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INTERNATIONAL PHARMACY EDUCATION SUPPLEMENT

The WHO UNESCO FIP Pharmacy Education Taskforce: Enabling Concerted and Collective Global Action

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Pharmacy Education is a priority area for the International Pharmaceutical Federation (FIP), the global federation representing pharmacists and pharmaceutical scientists worldwide that is spearheading the Global Pharmacy Education Taskforce. This paper describes the work of the Taskforce that was established in March 2008, explores key issues in pharmacy education development, and describes the Global Pharmacy Action Plan 2008-2010.

Given the significance of pharmacy education to the diverse practice of contemporary pharmacists and pharmacy support personnel, there is a need for pharmacy education to attain greater visibility on the global human resources for health agenda. From this perspective, FIP is steering the development of holistic and comprehensive pharmacy education and pharmacy workforce action to support and strengthen regional, national, and local efforts.

The role of a global organization such as FIP is to facilitate, catalyze, and share efforts to maximize pharmacy education development and stimulate international research to develop guidance, tools, and better understanding of key issues. To achieve this goal, FIP has (1) established a formal collaborative partnership with the 2 United Nations agencies representing the education and health sectors, United Nations Educational, Scientific and Cultural Organization (UNESCO) and the World

Health Organization (WHO); and (2) established the Global Pharmacy Education Taskforce to serve as the coordinating body of these efforts. The initial effort will serve to leverage strategic leadership and maximize the impact of collective actions at global, regional, and national levels. Three project teams have been convened to conduct research, consultations and develop guidance in the domains of vision for pharmacy education, competency, quality assurance, academic workforce, and institutional capacity.

BACKGROUND

Pharmacists in many countries are too few in number and trained at a critically insufficient scale.¹ WHO estimates a current shortage of more than 4 million health care workers.² Fifty-seven countries fall below the WHO threshold of 2.5 health care professionals per 1000 population, which has a negative effect on health outcomes and forms a barrier to achieving the Millennium Development Goals. While much of the evidence relates to physicians, nurses, and midwives, it is widely recognized that unless human resource shortages and imbalances are tackled in the pharmacy workforce as well, any attempts to improve health systems and access to and appropriate use of medicines will be undermined.³ There are marked imbalances in the distribution of the pharmacy workforce globally, particularly in sub-Saharan Africa, where the size of the country represents the country's share of the pharmacy workforce.⁴

For many communities, the pharmacist is the most accessible or sole provider of healthcare advice and

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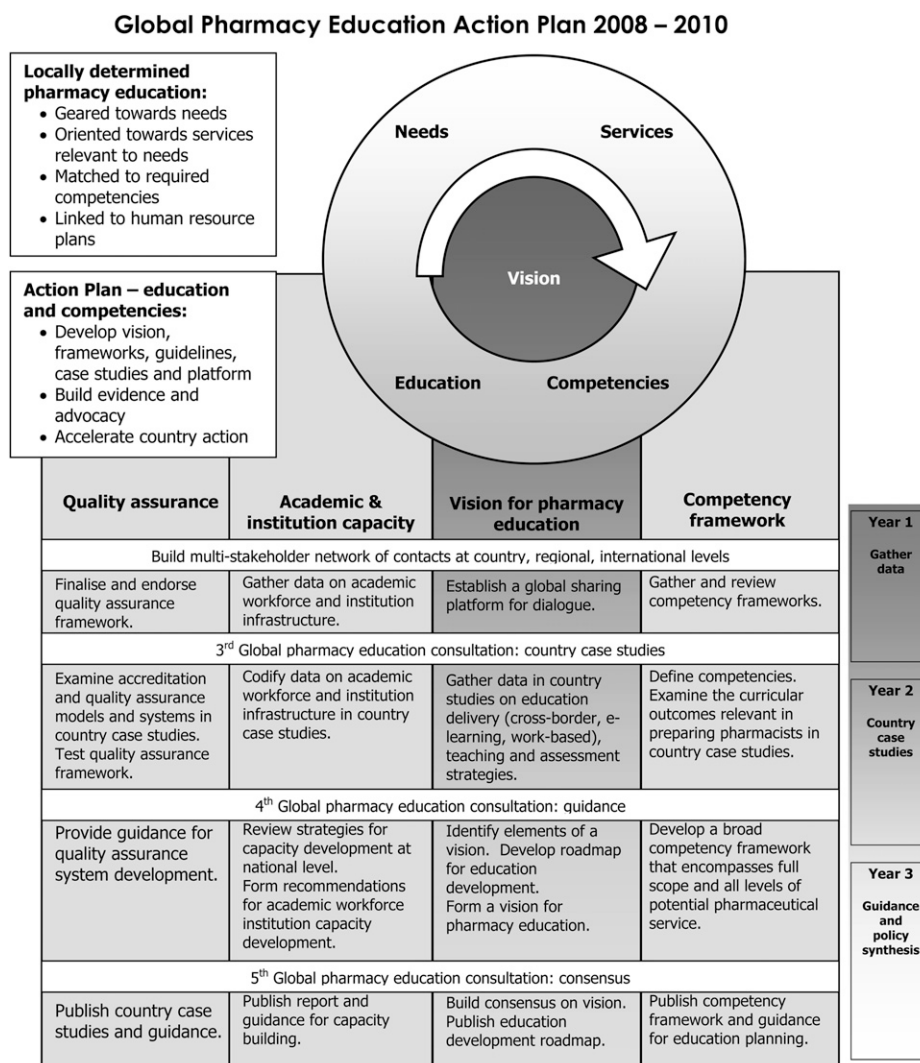


