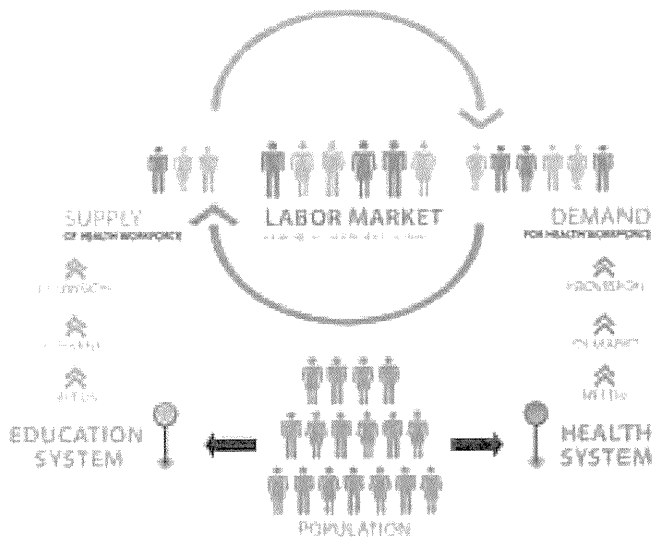
OBJECTIVES

- To identify, share and learn strengths and weaknesses of the current health professional education, teaching and learning systems in different country contexts.
- To identify how health professional education, teaching and learning systems be transformed in advancing health equity agenda and be responsive to health of people in the dynamic socio-economic environment.
- To support the development of strategies and interventions in transforming health professional education systems at the national levels.
- To strengthening the regional network contributing to evidence for health professional education transformation.

CONCEPTUAL FRAMEWORK



Source: Julia Frenk, Lincoln Chen et. al. 2010. Health Professionals for a new century transforming education to strengthen health systems in an interdependent world, Lancet 2010; 376: 1923-58

The conference program was developed starting with the conceptual framework in the figure above, comprising 3 main components: (1) education system including innovation and technology on health professional learning; (2) health system, and (3) labor market and demographic transition that will have impact on both education and health systems. These 3 components are divided into 4 key areas with various issues under each area as follows:

1.

Health Professional Education Reform: Instructional Dimensions

Ensuring skills and competency of teachers and faculties

- Fostering leadership and cultivating transformative learning to teachers and faculties, and learners, students.
- Competency driven design of curriculum, teaching and learning modalities and outcomes of different models
- Technology supporting effective learning, including revolutions in IT-based learning, on-site and distant learning experiences

Ensuring skills and competency of graduates

- Innovative methods for transferring, practicing and measuring skill development and mastery
- Nurturing a culture of critical inquiry
- Adequate responses to emerging health needs of population and structure of health systems
- Community-based and field-based education, policy, implementations and outcome of different modalities
- Inter-professional education which promote the practice of team work in health and its outcomes after graduation?
- Outcome measurement: the assessment of clinical/nursing and public health competencies among graduates based on different instructional modalities

Ensuring quality and responsiveness of health professionals

- Pre-service: Quality assurance of health professional education such as accreditation of curriculum and training institutions, requirement of national license examination
- In-service: Continue professional education: policy, implementation, effectiveness and outcome, learning and lessons drawn; requirement of continuing professional education (CPE) as conditions for re-licensing. What are the effective models of CPE, what are the discourses between mandatory versus voluntary CPE and requirement of mandatory re-licensing of different professionals?
- Student assessment and evaluation methods and outcome
- Debates on health professionalism versus ethics, role of health professionals in the society and their social responsibilities

Ensuring number and quality of health professional after graduation

- Workforce development and in-service training: e.g. short courses, long courses, distant courses, refresher courses, application of e-learning in the workplace
- Discourse on the balance between pre- and post-service training and education, demand for and supply of general doctors versus specialists and sub-specialty, in the context of national health systems and health needs and demand for health care by the population
- What are the opportunities in reorienting CPE in line with demographic and epidemiological transition in order to improve skill and competency of in-service health workforce in response to these changes?

2.

Health Professional Education Reform: Institutional Dimensions

- Developing and sustaining faculty and teaching staffs capacity: recruitment, remuneration, incentives, retention strategies and sustainability
- Facilitating health professional education reform to strengthen health systems
- Policies and processes to strengthen capacity of health training institutions
- New models of training institutions for primary care
- Public and private ownership of training institutes, public and private sources of financing health professional education and its outcome in terms of access to education, contributions to health systems of countries, attitude and responsiveness to health systems
- Stewardship, accreditation and certification of health education programs
- Health professional education in favour of equity and offer opportunities to the socially disadvantaged group and mechanisms to ensure contributions to their ethnic groups, rural areas
- Linkage between tertiary education and secondary education
- Perspectives of stakeholders in health professional education reforms: students, graduates, teachers or educators, and users and system managers
- Expand academic centers to academic systems encompassing networks of hospitals and primary care units
- Link together through global networks, alliances, and consortia

3.

