health challenges that need to be appropriately addressed. To effectively address these health challenges, these countries need to strengthen their health system based on primary health care with a good balance between public health services and medical care. A medical doctor who is normally considered a leader of a health-care team, be it primary, secondary or tertiary level of care, should have required competencies to address these challenges. Therefore, medical schools must equip their medical graduates with the required competencies to effectively support the strengthening of health systems, in both medical and public health care.

However, rapid assessment of medical schools' responses to the current health challenges in the SEA Region conducted in early 2012 reveals that there are wide variations within and between countries with regard to the extent of those identified health challenges that were incorporated in the undergraduate medical education, and how these were introduced, taught, and learnt. And with few exceptions, these health challenges are largely inadequately addressed in the undergraduate medical education and also with limited innovative approaches for effective learning in most countries.

Examples of experiences on innovative approaches at the global and national levels to improve quality and relevance of medical education were shared in the meeting. These include Global Consensus on Social Accountability of Medical Schools; community-based medical education; partnerships between academic centres and health ministry; patient, family, and community-centred approaches; and medical competency assessments.

The meeting critically reviewed the proposed strategic framework for strengthening undergraduate medical education in addressing the health challenges, which is based on a systems approach (input–process–output–outcome). This framework will guide countries on factors to be considered as well as strategic directions and actions to be carried out in order to produce medical doctors who have clinical and public health competencies as well as other broader competencies to meet the needs of the health systems.

Suggested strategic directions for strengthening undergraduate medical education are: (1) aligning medical education with needs of health systems; (2) strengthening quality assurance in medical education; (3) emphasizing social accountability; (4) strengthening curriculum and teaching–learning process; and (5) promoting an enabling environment.

The meeting made recommendations as follows.

Recommendations for countries

Countries should carry out the following actions in order to strengthen the undergraduate medical education to equip graduates to effectively address the health challenges in their respective countries:

(1) To establish a forum for the ministry of health, ministry of education, and other relevant ministries and stakeholders, including national medical councils, for joint planning, monitoring, and evaluation of the undergraduate medical education.

(2) Develop/strengthen evidence-based national policies on medical education and ensure equitable distribution of medical schools across the country.

(3) Establish/strengthen quality assurance mechanisms, including accreditation of medical educational institutions and programmes, which are aligned with current health needs and required competencies of medical graduates.

(4) Organize national/subnational forums with relevant stakeholders to agree upon and prioritize current health challenges for inclusion in the undergraduate medical curriculum.

(5) Review periodically (e.g. every five years) the effectiveness of existing medical education programmes in addressing current health challenges of the community and health system needs, and take appropriate measures to tackle the shortfalls.

(6) Ensure that principles of social accountability are reflected in the teaching–learning, assessment and accreditation processes.

(7) Establish a selection process for entry into medical schools to ensure an equitable representation for students from underserved areas.

(8) Develop/strengthen the mechanism for systematic performance evaluation of the medical school faculty.

(9) Establish/strengthen faculty development programmes for continuous professional development.

(10) Involve medical schools in public health management for defined geographical areas (e.g. the district in which the schools are located).

(11) Involve medical educationists in national health policy dialogue and health policy formulation.

(12) Promote networking among medical schools within the country and in other countries to share experiences and good practices.

Recommendations for WHO

WHO-SEARO (WHO Regional Office for South-East Asia) should:

(1) provide support to countries, as and when needed, in implementing the foregoing recommendations;

(2) develop a generic competency framework for medical graduates;

(3) develop tools and guidelines for in-depth assessment for medical schools to address current health challenges;

(4) develop a generic faculty development programme for competency-based, public health and learner-oriented medical education and support faculty development programmes at national and regional levels;

(5) assist countries to conduct studies on the effectiveness and efficiency of different models of undergraduate medical education;

(6) assist countries to access medical educational resources;

(7) provide a regional forum for exchange of information and experiences (including faculty exchange programmes and collaborative research) in undergraduate medical education.

1. Introduction

This meeting focuses on how the medical education will equip its undergraduate with sufficient competencies to address the current health challenges. A common observation to the medical curriculum and the teaching–learning process is that it is more focused on curative and rehabilitative health care and the undergraduates are mostly interested in clinical rather than public health sciences.

In addition, the SEA Region countries are confronted with numerous health challenges such as those related to health systems, sociodemographic changes, changing disease patterns and changing vulnerabilities and risks. To cope with these challenges, health systems must be strengthened with a good balance between community-based health care that focuses on health promotion and disease prevention and institution-based health care with a primary focus on curative and rehabilitative services. In this regard, medical doctor who usually considered as leader of a health-care team has a crucial role to play in addressing these challenges. Therefore, appropriate competency in public health is needed by medical doctors.

There were many regional events in addressing these issues, such as the Regional Meeting on "Teaching public health in medical schools" in 2009, the regional consultation on "Strengthening the role of family/community physician in PHC" in 2011, and a meeting of experts on "Doctor–patient relationship" in 2011. Actions are being taken to strengthen public health teaching in medical schools, particularly in the department of public health/social medicine/community health and to link it with other clinical departments.

Despite all the efforts, much remains to be done to equip medical doctors to effectively address the health challenges. Medical education is an expensive undertaking. The opportunity cost can be quite high if compared with education of the other categories of health workforce, in particular comparison with the other community-based health workers (CBHW) and community health volunteers. Hence, it is natural that we expect to obtain

the highest benefit from the medical graduates for promoting the health of the population and not only taking care of sick people.

There were altogether 72 participants in the meeting, i.e. 43 country participants from all SEA Region countries, 7 special invitees, 11 observers, and 11 WHO Secretariat.

2. Objectives

2.1 General objectives

This meeting aimed at strengthening undergraduate medical education to equip its graduates to effectively address the health challenges in the SEA Region.

2.2 Specific objectives

Specific objectives of the meeting were the following:

- to critically review and learn how undergraduate medical education in countries of the WHO SEA Region addresses current health challenges;
- to agree on strategic framework, strategic directions and actions for improving the quality and relevance of undergraduate medical education to address the health challenges;
- to propose recommendations for implementation of the identified strategic directions and actions for improving the quality and relevance of undergraduate medical education to address the health challenges.

3. Inaugural session

3.1 Welcome address by Dr Sophon Napathorn

On behalf of the local organizing institute Dr Sophon Napathorn, Dean Faculty of Medicine, Chulalongkorn University, welcomed all the

participants, and said he was honoured that WHO had invited the Faculty of Medicine, Chulalongkorn University to co-host this important meeting. He mentioned that the medical education and medical professionals play a crucial role in the health-care approach and he put great emphasis on this regional effort towards strengthening medical education to respond to the current health challenges.

3.2 Remark by Dr Arvudh Srisukri

In his speech, Dr Arvudh Srisukri, Secretary General, Consortium of Thai Medical Schools, said that a medical doctor's role is not just to save a live but also to be involved in health promotion and prevention. Another issue he emphasized was to integrate body and mind systems, not just treating physical conditions. A responsibility of medical educators is to nurture future medical doctors for the huge tasks ahead. Medical graduates need to have core competencies to cope with current health challenges.

The Consortium of Thai Medical Schools calls for the genuine value of medical sciences and education that is "focusing on managing the care of people well, not only aimed at diseases".

He concluded by expecting that the regional meeting would shed more light on the current status in the Region, and would strive to map individual and collective strategic efforts.

3.3 Address by the Regional Director WHO South-East Asia

The Regional Director mentioned that despite an improvement of life expectancy at birth due to the significant progress in health development, there is a multitude of health-related problems, and new health challenges prevail globally. The Earth is becoming warmer due to climate change, which has a wide range of impacts on human health. He said that epidemiologic and demographic transitions that bring about rapid increase in elderly population, often affected by chronic noncommunicable diseases (NCDs), need long-term or even life-long care and treatment. With inadequate promotive and preventive care, people often get sick unnecessarily and die prematurely. This situation contributes to the increasing or even skyrocketing of medical care cost. This is a critical

challenge to the governments, as far as the financing of health services is concerned.

The Regional Director emphasized that facing the current health challenges needs more robust health systems with a good balance between community-based health care that focuses primarily on health promotion and disease prevention and institution-based health care that is designed mainly for curative and rehabilitation services. These two important functions of health systems must work in complete complementarity to each other, in order to ensure optimal cost-efficiency and cost–effectiveness of health care and services at all levels.

The Regional Director also mentioned that medical graduates are generally equipped to handle mainly medical interventions in institutions and to provide effective referral services, especially at secondary and tertiary levels. However, the medical graduates also have an important role to improve the community-based health care by strengthening public health work that is carried out at community level by multidisciplinary and multisectoral teams. The medical institutions have an indispensable role to play to equip the undergraduate medical students with the required knowledge, attitudes, skills, and competencies for both medical and public health work needed wherever they work.

The Regional Director further emphasized that we should look at health in terms of well-being and quality of life and in the context of overall national development. Health development should be viewed and geared towards building human potential and human capital that can effectively contribute to national wealth and prosperity.

3.4 Inaugural address by Dr Pirom Kamol-ratanakul

In his speech, Dr Pirom Kamol-ratanakul, President, Chulalongkorn University, mentioned that globalization has turned the world into a global village that has had a great impact on population health; as the world becomes borderless, diseases and public health issues impacting national health systems can emerge anywhere. Social, political, and economic conditions around the world today have changed dramatically. Health systems, sociodemographics, climate changes, including vulnerabilities and

risks, have created a tremendous impact on the day-to-day practice of health-care professionals.

He said that the challenge is to find ways to equip medical students with enough knowledge and skill to handle this rapid accumulation of drastic changes and tremendous impacts. The educational system should adapt itself to better accommodate these changes.

He mentioned that in Thailand medical education has been taken seriously and continuously. The Thai Medical Council and the Office of Higher Education Commission are the national authority of overall policy on medical education. The national policy is formulated based on the findings and recommendations of the National Medical Education Conference as a platform for policy dialogue, which is organized every seven years by the Consortium of the Thai Medical Schools. He also said that the next National Conference will be held in 2016 and that he was keen to learn more from this regional meeting.

He emphasized on working together to support the development of better medical education towards the health care of the population.

4. Medical education for meeting the current and future health challenges

Dr Pisake Lumbiganon, Dean, Faculty of Medicine, Khon Kaen University, presented the history of medical education, the challenges of medical education, the need of transformation of education in the 21st century, and the activity of the Asia-Pacific Network for Health Professional Education Reform.

He described that the 1910 Flexnor Report led to the integration of modern science into the curricula at university-based medical schools, the reforms equipped health professionals with the knowledge that contributed to the doubling of lifespan during the 20th century. However, by the beginning of the 21st century, there are several changes affecting health-care services worldwide. Inequities in terms of health care access and quality underscore failure to share health advances both domestically and internationally. Emerging or re-emerging infectious diseases, environmental

and behavioural risks, associated with various socioeconomic factors, especially increasing ageing population, threaten health security of all. Health-care cost also significantly increases over the years. Universal health coverage has been recommended by the WHO to be the most important strategy for achieving equity in health. He also mentioned that recently there has been rapidly progressive advancement in biomedical knowledge as well as information technology worldwide. This progression will definitely be even much faster in the future. These will very much affect both the health care and health-care delivery system worldwide.

He emphasized that, today, the health professional education has not been well adapted to address these challenges; largely, because of the outdated, static and fragmented, content-oriented curricula, which produce graduates with insufficient knowledge, skills, and competence responsive to the present and future population and communities' health needs. The problems also consists of various factors: poor teamwork across different professions and inadequate collaboration among health professionals, narrow contextual understanding, episodic encounters with patient illnesses rather than continuous health care, emphasizing treatment rather than disease prevention, lack of understanding in social determinants of health, and imbalance between health workforce and health needs in both qualitative and quantitative aspects. There is also inadequate collaboration and communication between health professional institutes and health delivery systems in terms of competencies of various health professionals.

He stated that there is also increasing consensus globally that the education of health professionals is failing to keep pace with the scientific, social, and economic changes transforming the health-care environment. Since the initiation of the joint work on health professional education by WHO and PEPFAR (the US President's Emergency Plan For AIDS Relief) in the autumn of 2009, and in the Second Global Forum on HRH at the Prince Mahidol Award Conference in January 2011, there are signs that a new movement to tackle the current inadequacies of health professional education is gathering pace across a range of different constituencies.

He said that the Commission on Education of Health Professionals for the 21st Century was established and chaired by Professor Lincoln Chen (President of China Medical Board) and Professor Julio Frenk (Dean of Harvard School of Public Health). The committees launched a report on

"Education of health professionals for the 21st century: a global independent Commission" on 4 December 2010. Since then there has been a solid movement in health education reform in many regions: Africa, Americas, and the Asia. A network of five countries, including Bangladesh, China, India, Thailand, and Viet Nam, has volunteered to conduct situation analyses to assess current health-care profile of the countries, national policy for health professionals, and health professional curricula. Current medical, nursing, and public health curricula, as well as learning resources will be evaluated. A survey of the graduates will also be conducted to assess their competencies. Success examples and deficiencies will be identified. Appropriate and practical health professional education interventions with respect to the domestic socioeconomic and cultural status, as well as international health service systems, will be developed, implemented, and evaluated. Similar activities are also occurring in other regions. Gathering and sharing this information and experience among global, regional, and national health leaders would provide further momentum for the global HRH education reform.

5. The role of medical education in addressing the current health challenges

Dr Quazi Monirul Islam, Director of Health Systems Department, WHO-SEARO, mentioned that there is a changing pattern of medical care. He referred to the past 150 years which has been a golden age for doctors. Since the mid-19th century, the medical associations and medical schools helped to separate doctors from quacks, followed by improvements in licensing and regulations for prescriptions, better technology for diagnosis and care, and rising of specializations.

He said that during the 21st century with soaring demand for health care, the doctors' demand will increase accordingly. The change was triggered by the current and evolving health challenges, such as increasing ageing populations, while at the same time, we are also facing a large number of growing youth populations, the growing crisis of NCDs, the soaring cost and need for cost containment, the need for a public health approach amid the cost of medical care, the use of high technology in communications and medical care, and a better understanding of the

changing environment. He mentioned that these health challenges are complex and require multidisciplinary approach and multisectoral collaboration to address them. Thus, the question is can we solve the 21st century's problems with the 20th-century solution? Do we need alternative approaches? The expectation is that undergraduate medical education will be able to produce medical graduates with broader competencies in meeting the changing health situation and also to be able to lead a health-care team either in public health or medical care towards strengthening the health systems based on primary health care.

He emphasized that most of the current health challenges are in the areas of public health, hence the medical graduates should be equipped with appropriate competencies in public health. However, the interest of medical students in public health is not adequate. Many efforts had been launched to address this issue, such as the Reorientation of Medical Education (ROME), the Regional Meeting on "Teaching of public health in medical schools" in 2009, the regional consultation on "Strengthening the role of family/community physician in PHC", 2011, and the meeting of experts on "doctor–patient relationship" in 2011. However, a recent rapid assessment in six countries of the SEA Region on the current situation of the medical education in addressing the health challenges revealed that the medical education in the Member countries was at different stages of development and there were variations within and between countries on how the health challenges were introduced, taught, and learnt.