Advancing Health Equity Through Health Workforce Education, Training and Deployment

To achieve health equity, government needs to move closer to and finally reach universal health coverage by ensuring equitable access to healthcare by all socio-economic groups: rich-poor, urban-rural and vulnerable populations, with adequate financial risk protection. All these pose a huge challenge on financing and service provision, for which adequate number and proper mix of health workforce cadres, commitment play a vital role. A number of questions or issues may be raised, such as:

- Universal health coverage has major ramification on health professional education and training, what cadres (diploma, bachelor, and post graduates, as well as other paramedics), how many to be trained? Can the government and private sector employ all these graduates and ensure they properly contribute to health needs of the population?
- What are the relative contributions of different cadres of health professionals (in a broad sense) in enhancing health equity?
- What skill-mix, cadre-mix, types of training (pre-services, in-service and post-services) are required to improve access to health services and achieving UHC?
- What are the models, and good practice of inter-professional and trans-professional team works in practice? Lessons from different country settings
- Evolution of education programmes and plans towards UHC: different country experiences
- Contributions of different tracks of student recruitment into health professional education e.g. national entrance examination, special quota for rural, ethnic minorities on rural retention and home town services
- At clinical and public health practice context, how health professional recognize and understanding the contributions of social determinants to (ill) health of population, how health professional education support such skills and attitudes?
- What are effective models of strengthening capacity of health workforce to
    - facilitate intersectoral actions in order to address social determinants contributing to ill health?
    - facilitate community participation and social mobilization?
    - effectively communicate with public and strengthen health literacy?
- Trends in the application of technology and ICT in health service delivery
- Contributions of health of the population such as burden of diseases, risk factors, poverty and ill health, health systems configuration to the design and reform of health professional education curriculum. What are the effective interface between health professional training institutes, health systems and the national health authority (MOH)?

4.

Changing Context and Impact on Labour Market and Health Professional Training

At country level, the social determinants of health, demographic and epidemiological transition (increased NCD in almost all countries and double burden of communicable and non-communicable diseases in low income countries) have impact on demand for health professionals. Government needs to plan for number and cadres mix requirement for the country health needs; and understand the labour market dynamics to achieve better results in the distribution, retention and performance of the health professionals.

At global level, the trends in economic and health systems in one country have major ramification on health workforce in another country. In the light of rights to employment, migration and settlement, free international migration of health workforce will have major impact to health systems and patients in the source countries. Demands of elderly and chronic patient care coupled with high purchasing power in rich countries trigger exodus of trained health workforce from poorer countries. Many countries also face acute mal-distribution of health workers within their borders, due to unattractive employment conditions in remote and rural areas, which create barriers to recruitment and retention of health workers, and inequities in the availability of health services for the population.

In low income countries where Global Health Initiatives (GHI) plays a significant financing role in health sector in general or in diseases specific, migration of health workforce to accommodate these GHI programmes may have either positive or negative impact on retention of health workforce in areas where health needs are urgent but not funded by GHI. Understanding these issues would help mitigate impact.

Economy which changes from export-led growth to stimulating domestic consumption of services will have major impact on demand for health workforce. In the economic boom, the increased demand for private health care triggers domestic migration of trained health workforce from public to private; and vice versa, in a economic bust situation; reverse migration was observed. Public sector reform, downsizing government and opening up for increased private sector role have major impact on the choice of employment, including migration of health workforce. Employment conditions matter, such as the emergence of flexible career pathway and alternative careers, changing demographic profile of the health workforce, availability of part-time and full-time work, and multi-task generation have major impacts on the performance of and employment options accessible to the health workforce. Therefore, understanding these economic factors and labour market context and determinants are important contributions to effective strategies and solutions to protect public interests and to prepare the health professionals for a productive and fulfilling career.

The abovementioned four key areas and issues under each area were used as a guideline in the design of organized sessions for the conference.

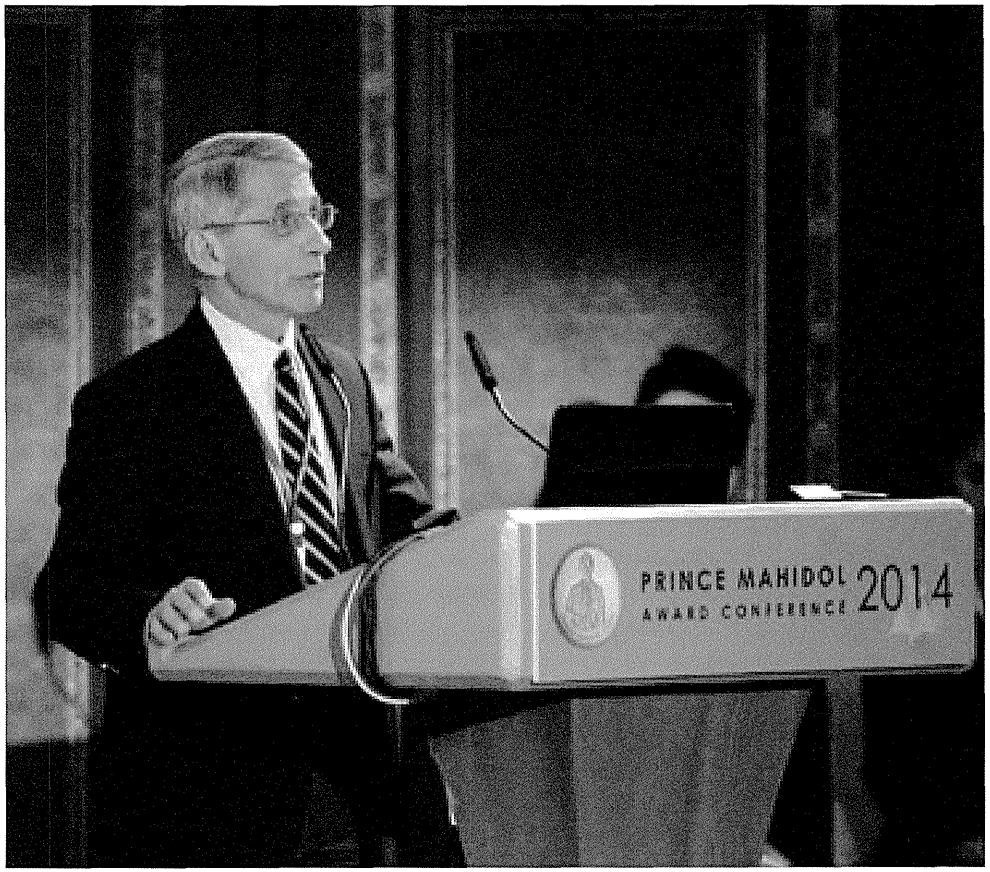
CONFERENCE CO-HOSTS

The conference is co-hosted by the Prince Mahidol Award Conference, the World Health Organization, the World Bank, U.S. Agency for International Development, Japan International Cooperation Agency, the Rockefeller Foundation, and China Medical Board.

KEYNOTE SESSION

SUMMARY OF THE OPENING SESSION & KEYNOTE ADDRESSES

Global health situations are now more complex, and inequities in health remain a challenge at national and international levels. However, the current health profession education systems fail to address these challenges mainly due to fragmented, outdated, and static curricula, that produce health personnel with insufficient knowledge, skills and competencies needed to recognize determinants of health problems and to become more responsive to fulfill population and communities' health needs.



Anthony S. FAUCI

Prince Mahidol Award Laureate 2013
Director
National Institute of Allergy and Infectious Diseases,
National Institutes of Health

USA

Starting from health professional education, it should shift from treatment to health promotion, individual to population, disease-centric to patient-centric, knowledge and skill to holistic, teacher-centric to student–centric, and elite health professional to primary care giver. The young health professional leaders represented at PMAC also suggested that medical curricula should include public health programs from which students learn to approach healthcare with holistic perspectives and understand entire community needs. In addition to strengthening the health system, improving the universal coverage can minimize the coverage gap and reduce health problems. Another effective model is to facilitate community participation, including community-funded training of healthcare providers. Finally, Dr. Anthony Fauci proposed that successful implementation of intervention in treatment and prevention needs to be concerned about biomedical intervention and human behavior/ social determinants. This can be achieved only if the healthcare workforce is primarily trained to address the complexity of global health situations.

Crisis in the global health workforce distribution has caused unmet population health and health service needs. Apart from the shortage of human resources in disadvantaged areas, other social determinants of health such as cultural barriers, stigma and discrimination need to be taken into account when discussing treatment accessibility and healthcare coverage.

Another fundamental problem affecting health inequity is incomparable medical education and social needs, that have resulted in health professionals with lack of public health skills and an inability to understand health systems as a whole.