He mentioned that, based on this assessment, the strategic framework for strengthening undergraduate medical education in addressing the current health challenges has been developed. The strategic framework is based on a systems approach (input-process-output-outcome). The inputs are the current national and local health and education policies and challenges in health and medical education. The process is the strategic directions – as the crux of this strategic framework – focusing on a better collaborative action between the medical education systems and the health systems in finding solutions to the problems triggered by the health challenges. The output is an improved medical education in producing medical graduates with proper clinical competencies as well as public health and other broader competencies in meeting the health systems' needs, in terms of the quantity, equity, quality, and relevance of the medical graduates. Finally, the outcome is the medical school's contribution

to improving the performance of the health systems' performance and the health of the population. Detail of the strategic framework will be published separately.

6. Health challenges in the WHO South-East Asia Region

In his presentation, Dr Kumara Rai, Adviser to the Regional Director WHO-SEARO, underscored the challenge of health inequity which is the overriding challenge globally. There is widening health inequity within and across countries. Moreover, health systems (i.e. all organizations, people, and actions whose primary intent is to maintain, promote, or improve health) in most countries in the WHO SEA Region are weak and thus largely have poor performance. There is also need to address social determinants of health to ensure healthy public policy and/or health in all policies in order to promote health and well-being of the population.

The countries in the WHO SEA Region are confronted with numerous health challenges brought about by various factors and changing environments. These challenges are grouped into four categories: (1) challenges related to the health systems; (2) challenges related to sociodemographic changes; (3) challenges related to changing disease patterns; and (4) challenges related to changing vulnerabilities and risks. These are not mutually exclusive categories since they are intricately interlinked with some overlaps.

He described challenges related to the health systems as per the six building blocks of the health system (i.e. governance, health workforce, health products and medical devices, health financing, health information system, and service delivery). For service delivery, accessibility to health service is one of the major challenges. Barriers to access (geographical–economical and sociocultural) lead to inequitable access that contributes to inequity in health. Moreover, health service is largely non-responsive to non-health aspects (e.g. dignity, confidentiality, and prompt attention). Also quality of care, such as systems for assuring quality and patient safety, remains a challenge.

For health workforce challenges, most countries are confronted with problems of shortage, maldistribution, and inappropriate skill mix of health workers. The voluntary implementation of the WHO Global Code of Practice for International Recruitment of Health Personnel to address a problem of international migration of health workers has yet to bear fruit in the Region. Furthermore, there is a bias towards a clinical workforce with less focus on CBHW and community health volunteers who are responsible for public health interventions.

With regard to health information systems, most countries have some sort of health information system in place under various organizations/departments and are largely fragmented and/or uncoordinated. Countries need to strive towards an integrated health information system. Moreover, there is a challenge to obtain disaggregated data to measure equity, such as age, sex, ethnicity, and education. Countries also need to strengthen their surveillance systems to prepare for and respond to outbreaks and/or unusual events.

Challenges related to health products and medical devices include access to medicines, e.g. those dealing with price, intellectual property rights, agreement on Trade-related Aspects of Intellectual Property Rights; rational use of medicine and use of generic medicine; resistance to medicines which leads to antimicrobial resistance; over-sophistication of medical devices resulting in technical inefficiency (not doing the things right); and limited capacity in most countries for carrying out health technology assessment.

Health financing challenges that most countries in the SEA Region are confronted with include low percentage of gross domestic product and per-capita health expenditure; high out-of pocket expenditure (direct payment) which leads to catastrophic expenditure and results in increasing the numbers of the poor; and high share of unregulated private providers. There is also a problem of allocative inefficiency or “not doing the right things” of which allocation is biased towards medical care instead of public health services. Government expenditure should be focused on provision of public goods in which public health services are also included. While challenges in governance are related to government efforts for decentralization, oversight of private health-care providers and compliance

to international/global health law such as the Framework Convention for Tobacco Control and International Health Regulation (2005).

He further elaborated on challenges related to sociodemographic changes. In addition to health equity, most countries in the Region are confronted with globalization and rapid and unplanned urbanization. Although urbanization is important for economic growth, unplanned urbanization poses a great challenge. In the SEA Region more than 1.6 billion people (32% of the population) live in urban areas and a majority of them (25% of the population) are poor. Urban poor normally do not have access to health-care services despite good availability of health facilities. Special attention is, therefore, needed to effectively address health needs of the urban poor.

For challenges related to changing disease patterns, most countries are confronted with a growing crisis of NCD, which accounted for 55% of all deaths in the SEA Region. Major non-communicable diseases that countries are grappling with are diabetes, hypertension, cancer, chronic obstructive pulmonary disease, and mental and neurological disorders. These diseases are primarily preventable and special attention is needed to address associated risk factors and social determinants of health. There is a serious socioeconomic impact of non-communicable diseases as they will impoverish the population and impede development efforts of the country. Recently, there has been a UN Political Declaration on non-communicable diseases pledging global commitment to tackle these diseases.

Furthermore, challenges related to changing vulnerability and risks also require special attention. Countries of the SEA Region are highly vulnerable to natural disasters. The magnitude of disasters and their effects have considerable impact on the morbidity and mortality of the Region. The SEA Region accounts for 46% of global deaths due to disaster during 2001–2010. Climate change/global warming also brings numerous challenges such as flood and drought, rise of sea level, water- and vector-borne diseases, heat waves, cyclones, and food security. All these have negative impact/consequences on the health and well-being of the population.

Dr Kumara Rai concluded that to effectively address these health challenges, countries in the SEA Region need to strengthen their health

system based on primary health care with a good balance between public health services (health promotion and disease prevention) and medical care (curative and rehabilitative services). Countries should focus their efforts on primary health care with good referral backup. They also need to provide quality and responsive/people-centred care. Countries need to ensure equitable access to health services according to needs regardless of social attributes. Health services should be affordable with no catastrophic expenditure. All countries need to have strong health systems to effectively address the health challenges for promoting, maintaining, and protecting health of their populations.

7. Overview of undergraduate medical education in the SEA Region in addressing the current health challenges

Dr Budihardja Singgih, Regional Adviser for Human Resources for Health, WHO-SEARO, presented the subject on the basis of the findings of a rapid assessment on undergraduate medical education programme carried out in nine countries of the Region during April–May 2012. This assessment revealed that medical education in the countries of the SEA Region is at different stages of development. Nine[1] out of the 11 countries of the Region have the undergraduate medical education programme in the countries. One country has just started its medical school in 2005 while several other countries have been offering their medical education for a long time and are quite well developed.

He said that majority of the medical schools in most countries are under the jurisdiction of the government. However, private medical schools are increasing rapidly in some countries. Special efforts are, therefore, needed to ensure the quality and relevance of medical education under these private medical schools as well as the public medical schools. The salient findings of the rapid assessment based on self-assessment reports from six countries[2] are provided in the following:

[1] Bangladesh, Democratic People's Republic of Korea, India, Indonesia, Myanmar, Nepal, Sri Lanka, Thailand, and Timor-Leste.

[2] Bangladesh, Myanmar, Nepal, Sri Lanka, Thailand, and Timor-Leste.