To solve the problem of health workforce distribution, we learnt from Daisyrie Aidyl Pamogas, a young student nurse from the Philippines, that community-selected candidates for healthcare personnel and community-funded scholarships for local candidates increase workplace adherence of healthcare personnel especially in disadvantaged areas. She also emphasized the importance of community empowerment through her quotation "by the people with the people and for the people".

Despite community participation, community diversity needs to be considered when developing strategic health plans. The best health strategy in one country may not be appropriate in another setting. Experience from Haiti and Rwanda community-based programs taught us that the key success factor in implementation is a power of community engagement.

Paul FARMER

Kolokotrones University Professor
Chair of the Department of Global Health
and Social Medicine
Harvard Medical School

USA

Yang KE

Executive Vice-President
Peking University
Peking University Health Science Center

China

Health professional education improvement needs to start from the administration (improving of administration mechanisms, increasing the attractiveness of needed health positions, enhancing propaganda, strengthening admission management and enacting favorable admission policies for needed health positions, attaching importance to research in education of health professionals), the institutional measures (promoting comprehensiveness of health professionals education, optimizing disciplinary structures to train needed health professionals, emphasizing the importance of the development of teaching bases, strengthening faculty development), and instructional measures (pushing forward student-centric teaching, strengthening education of humanistic skills and implementing visions of holistic education, making full use of modern educational technology).

In conclusion, the implementation of intervention needs to find a way to close the inequity gap, to increase life expectancy, and to ensure well-being of the population which can not be made possible without "transformative learning", the most important fundamental aspect of health professional education.

“By the people with the people and for the people.”

Josko MISE
President, International Federation of Medical Students' Associations, Switzerland

Pablo Torres AGUILERA
Executive Director, HIV Young Leaders Fund, Netherlands

Tatiana VOROVCHENKO
Dentist, MSc Candidate in Global Health Science, University of Oxford, United Kingdom

Daisyrie Aidyl T. PAMOGAS
Licensed Midwife and Student Nurse, University of the Philippines Manila - School of Health Sciences, Philippines

CONFERENCE
SESSIONS

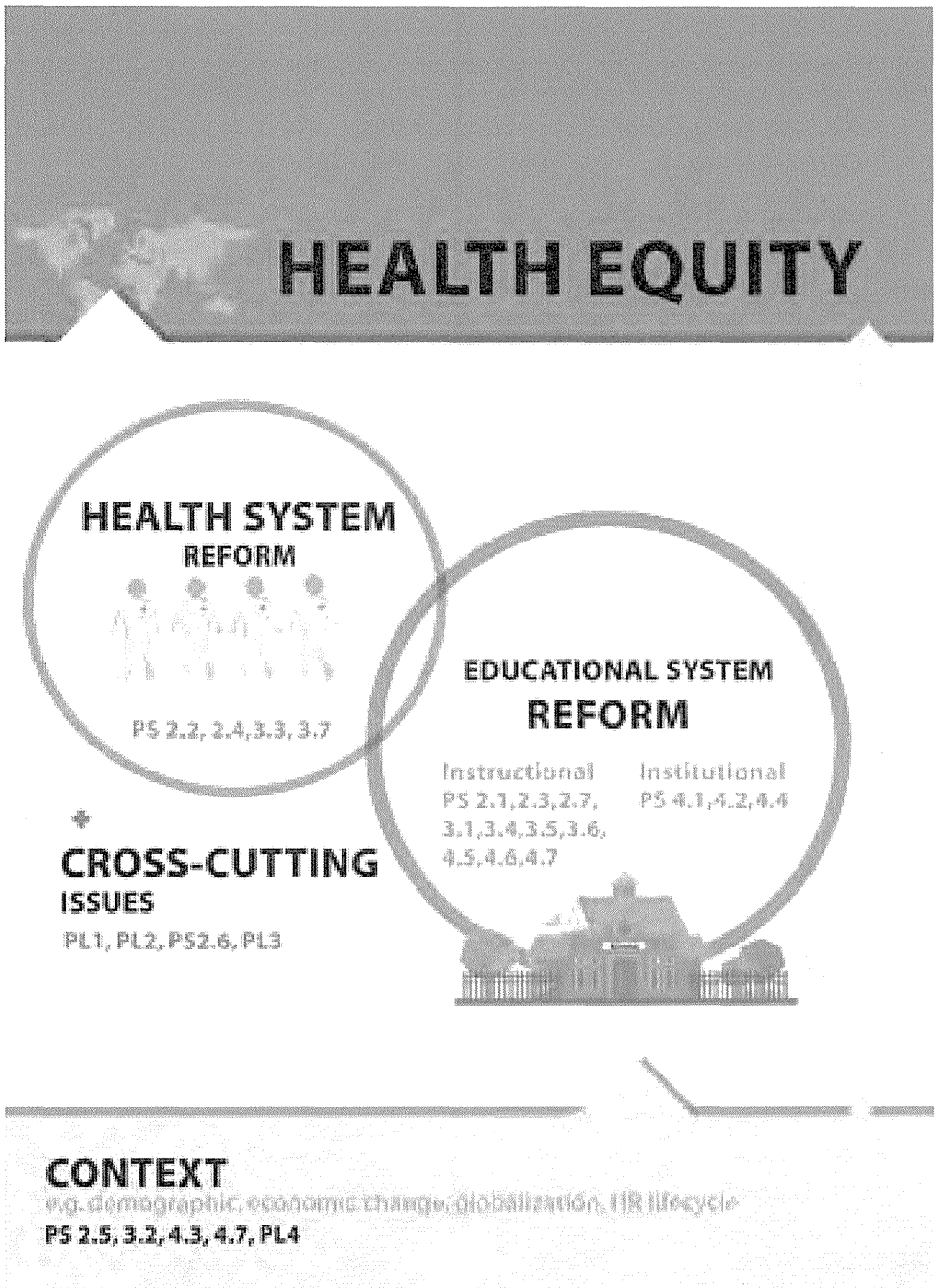


FIGURE 1

EMERGING CONFERENCE THEMES

The conference was organized into five plenary sessions and three sub-themes followed each plenary with 21 parallel sessions. All these conference sessions result in four emerging conference themes (see Figure 1). To achieve health equity, two major reforms are required: health systems reform in favour of improved access and financial risk protection; and health professional education systems reform for which two main elements, instructional and institutional reform are required. In such reforms there are a few cross cutting issues as well as other contextual environments such as demographics, economic change, globalization and health workforce life cycles that should be addressed in synergy. The ID number of Plenary Sessions (PL) and Parallel Sessions (PS) which contributed to each of the four sub-themes are depicted below each sub-theme.