- There are wide variations within and between countries with regard to the extent of those identified health challenges that were incorporated in the undergraduate medical education, and how these were introduced, taught, and learnt. There is no uniform practice in this regard in any country of the Region.
- With few exceptions, these health challenges are largely inadequately addressed in the undergraduate medical education in most countries. There is also inadequate community exposure in the teaching–learning process. Some countries indicated that large number of students and the shortage of faculty members hinder their efforts to enhance community exposure.
- Some of the identified health challenges, such as the increasing crisis of non-communicable diseases, are well covered in most schools. While several other challenges, such as ageing, globalization, and urbanization, are inadequately or not addressed in most schools.
- For those medical schools with a conventional medical curriculum, and discipline-oriented curriculum, these challenges are mainly covered in preventive and social medicine towards the end of their education. Only in a few countries, with integrated medical curricula and with no department boundaries, these health challenges are apparently incorporated throughout their curriculum, starting from year 1 to the final year.
- With few exceptions, medical schools in most countries follow a conventional way of teaching–learning with limited innovative approaches for effective learning. There is inadequate student-centred learning, lack of self-directed learning, and limited opportunity for project-based/research learning.
- Although problem-based learning is practised in varying degrees in several schools, its wide application has yet to gain momentum.

He mentioned that these countries will need to further undertake in-depth assessment of the current situation of undergraduate medical education and its response to their priority health challenges, to get a comprehensive picture of the situation in the countries. This will help the

countries to identify areas requiring special attention, as well as challenges and opportunities for concerted efforts in further strengthening the undergraduate medical education.

8. Health promoting hospital initiative

In her presentation, Dr Suvajee Good, Regional Adviser on Health Promotion and Education, mentioned that referring to the WHO Ottawa-Charter (1986) that placed the hospital as one of the healthy settings, WHO initiated the Health Promoting Hospital (HPH)with an aim to reorient health-care institutions, in order to integrate health promotion and education, disease prevention, and rehabilitation services in curative care.

She mentioned that the characteristics of HPH are a management policy for HPH, to assess the needs of patients for health promotion, health information and education for improving health conditions, healthy workplaces, and collaboration with other institutions and sectors. As a setting-based approach HPH involves changes in (1) structure: human resources (capacity), physical and social environment; (2) culture and decision: leadership and vision, the core value and priority, stakeholder empowerment, and participation in decision-making; and (3) processes: redesign of care delivery processes, of working procedures, in collaboration with other providers.

She said that some countries have initiated the HPH, such as:

- Thailand – initiated HPH since 1998 with two essential elements: HPH policy and Health Promotion planning and management. There is a master for health promotion from 1999 to 2009. About 920 hospitals(70% of total hospitals) of different categories fulfilled the HPH criteria;
- Indonesia – initiated similar initiative since 2003 with focus on policy, advocacy, integrated services, enabling environment, empowerment, and behaviour change. The integration of HPH elements in health service delivery was the key to success;
- Maldives – also initiated similar HPH initiatives called *Lhaviyani-Naifaru* since 2005 with positive outcomes. The key success

factors include policies and strategic plans, commitment from medical profession and health staffs, hospital environment, whole-hospital approach to promote health, community support, and positive approach to partnership across sectors.

She mentioned that, in conclusion, the HPH needs the whole organization's commitment to assure provision of health promotion in a systematic and consistent way to bring positive change, and to achieve better quality care and health outcome.

9. Initiatives for strengthening medical education to address the current health challenges

This section shows some initiatives that have been taken to strengthen medical education in addressing the current health challenges. The ideas and concepts of the initiatives enriched the material of the group discussions and used for revising the strategic framework for strengthening undergraduate medical education in addressing the current health challenges.

9.1 Global Consensus on Social Accountability of Medical Schools *(Professor Khunying Kobchitt Limpaphayom, Former President of South-East Asian Regional Association for Medical Education, SEARAME)*

In her presentation, Professor Kunying Kobchitt Limpaphayom highlighted that the WHO has promoted social accountability of medical school since 1995, where they have an obligation to direct their education, research, and service activities towards addressing the priority health concerns of the community, region, and/or nation they serve.

She mentioned that the Global Consensus for Social Accountability (GCSA) comprising 130 organizations and individuals around the world have developed a consensus on medical education standards and methods for assessment, evaluation, accreditation, and quality improvement. In response to the current health challenges, the GCSA considers social accountability as an integral part of ethics, responsibility/responsiveness,

academic freedom, and mark of excellence. A socially accountable medical school should, therefore, respond to current and future health needs and challenges in society; reorient their education, research and service priorities accordingly; strengthen governance and partnerships with other stakeholders; and use evaluation and accreditation to assess performance and impact.

She emphasized that social accountability of medical education means having the health needs of society at the core of their business. The development of socially responsible medical education will bring the relevance of medicine to society, address equity and equality, and make the programme cost-beneficial to society.

9.2 India: community-based medical education innovations in the undergraduate medical education at Christian Medical College, Vellore *(Dr Anna B Pulimood, Vice Principal, Christian Medical College, Vellore)*

Dr Anna B Pulimood highlighted the Christian Medical College mission and policies that aim to ensure the serving of well-being to the community. She said that among the multiple approaches developed to fulfil the mission, the community orientation programme is implemented, since the first year, during which students live in the community for three weeks and conduct household surveys with other health team members. Then, in the second year, they join the community health programme part one, for two weeks, during which students get more orientation about primary health-care services and conduct a more extensive cross-sectional morbidity and mortality survey. And in the third year, a community health programme part two is implemented in which students build on the skills acquired during the first two postings and learn to make a community diagnosis using a survey on existing data to identify their health problems. After that, they learn to design and implement a plan related to the problems, and further evaluate the achievement of the programme. She also said that during their internship period, students spend two months in the community medicine department, working in a secondary-level hospital.

She stated that the outcome is an increasing rate of medical graduates working in rural areas up to 65%. Alumni who work in rural areas for a long

time will be awarded. One alumnus is given one of the most prestigious awards of the college – the Paul Harrison award – for exemplary service in rural areas.

9.3 Nepal: Nepal initiatives to strengthen medical education to address the current health challenges *(Professor Dr Jagdish Prasad Agrawal, Executive Director, National Centre for Health Professions Education, Institute of Medicine, Kathmandu)*

He started his presentation with the history of medical education in Nepal and mentioned that in 1972 the first medical school was developed and had the mandate to produce all categories of HRH. With the onset of democracy in 1990, BP Koirala Institute of Health Sciences (BPKIHS) was established in 1993 with the philosophy of community-based education and service to the people of that region.

He mentioned that in the beginning BPKIHS was in a dilemma, whether to take the path of least resistance, train students on traditional curricula in conventional settings, turning out doctors and other health workers with conventional skills and attitude often oblivious of the health needs of the country, or take the opportunity to usher in a new wave of reform in the education of health personnel in which graduates competent in population, as well as individual health functions, as socially accountable leaders in the community bringing in measurable improvement in the health status of the people in pursuit of an equitable and inclusive health system.

He said that Nepal has a formidable challenge because of difficult geography, terrible poverty, poor infrastructure and insufficient and inappropriately trained human resources for health in the health-care system of that region. Therefore, BPKIHS with understanding with the Government of Nepal adopted the "Teaching District" concept whereby their faculties and students had access to the community hospitals – such as district hospitals, primary health centres, and health posts for teaching, learning, and research – and community had the benefit of having quality health service by the trained faculties from BPKIHS. Students had opportunities for problem solving and leadership development and teachers had excellent exposure of health system. He emphasized that BPKIHS

initiatives proved that 'Teaching district' is therefore both feasible and desirable and is an effective instrument for health development.

In second half of his presentation, Dr Agrawal talked about the Patan Academy of Health Sciences (PAHS) that was started in 2011. PAHS mission is dedicated to sustained improvement of the health of the people in Nepal, especially those who are poor and living in rural areas, through innovation, equity, excellence, and love in education, service, and research.

9.4 Sri Lanka: learning to meet health challenges through patient-, family-, and community-centred approaches

(Professor Rohini Seneviratne, Professor and Head, Department of Community Medicine, Colombo Medical College, Colombo)

She presented the medical curriculum of Faculty of Medicine, University of Colombo, which was introduced in 1995 after five years of planning. The new, hybrid, partially integrated curriculum, is organized in five parallel "streams": a basic sciences stream, an applied sciences stream, a behavioural sciences stream, a community stream, and a clinical sciences stream.

She said that public health teaching through community stream includes: concepts and theories, basic statistics, and epidemiology. Learning in community setting for the student has particularly focus on environmental health and also to develop skills to meet health challenges through community and family attachment and research.

She cited examples of some specific areas for community activities by the medical students such as community education programmes on nutrition, disease prevention, and promotion; promotion of mental health in preschool children; and to learn strategic planning to work in community setting. Medical students also learn how to build rapport with the community, how to involve community in health promotion activities, and how to work with related sectors for the health of individual and community.

9.5 Indonesia: establishing a new accreditation system in health education system in facing current health challenges

(Professor Irawan Yusuf, Dean, Faculty of Medicine, Hasanuddin University and Chairman of Indonesia Medical Colloquium, Makassar, Sulawesi Selatan)

Professor Irawan Yusuf mentioned that there are fundamental changes that health education institutions in Indonesia have to face. These changes are caused by the increased need of high-quality health services among people regardless their socioeconomic status, the powerful influence of globalization towards health services, the rapid advancement of science and technology, and the increased numbers of health education and health-related study programmes in the past 10 years.

He said that to anticipate the above complex circumstances and challenges, Indonesia needs to evaluate and revitalize its health professions education and, therefore, a new accreditation of health education is needed to address the health challenges. An accreditation system is a tool to assess whether an institution is capable to reach the standard or not. He mentioned that the basic principles of the new accreditation systems are continuous quality improvement, quality cascade, conceptualization, production and usability, and achieve trust and credibility from all relevant stakeholders.

He stated that currently, the accreditation programme is organized by National Accreditation Board for Higher Education. There are more than 3000 universities and approximately 17 000 study programmes that should be accredited. The instruments that employed are generic in nature or “one size fits all” for all study programme that is not suitable to accommodate uniqueness of each profession. The current accreditation processes only assess academic programme and not assess professional programme and specialist programmes.

He emphasized that legal foundation is needed to guarantee the autonomy and independence of the accreditation system. Law No. 20 (2003) stated that programme accreditation should be organized by the Government and/or independent body as a form of public accountability. The roles of independent accreditation institution include verifying whether

a study programme has achieved required standards or not; design, create and implement policies, standards, instruments and procedure related to accreditation processes; develop and enhance the quality of a study programme by giving feedbacks; and to recruit and train assessors and evaluators.

9.6 Thailand: medical competency assessment to ensure the quality of education and meet the health challenges

(Dr Boonmee Sathapatayavong, Lecturer, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok)

On behalf of the Centre of Medical Assessment and Accreditation, Medical Council of Thailand, and the Consortium of Thai Medical Schools, Dr Boonmee Sathapatayavong stated in her presentation that assessment has great influence on how students learn. Students will learn and practice on what they are going to be assessed. Thus, the assessment needs to be used wisely to achieve the goals of medical education for producing competent medical graduates. The Medical Council of Thailand has issued and updated the "Standards of knowledge and competencies of Thai medical graduates" regularly for all medical schools to follow. The Council has just revised these standards in 2012 and these will be used in the assessment for medical licensure. Most of the current health challenges are included in the revised standards.

She said that with many new medical schools coming up there were some concerns on the quality of medical graduates. Consequently, a system for quality assurance of medical schools was established in 1999, and since then all medical schools have been regularly audited and accredited.

She further elaborated that the Centre of Medical Assessment and Accreditation was founded in 2004 by the Medical Council of Thailand. The main role is to conduct the national licensing examination for Thai medical students and foreign medical graduates, both knowledge and competencies as per the standards set by the medical council. They would be assessed through both written and practical examinations that include multiple-choice questions (MCQ), objective structured clinical examination (OSCE), modified essay questions (MEQ), and long-case examinations.

For practical examination, large-scale OSCE is conducted by the Centre of Medical Assessment and Accreditation three times per year, for approximately 800 examinees each time. MEQ and long-case examination are conducted by each medical school, audited by the centre, with satisfactory results. Most schools include the long-case examination as summative evaluation in their curriculum. For OSCE, five competencies are assessed: history taking, physical examination, procedural skills, communication skills, and interpretation skills. Feedback is provided to both medical schools and individual examinees.

9.7 Thailand: exploring factors affecting the decision of newly graduated physicians in choosing potential practice areas

In his presentation, Mr Jate Ratanachina, a medical student under the Health Systems and Services Programme, Faculty of Medicine, Chulalongkorn University, described that although Thailand's universal coverage scheme has demonstrated successful expansion of coverage and access to health care for the population, it has failed to help alleviate problems of the shortage and inequitable distribution of doctors in the country. There are increasing numbers of medical doctors who have resigned from rural public hospitals. The number has increased from 61 physicians in 1999 to 352 in 2005, and majority of them were newly graduated physicians.

Several strategies have been employed to increase distribution of physician to rural areas. For example, since 1967, newly graduated physicians have to sign a three-year compulsory public service contract. Breach of contract would result in approximately US$ 13000 or THB 400 000 fine, which is now considered very cheap for six-year medical education. There is also a special monthly allowance of US$ 325 650 for physicians working in the rural areas. Nevertheless, at least one third of newly graduated physicians still resign from the rural areas.

He stated that this study was therefore conducted to empirically explore factors influencing the decision of newly graduated physicians in choosing future practice areas. This research comprised three steps: questionnaire development, data collection, and exploratory factor analysis.

He stated that based on his study he found that there are five strongly associated factors influencing newly graduated physicians to choose their future practice areas, and each factor contains overall significant issues as the following:

- working condition – daily workload, out-of-hours workload, and hospital size;
- lifestyle quality – environment, food, entertainment, and cost of living;
- essential amenities – facility in allocated area and telecommunication facilities;
- professional development – learning opportunity, staff reputation, and familiarity with staff;
- adjustment concerns – distance from current residence, parent's preference, and familiarity with the area.

He concluded that these five factors that can influence the decision of newly graduated physicians in choosing practice areas are useful for the development of comprehensive interventions for alleviating inequitable distribution of physician in developing countries, especially for newly graduated physicians.

10. Group work

10.1 Group work session I: strategic framework for strengthening undergraduate medical education to address the current health challenges

For Group work session I, the participants were divided into three groups. The members of all the three groups were requested to critically review the proposed strategic framework for strengthening undergraduate medical education to address the current health challenges. They were specifically requested to discuss whether the proposed strategic framework captures key factors that need to be considered in our effort to strengthen the undergraduate medical education in addressing the health challenges.

The outcomes of the three groups' deliberations were presented in the plenary session. Participants of the meeting were then further deliberated on the presentations in a plenary discussion.