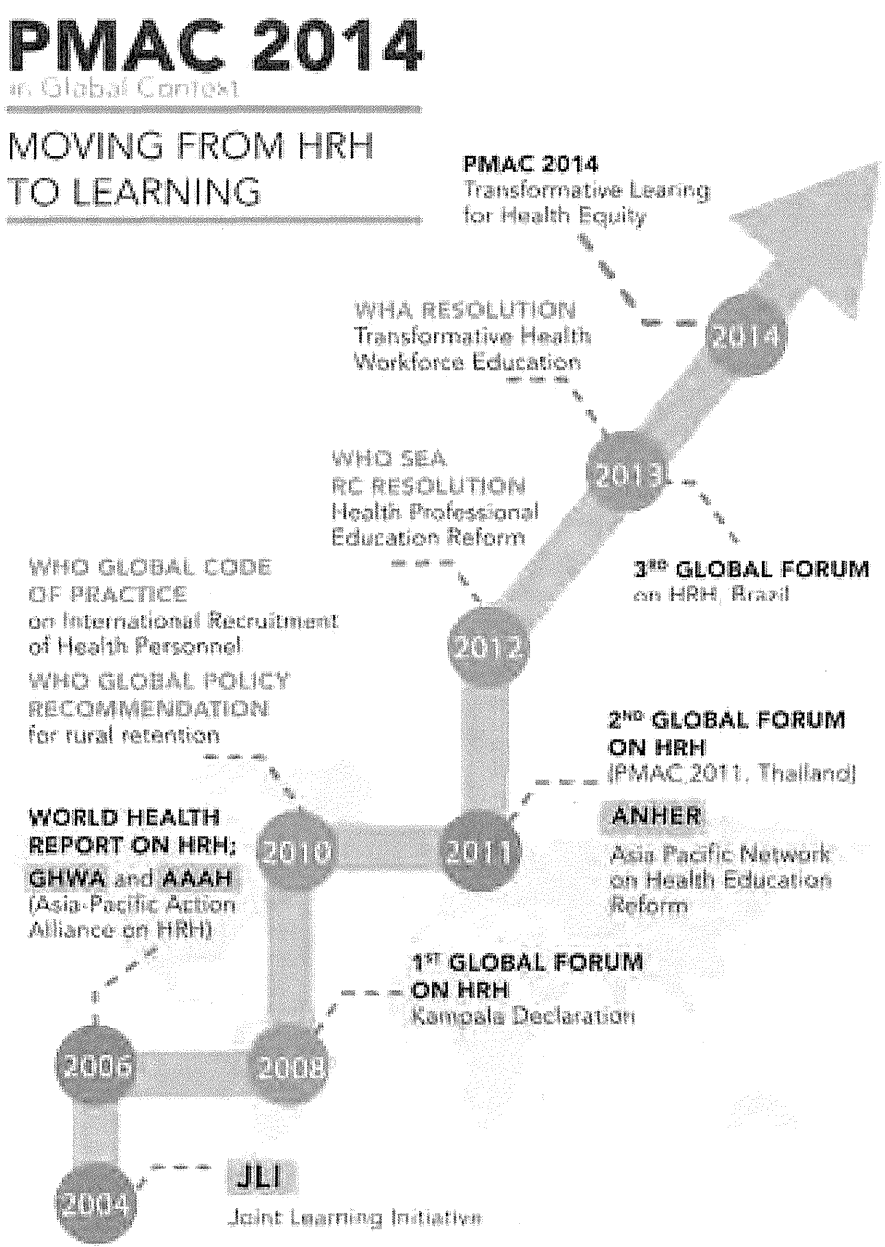


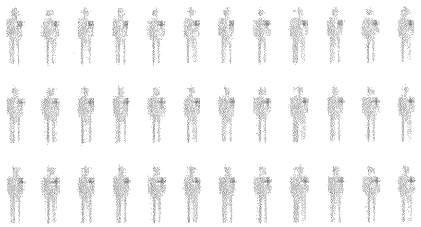
FIGURE 2

MAIN HISTORICAL EVENTS ON HEALTH WORKFORCE 2004-2014

Figure 2 depicts several key historical milestones which contributed to the global health workforce agenda movement. The 2004 Joint Learning Initiatives, set the scene and called for global attention on the health workforce. The 2006 WHO World Health Report offered the problems stream, introducing 2.28 health workforce (including doctors, nurses and midwives) per 1000 population as an indicative benchmark for minimum threshold of health workforce density contributing to high level of ANC and Skilled Birth Attendance. The 2006 advent of the Global Health Workforce Alliance at global level and the 2006 Asia Pacific Action Alliance on HRH at the Asia Pacific Regional level, contributed to national movements and several notable achievements.

After the 2006 GHWA inception, three consecutive global forums on HRH were convened: first in 2008 in Kampala, Uganda; second in 2011 during the Prince Mahidol Award Conference in Bangkok; and the most recent third forum in 2013 in Recife, Brazil. All forums contributed to sustaining global momentum on HRH. The WHO also contributed significantly, such as in the 2010 WHO Global Policy Recommendation on rural retention, the WHA resolution in 2013 on Transformative Health Workforce, the WHO SEA Regional Committee Resolution on Health Professional Education Reforms, and the 2013 WHO Recommendation on Scaling and Transforming Health Professional Education. These historical milestones have paved the way to convening the Prince Mahidol Award Conference in 2014.

CHANGING CONTEXT



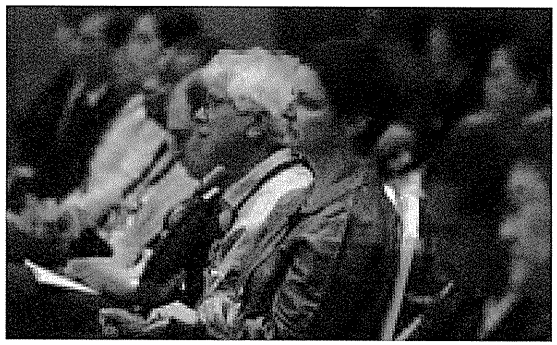
As countries' health systems respond to significant demographic, epidemiologic and economic transitions, one of the most important responses will be that of health workforce policy, planning, and management. Understanding the labor market dynamics in each country, increasing proportion of ageing population, and changes of disease burden from communicable to chronic non-communicable diseases,- is therefore essential to coming up with the right solution. Supply problems in many countries have been exacerbated by out-migration and skills imbalances and quality of education (know-do gap), and HRH policies and regulations have failed to capture broader labor market dynamics (nationally and internationally), with too little attention on the growth of private sector and impact on health labor markets.

Health workforce challenges facing the majority of counties are numerous. Evidence shows that increased demand for health service, better pay and work environment are contributing factors to domestic and international migration. Along with increased demands for health and social care, demographic and epidemiologic transitions in high and low and middle income countries are occurring, requiring more effective health workforce policy, planning and management at the global level. These concerns led to the advent of the WHO Global Code on International Recruitment of Health Personnel in 2010. The growth of domestic private health markets and internal migration are key issues in these countries.