The meeting viewed that for the inputs of the proposed strategic framework, in addition to challenges in health and in medical education, countries would also need to consider national and local health and education policies that impacted on medical education. For the proposed processes, the meeting agreed with the three proposed strategic directions: (1) aligning medical education with needs of the health systems; (2) strengthening curriculum and teaching–learning process; and (3) promoting an enabling environment; however, two strategic directions should also be added: (1) strengthening quality assurance in medical education; and (2) emphasizing social accountability. For the proposed output, we should also mention explicitly of "improved medical education" in addition to "medical graduate with broader competencies meeting the health system needs". Furthermore, as medical student is a major stakeholder in medical education, the meeting recommended adding "medical students' association" in the context of the proposed framework.

10.2 Group work session II: strategic directions and actions to be carried out at national and institutional levels for application of the agreed strategic framework for strengthening undergraduate medical education to address the current health challenges

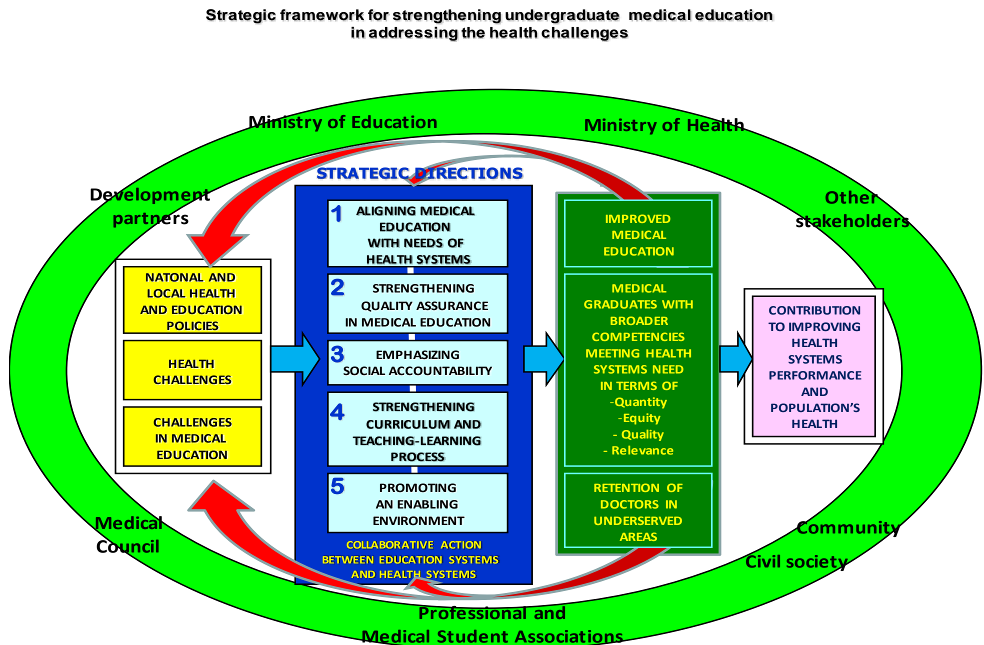
The participants were requested to take into account the outcomes of Group work session I and deliberate further on agreed strategic actions included in the strategic framework for strengthening undergraduate medical education to address the current health challenges. The members of Group A were requested to discuss actions for aligning medical education with needs of health systems and for strengthening quality assurance in medical education, while Group B was requested to discuss actions for strengthening curriculum and teaching–learning process. The topic assigned to Group C was actions for promoting enabling environment and for emphasizing social accountability. The participants were also requested to develop practical and feasible recommendations for countries and WHO.

The outcomes of the three groups' deliberations were presented in the plenary session and the presentations were followed by a plenary discussion. The final recommended strategic framework for strengthening medical education in addressing the health challenges, taking into account the comments and suggestions made in the plenary discussion is provided in the following section.

Recommended strategic framework for strengthening undergraduate medical education in addressing the health challenges

The strategic framework in Figure 1 is based on a systems approach that is input, process, output, and outcome.

Figure 1. *Strategic framework for strengthening undergraduate medical education in addressing the health challenges*



Legend:

- Yellow boxes: inputs
- Light blue boxes: processes
- Green boxes: outputs
- Pink box: outcome
- Light green circle: context – political and technical environment.

The *inputs* are the national and local health and education policies and challenges in health and medical. The national and local health and education policies will give directions on how the medical education should be provided. While health challenges will influence the practice of medical professionals and how they should be educated, challenges in medical education will help determining areas requiring special attention.

The *process* is the strategic directions with better collaborative action between the medical education systems and the health systems as the crux of this strategic framework. It consists of five key strategic directions that are related to each other. Suggested actions under each strategic direction are provided in the following:

Strategic direction 1 – aligning medical education with needs of health systems:

- establish forum for joint planning between ministries of education and health, and other key stake holders such as medical council, professional associations and civil society;
- redefine roles and competencies of medical graduates in light of current health challenges;
- establish mechanisms for periodic review for regularly updating and innovating curricula to make medical education continuing relevant to the evolving needs of the health systems;
- strengthen evidence-based policy development in medical education.

Strategic direction 2 – strengthening quality assurance in medical education:

- establish/strengthen regulatory systems including accreditation at the national level to ensure quality of medical education;
- establish/strengthen quality assurance system at the institutional level.

Strategic direction 3 – emphasizing social accountability:

- create responsive and responsible medical school's governance;

- foster deployment of medical graduates in the rural, remote, and underserved areas.

Strategic direction 4 – strengthening curriculum and teaching–learning process:

- develop or strengthen competency-based curricula that are responsive to changing needs of the health systems;
- promote interprofessional education that breaks down professional silos while enhancing collaborative and non-hierarchical relationships in effective teams;
- apply or strengthen problem-based learning in developing competencies related to the health challenges.

Strategic direction 5 – promoting an enabling environment:

- strengthen faculty development programmes to build high-quality pedagogical skills for learner-centred education and to enhance interest towards public health;
- provide appropriate and adequate infrastructure such as library services, appropriate information and communication technology and conducive physical environment;
- ensure mutual benefit for students and community at field practice area;
- promote national and regional networking of medical schools.

The *output* is an improved medical education. This will produce medical graduates with clinical and public health competencies, as well as other broader competencies in meeting the health systems needs, in terms of the quantity, equity, quality, and relevance of the medical graduates. Moreover, by proper planning, production and deployment of newly graduated medical doctors, the underserved areas will be sufficiently staffed with competent and motivated medical doctors.

The problems and challenges, as well as achievements in implementing the strategic directions and attaining the output become a feedback to the process and input, and will be taken into account periodically in the implementation of the strategic directions.

When the aforementioned outputs are attained, this will eventually lead to enhance medical school's "contribution to improving health systems' performance and population's health" – the "outcome" of this strategic framework.

However, to achieve the desired outcome of the health systems, contributions from other categories of health workforce as well as health-related professionals from other disciplines are also important.

Moreover, strengthening undergraduate medical education will also need further collaboration with other key stakeholders such as ministries of education and health and other relevant ministries, development partners, medical council, professional and medical associations, civil society, community, and other key stakeholders.

Detailed information of this strategic framework is being published separately for wide dissemination to promote its application for improving medical education in countries of the Region.

11. Recommendations

Taking into account the outcome of deliberations at the meeting, participants made the following recommendations:

Recommendations for countries

Countries should carry out the following actions in order to strengthen the undergraduate medical education to equip graduates to effectively address the health challenges in their respective countries:

- To establish a forum for the Ministry of Health, Ministry of Education, and other relevant ministries and stakeholders, including national medical councils, for joint planning, monitoring, and evaluation of the undergraduate medical education.
- Develop/strengthen evidence-based national policies on medical education and ensure equitable distribution of medical schools across the country.

- Establish/strengthen quality assurance mechanisms, including accreditation of medical educational institutions and programmes, which are aligned with current health needs and required competencies of medical graduates.
- Organize national/subnational forums with relevant stakeholders to agree upon and prioritize current health challenges for inclusion in the undergraduate medical curriculum.
- Review periodically (e.g. every five years) the effectiveness of existing medical education programme in addressing current health challenges of the community and health system needs, and take appropriate measures to tackle the shortfalls.
- Ensure that principles of social accountability are reflected in the teaching–learning, assessment, and accreditation processes.
- Establish a selection process for entry into medical schools to ensure an equitable representation for students from underserved areas.
- Develop/strengthen the mechanism for systematic performance evaluation of the medical school faculty.
- Establish/strengthen faculty development programmes for continuous professional development.
- Involve medical schools in public health management for defined geographical areas (e.g. the district in which the schools are located).
- Involve medical educationists in national health policy dialogue and health policy formulation.
- Promote networking among medical schools within the country and in other countries to share experiences and good practices.

Recommendations for WHO

WHO-SEARO should:

- provide support to countries, as and when needed, in implementing the foregoing recommendations;

- develop a generic competency framework for medical graduates;
- develop tools and guidelines for in-depth assessment for medical schools to address current health challenges;
- develop a generic faculty development programme for competency-based, public health and learner-oriented medical education and support faculty development programmes at national and regional levels;
- assist countries to conduct studies on the effectiveness and efficiency of different models of undergraduate medical education;
- assist countries to access medical educational resources;
- provide a regional forum for exchange of information and experiences, including faculty exchange programmes and collaborative research, in undergraduate medical education.

12. Closing session

In the closing session, all participants were invited to convey their views of the meeting. They expressed their appreciation to WHO-SEARO in organizing the regional meeting that they feel very important and timely to deal with the rapid and complex global health challenges. They also expressed their satisfaction with the opportunities given for a deep discussion of the subjects and share experiences to strengthen the medical education in addressing the current health challenges. They would share the result of the meeting with other colleagues in the country and prepare actions for the way forward.

In his closing remark, the Regional Director Dr Samlee Plianbangchang thanked all the participants for their active participations. He said that we need to increase and get more advantages of any forum, networks or platforms, as a media for exchanging information, experts, and also faculty members. We need to strengthen advocacy to the government, to have their political commitment especially in allocating the budget needed and direction of national health policy on the health systems. It is

very important because it will give guidance to what are the categories of human resources for health needed.

He mentioned that education for the medical graduates is an expensive investment, therefore the medical education should be more cost efficient and cost effective. "We need a role model for the medical students to imitate and follow", the Regional Director added.

CBHW should be competent and work in the primary health-care centre to strengthen the preventive and promotive activities. However, referral systems to medical care must be functioning. He said, "Roles of health in the human resource development is critical. We are not only dealing with efforts for survival, treat the sick, but more to quality of life. Therefore, health plays important roles to develop the human capital".

The Regional Director concluded that the countries should further follow up the recommendations. The WHO Country Office could facilitate and support in organizing the dissemination information through a national meeting or workshop. The Regional Office would provide technical support as needed.

Annex 1

Agenda

(1) Inaugural session.

(2) Medical education for meeting the current and future health challenges.

(3) The role of medical education in addressing the current health challenges.

(4) Health challenges in the WHO SEA Region.

(5) Overview of undergraduate medical education in the SEA Region in addressing the current health challenge.

(6) Health promoting hospital initiative: lessons learnt.

(7) Initiatives for strengthening medical education to address the current health challenges.

(8) Strategic framework for strengthening undergraduate medical education to address the current health challenges.

(9) Strategic directions and actions to be carried out at national and institutional levels for application of the agreed strategic framework for strengthening undergraduate medical education to address the current health challenges.

(10) Recommendations for implementation of the identified strategic directions and actions to strengthen the undergraduate medical education to address the health challenges.

(11) Closing session

Annex 2

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Annex 3

Address by Dr Samlee Plianbangchang Regional Director, WHO South-East Asia

Professor Pirom Kamol-ratanakul, President, Chulalongkorn University; Professor Sopon Napathorn, Dean, Faculty of Medicine, Chulalongkorn University; Professor Arvudh Srisukri, Secretary-General, Consortium of Thai Medical Schools; Dr Monirul Islam, Director, HSD/WHO/SEARO; Dr Maureen Birmingham, WHO Representative to Thailand; Distinguished participants, Honourable guests, Ladies and gentlemen

On behalf of WHO in the South-East Asia (SEA) Region, it is my pleasure to welcome you all to the regional meeting on "Role of Medical Education in Addressing the Current Health Challenges". I thank all participants for sparing their valuable time to attend this important meeting.

Distinguished participants

We have come a long way in health development. As a result, people today, on average, live longer and are healthier, compared with the situation some decades ago. We have been able to control many communicable diseases. And a few infectious diseases have been globally eliminated or eradicated.

We must thank advancements in medical sciences that have significantly contributed to these achievements. However, a multitude of health-related problems and issues prevail globally and "new health challenges" keep emerging.

Among others, our globe is becoming warmer due to climate change resulting in a wide range of impact on human health. Rainfall is more frequent, with devastating floods. To mention a few: there are more outbreaks of vector-borne and water-borne diseases; there is a strong possibility of mass migration due to land loss caused by rising sea level; and extreme changes in air temperature affect our cardiovascular system. Important and critical are epidemiologic and demographic transitions that bring about rapid increase in "elderly population", often affected by "chronic noncommunicable diseases", which need long-term or even life-long care and treatment. This is really a formidable challenge to our health

systems. Furthermore, there is an obvious deterioration of "peoples' health" due to "environmental pollution"; and due to unplanned or poorly planned urbanization. Moreover, because of several contributing factors, new infectious pathogens keep appearing posing significant health risks to our population. More than 30 new infectious agents have been found during the past three decades. Despite all these and other challenges, our countries are expected to attain the targets set for health-related MDGs by 2015.

Ladies and gentlemen

With inadequate promotive and preventive care, many people often get sick unnecessarily and die prematurely, particularly those among the disadvantaged groups. This situation is burdening our health systems, especially the medical care facilities. The situation that contributes to the increasing or even skyrocketing of medical care cost. This is a critical challenge to our governments, as far as the financing of health services is concerned.

To face these and other health challenges, among others, we need more robust health systems, striking a good balance between community-based health care that focuses primarily on health promotion and disease prevention and institution-based health care that is designed mainly for curative services, diagnosis, treatment, and rehabilitation. These two important functions of health systems must work in perfect tandem and in complete complementarity to each other in order to ensure optimal cost-efficiency and cost–effectiveness of health care and services at all levels.

Distinguished participants

Medical education institutions are indeed an important part of national health systems in contributing to the governments' efforts in addressing the current health challenges. Medical institutions are indispensable sources of knowledge and expertise that are needed for supporting public health and community health work. WHO is organizing this meeting as a platform for a diverse group of professionals to review the current health challenges in the SEA Region as well as to identify the relevant strengths, gaps, and opportunities of the existing role of medical education in facing these challenges. We will deliberate upon the issue on how contemporary medical education can be made more effective in the

light of the prevailing national and international health scenarios and perspectives.

Hopefully, at the end of the meeting, we would be able to come up with a consensus on a strategic framework for strengthening medical education that would support national health systems more effectively in responding to the current health issues by identifying this strategic framework, and broad actions for implementation at national and institutional levels. During this meeting, we will touch upon the entire range of undergraduate medical education, involving both clinical and public health teaching.