With improved socio-economic development, an increased proportion of middle classes, and the increased expectation of populations, international

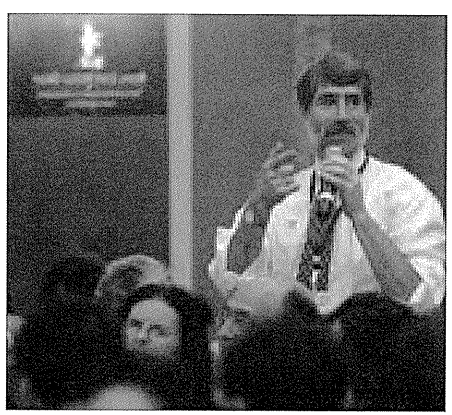
labor market dynamics are driving demand for health workforce in rich countries, resulting in large scale international migration and recruitment from low and middle income countries. The WHO Global Code would redress the international migration issues, though it is the right of citizens to migrant and seek job opportunities. Added to this, student expectations for returns on medical education, private practices and specialization for higher compensation, social prestige and leisure time is resulting in over-specialization and lack of generalists and family medicine practitioners.

The structural health inequity, inadequate access to health services by the poor in rural and hard to reach areas occurring in many countries can be traced to a general lack of social accountability, both by health professional training schools, and by students and graduates themselves. The schools have yet



to adequately equip students with social commitment and inspirations to work for the poor in rural areas. Concepts of health equity and social justice are generally not in the curriculum, and this results in the "white (coats) following the green ($$$)" (student debits and career choices).

Concepts of social accountability need to be firmly embedded into medical curriculum and instructional methods of medical schools and all other associated health care professional education. Better understanding of the role professional bodies (medical association, unions and other regulators such as legally mandated health professional councils) in influencing labor markets outcomes

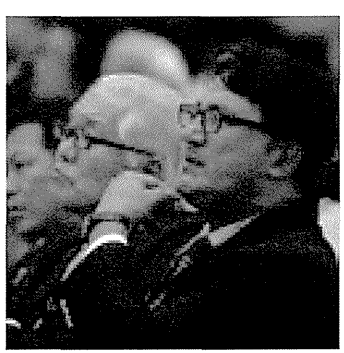


will allow intervention in the markets to make social returns as valuable as private returns – through regulation, training, and setting social values.

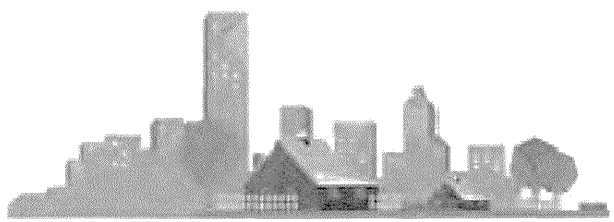
Health equity embedded in UHC is high on the global/regional/national agenda, and yet health delivery systems, especially primary health care usually is not equipped to provide adequate quality services. Human resources for health are still a key bottlenecks in most settings, both in number, skill mix

and responsiveness. Investment needs to be made in both number, competency and skill-mix to deliver UHC and services that are socially necessary and address skills portability (though not creating two-tier career systems). Added to this, inadequate financing and government spending on health poses a major challenge.

CROSS CUTTING ISSUES AND HEALTH SYSTEMS



> “
> ...if I can influence
> their heart,
> I can influence
> their mind, then hands
> and feet follow.
> ”



There was a general consensus among the conference delegates that health equity, social justice, human rights, and social accountability are not explicitly embedded in the curricula and learning platforms in schools, right from primary level through to higher education. Embedding curricula with social values and concepts in addition to evidence based medicine, competencies, etc. is the way forward to create the next generation of socially responsible and responsive health care workers. Equally, educators with a 'good heart', as inspirational role models and with good leadership are essential for this to succeed. As one delegate stated,

"…. if I can influence their heart, I can influence their mind, then hands and feet follow".

However it was equally recognized that there is no easy, single solution or "silver bullet"; a combination of engagement and empowerment of the community, long term vision to guide reform directions, and reforms to encompass 'broader pool of stakeholders' are all needed.

A concept that was raised many times was to apply "best practice", "best buys options" i.e. use what is known to work and what provides the best value for money. Both of these require a robust evidence base for policy making support, and a meta-analysis approach was suggested to underpin this approach.