Colleagues

In general, medical graduates are equipped to handle mainly medical interventions in institutions and to provide effective referral services, especially at secondary and tertiary levels. At the same time, however, they should have an important role to play in direct support to community-based health care in support of public health work that is carried out at community level by multidisciplinary and multisectoral teams.

Some medical graduates may be specially interested in public health practice and they become public health practitioners, serving people right in the community. However, other medical doctors who prefer practising in various medical specialities can also contribute effectively to public health interventions by bridging the gap between care and services provided in the institutions and those provided to the population right at the community level. Furthermore, and very importantly, medical institutions have an indispensable role to play, in training, education, and supervision of community-based health workforce, and their role in contributing to monitoring and assessing quality of community-based health care and services.

To play these roles effectively, medical graduates need orientation that can lead to the development of public health instinct and public health mind. Several attempts have been made in the recent past to ensure this. One such effort was the regional meeting on "Teaching of Public Health in Medical Schools" held in Bangkok in 2009. Another important endeavour is the "Health Promoting Hospitals Initiative" whereby hospitals are being challenged to go beyond their traditional roles and boundaries.

Hospitals are being called upon to place more emphasis on social, physical, economic, and environmental determinants that support "healing" while promoting and maintaining good health of people. These determinants can ensure a holistic approach in the treatment and care of patients. Our efforts should continue to ensure the realization of comprehensive and integrated health care to all people, by breaking the wall between medical interventions and public health interventions.

Wherever they work, medical graduates should be ideally equipped with the required knowledge, attitudes, skills, and competencies for both medical and public health work. The competencies of medical graduates acquired from their professional education should match with the principle of human ecosystem and with the principle of disease epidemiology as well as with the sociocultural and economic context of the community in which they serve. Furthermore, medical graduates need to understand and be prepared to work efficiently and effectively in a multidisciplinary and multisectoral environment.

Ladies and gentlemen

All in all, we should now look at health with a high ethical and moral standard, beyond the disease domain and beyond mere survival. We should look at health in terms of well-being and quality of life and in the context of overall national development. Health development should be viewed and geared towards building human potential and human capital that can effectively contribute to national wealth and prosperity.

Ladies and gentlemen

I wish this meeting all success in developing a strategic framework to strengthen medical education programme for preparing medical graduates who will need to contribute effectively to the efforts of our governments in addressing health challenges today and in the future. Medical institutions must assert themselves accordingly in playing their roles as an important part of national health systems to ensure quality health care and services for all people, including the poor and the underprivileged.

With these words, ladies and gentlemen, I wish all participants fruitful deliberations and an enjoyable stay in the city of Bangkok.

Thank you

Annex 4

Inaugural Address by Professor Pirom Kamol-ratanakul, President of Chulalongkorn University

Regional Director of WHO South-East Asia, Dr Samlee Plianbangchang; Secretary-General of the Consortium of Thai Medical Schools, Professor Avudh Srisukri; Dean of the Faculty of Medicine, Chulalongkorn University, Associate Professor Sophon Napathorn

Distinguished guests, Experts, Colleagues, Ladies and Gentlemen

I would like to take this opportunity to thank the host for inviting me to be a part of this very important Regional Meeting on the "Role of Medical Education to Address the Current Health Challenges", and giving me the opportunity to address this auspicious meeting among distinguished people. This meeting will be an excellent opportunity for the medical educators, health professionals, and health policy-makers to work together towards the health challenges these days.

Globalization has turned the world into a global village. This has had a crucial impact on population health; as the world becomes borderless, so diseases and public health issues impacting national health systems can emerge anywhere.

Countries in our Region are confronted with the current and evolving health challenges brought about by various factors. Social, political, and economic conditions around the world today have changed dramatically. Health systems, sociodemographics, diseases, and climate changes were pointed out as key factors. These factors and the changing environment have created a tremendous impact on the day-to-day practice of health-care professionals. The nature and characteristics of key health challenges and how the medical profession can address them are to be focused.

We have experienced rapid and drastic global changes that strongly affect the medical education and profession. There has been a greater need for medical education, not only because it is a mechanism for enhancementof medical doctors' competencies, but because the medical

education also plays an important role in increasing the quality of health care. It is remarkable how we can equip our students with enough knowledge and skill to handle this rapid accumulation of drastic changes and tremendous impacts. We cannot teach them the way we were taught. The educational system should adapt itself to better accommodate these changes.

Health professionals need to be aware of these challenges and their impacts on people's health. They should be able to address these challenges appropriately in order to promote the health of the population and minimize the negative consequences. They will need to have public health-oriented approachin managing diseases.

They need to be linked and engaged in the health system in whatever context they are working. Furthermore, to address emerging and re-emerging diseases or new health problems, there is a need for medical practitionersto be abreast, retrained, and retooled for the latest. The advancement of Information and Communication Technologies can allow this to happen more easily. These challenges are not just for individual medical doctors but also for the medical education institutions and professional bodies.

In Thailand, we have taken medical education seriously and continuously to ensure that physicians are linked to and can serve the society effectively. The Thai Medical Council and the Office of Higher Education Commission are the national authority of overall policy on Medical Education. This national policy is formulated based upon the findings and recommendations of the National Medical Education Conference. The national conferences are the policy dialogue forum organized every seven years by the Consortium of Thai Medical Schools and the most recent one was in 2009. The next national conference would be held in 2016 and we are keen to learn more from this meeting.

Distinguished participants, Ladies and Gentlemen

This meeting provides the great opportunity for the Member countries to exchange their points of view and experience. In this way we can learn together and strengthen our friendship. We all need to be working together to support the development of better medical education towards health care. Making sure that we take the steps needed to get continued

improvements in new, relevant practices is one of the most important public health issues we will face in this century. In this regard, let me humbly remind that he WHO Collaborating Centre for Medical Education at the Faculty of Medicine of Chulalongkorn University stands ready to work with partners to achieve this goal.

I think this is a wonderful time to work together. But it is a challenging time as well, especially in the area of medical education challenges. In every aspect I trust that the results will be positive and enduring.

Our missions cannot be achieved without the generous support from several partners. I know that many of you have travelled from quite a distance and I would like to acknowledge all speakers and members who have made this long trip to contribute and participate in the very important WHO Regional Meeting. The challenges and the ways forward identified and discussed by this meeting are significant. And I wish you all the very best for a most successful meeting.

Ladies and Gentlemen, it gives me great pleasure to declare open this Regional Meeting on the "Role of Medical Education to Address the Health Challenges".

Thank you.

Countries in the South-East Asia Region are confronted with numerous health challenges. In order to appropriately address these challenges, the national health systems need to be strengthened based on primary health care with a good balance between public health services and medical care. The medical schools must equip their graduates with the required competencies to effectively support health systems strengthening in both medical and public health care.

However, a rapid assessment of the responses of medical schools to the current health challenges in the South-East Asia Region conducted in early 2012 reveals that with few exceptions, in most countries, these health challenges are largely inadequately addressed with limited innovative approaches for effective learning in undergraduate medical education. Special efforts are, therefore, needed to ensure that medical schools produce medical doctors who have clinical and public health competencies as well as other broader competencies to meet the needs of the health systems.

The WHO Regional Office organized a regional meeting on the role of medical education to address the current health challenges on 13–15 June 2012 at Bangkok, Thailand. The purpose of this meeting was to determine how strengthen under-graduate medical education to equip medical graduates to effectively address the health challenges in the Region. There were altogether 72 participants from all 11 Member countries of the WHO South-East Asia Region, and regional HRH-related networks in the meeting. This publication contains an account of the deliberations and the recommendations made.

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