The regular "tracking of graduates" to provide important inputs for improved school performance does not seem to happen with any prevalence or continuity. It would seem clear that it is in the best interest of all educators to collect this data and use it to push the necessary reforms i.e. respond to the marketplace and provide the right sort and numbers of graduates, with the right knowledge, skills and experiences. Data collection can be done through multiple cross sectional survey or establishment of professional cohorts.

Any reforms require stable investment in health workforce underpinned by long term political and financial commitment. A systems approach to long term solutions for improved health equity, inclusive of different cadres: mid level professionals, community healthcare workers, social workers, managers, regulators etc. is proposed. Better tools to measure and evaluate process and outcome of transformative education and health workforce performance are now becoming available e.g. the 3 Gaps model, that was widely discussed.

Several parallel sessions discussed the role of health system reform, looking at how transformative learning can improve the performance of health workers, responding to the health needs of populations by striking a balance between generalists and specialists, achieving a more integrated approach to health profession education through integrating policies, training strategies and institutional collaboration, and the importance of social accountability.

Several approaches to measuring health workforce performance / competencies were presented including vignettes, direct clinical observation, standardized patients, and the three-gaps framework. It was recognized that measuring performance helps inform HRH policy decision-

making, and that health workforce performance is linked to reforms in health professional education. Problem solving skills and a move from "know all" to "know how" requires promoting, but is being hampered by

- A dearth of evidence in the area of education investment
- Sustainability of the funding (external funding)
- Competition for good instructors across education institutes
- The need to transform routine information system to collect evidence of performance

There is a consensus that generalists add important value in health care systems and play important and effective roles to resolve population health needs and health equity. Generalists relate to many concepts and perspectives, including patient-centered care, person-centered care, people-centered care, community based care, rural doctor perspectives, and holistic approaches. However, the number of generalists versus specialists in each country is very different; in most cases, specialists significantly outnumber generalists.

To strike a balance between generalists and specialists, outcome measurements and evidence are needed to support health policy reorientation. However, all involved parties, including policy makers, health care professional, and people need to collaborate to resolve this issue for ensuring that resolution will serve the needs of the population.

Factors that influence and drive medical students or physicians to specialise were discussed. Hospital based learning for medical students is an important issue. In general, medical students are trained in and customarily exposed to tertiary care facilities rather than in primary care facilities and communities per se; therefore, tertiary care systems are the powerful magnet to increase specialists. This factor is found in countries that have a number of specialists higher than generalists, such as Thailand. However, it is not only formal medical curricula, but also other related factors that influence perceptions and attitudes of medical students toward generalism and specialism. Dr. Nick Busing raised an interesting issue

related to "hidden curriculum" that is identified as "a set of influences that function at the level of organizational structure and culture," affecting the nature of learning, professional interactions, and clinical practice of medical students.

Incentives for and retention of generalists, especially in rural areas were also discussed. Many countries reported that generalists are paid less than specialists, except in United Kingdom. Although it is a consensus that financial or salary is an important incentive for generalists, other incentives were also discussed. Dr. Steve Reid shared his opinion and experiences as a rural doctor that money plays a small part in this equation; other social recognition factors also play important roles. Job satisfaction and

self actualization are very important for retaining generalists in the health system or rural area. However, social status may influence medical students and physicians toward specialists, as found in Indonesia.

Definitions of terms "generalists" and "specialists" as well as their scopes of practices, roles, and professional identity also needed to be clarified for better understanding of these terms at the global level because balance between generalists and specialists is an important issue of health workforce and human development worldwide.

To balance generalists and specialists in health care systems, political support to strengthen capacity of primary health care is highly needed. Universal health coverage is also an indirect force toward necessity of generalists in health care systems. As a fact, most of the diseases or illness that the impact health of people can be cured or treated by generalists rather than specialists. However, there is no ideal of the exact ratio between generalists and specialists. It depends on needs of populations, capacity of primary health care, and the context of each country. Working environment, team work, and job satisfaction are also important aspects rather than absolute number of generalists and specialists in health care systems.

To strike a balance between generalists and specialists, interconnected reforms for medical education that need to transform and change focus toward community based and holistic perspectives, health system to support generalists, and economic related to payments and incentives are required. Although compulsory or mandatory service after graduation may be an effective way to retain generalists in rural areas, in the long term however, retention strategies also need to be developed.

Based on the discussion, it is clear that each country puts a lot of their endeavors to find balance between generalists and specialists in their countries to reach optimal health outcomes and health equity of their population. Many continuous studies have been conducted at both national and international levels. However, the resolution of each country will vary depending on culture, health system, and contexts. Because this issue is complex, it needs complex systematic thinking, and evidence from research to