Figure 1. Global Pharmacy Education Action Plan 2008–2010.

services. Pharmacists and pharmacy support personnel are willing, competent, and cost-effective providers of public health and pharmaceutical care interventions. Internationally, there is wide acknowledgement of the underutilization of the pharmacy workforce for public health roles.⁵⁻⁸

The provision of pharmacy services in each country revolves around two workforce needs: (1) an appropriately trained pharmacy workforce to provide services, and (2) a competent and committed academic workforce to train sufficient numbers of new pharmacists and other pharmacy support personnel. These in turn depend on suitably resourced academic institutions composed of sufficient numbers of students who have the necessary intellectual and emotional competence to practice.

The 2006 World Health Report calls for more research and evaluation on the development of education and training, acknowledging that scaling up of education

and training cannot rely on expanding existing institutions alone.² New institutions will be needed as well as new and flexible modes of delivering education. It is increasingly accepted that initial training cannot provide health professionals with all that they need to know. Students must be prepared for lifelong learning with greater emphasis on “know how” than “know all.”⁹

While capacity to train is the starting point, other related issues must be taken into account to enable pharmacy education development. Since the roles of pharmacists and academics have undergone significant change, much effort is needed to progress beyond the status quo. At an institutional level, educators need incentives and encouragement to innovate and develop. At a national level, policies, processes, standards, and professional bodies must support education to meet current and future needs.

The term *pharmacy education* refers to the educational design and capacity to develop the workforce

for a diversity of settings (e.g., community, hospital, research and development, academia) across varying levels of service provision and competence (e.g., technical support staff, pharmacist practitioners, pharmaceutical scientists, pre-service students) and scope of education (e.g., undergraduate, post-registration, continuing professional development, practitioner development, lifelong learning).

Sustainable development and the scaling up of pharmaceutical education in many countries is necessary to meet workforce demands across the whole spectrum of pharmaceutical services, including in distribution, supply, care, and public health roles, as well as research and development, production of pharmaceuticals, quality assurance, and regulation. Standalone efforts that are developed in isolation from national and local priorities face challenges that compromise their sustainability.

As the global organization representing pharmacists and pharmaceutical scientists, FIP has been identified by key regional leaders in pharmacy education as the appropriate umbrella for collective and collaborative action directed towards identifying, addressing, and meeting challenges to the quantity and quality of pharmaceutical education worldwide. In July 2008, FIP formed an open and virtual community of practice in collaboration with WHO to facilitate the Taskforce's project teams, country case study teams and enable the sharing of knowledge and experiences.

FIP-WHO-UNESCO PARTNERSHIP

The FIP Pharmacy Education Taskforce, formally started in November 2007, is a new broad-based platform of partners that includes the WHO, UNESCO, as well as a range of national and regional stakeholders that are committed to and responsible for delivering the Pharmacy Education Action Plan 2008-2010.

The first global consultation on pharmacy education was held in 2006 in Salvador Bahia, Brazil.¹⁰ This group, which comprised representatives of key organizations in pharmacy education, including the American Association of Colleges of Pharmacy (AACP) and the American Society of Health-System Pharmacists (ASHP), accepted the challenge of organizing continued global consultations and developing an Action Plan. At a second global consultation in Beijing, China, in 2007, the Taskforce partnership was consolidated with two key United Nations agencies, WHO and UNESCO.¹¹

From these 2006 and 2007 global consultations, the Taskforce developed and validated its recommendations in the Action Plan 2008-2010. The Action Plan was launched as a joint initiative of FIP, WHO and UNESCO

in March 2008, at the Global Health Workforce Alliance (GHWA) forum on Human Resources for Health in Kampala, Uganda. The Action Plan advocates for a needs-based approach to pharmacy education development and builds on good practice to build the capacity and quality of pharmacy education worldwide.

In September 2008, the third global pharmacy education consultation was held in Basel, Switzerland to report on the progress of the taskforce, initiate plans for the development of the country case studies and gather input on the development of a global platform for pharmacy education. The response was overwhelmingly positive with over 75 recommendations and suggestions generated by participants to facilitate the platform's development and active exchange of experiences through a discussion panel of academic leaders from six African countries.

PHARMACY EDUCATION ACTION PLAN 2008-2010

The aims of the Pharmacy Education Action Plan 2008-2010 are to develop evidence-based guidance and frameworks through which to facilitate development of pharmacy education and higher education capacity to enable the sustainability of a pharmacy workforce relevant to needs and appropriately prepared to provide pharmaceutical services. Figure 1 describes the Action Plan goals in priority domains at each phase.

The 2007 global consultation facilitated key stakeholders (more than 40 national, regional, and international leaders in education, practice, and science) to reach consensus and shared commitment on an action plan encompassing 4 domains. These domains relate to:

- (1) developing a vision and framework for education development,
- (2) developing a competency framework,
- (3) ensuring a quality assurance system, and
- (4) building academic and institution capacity.

This consultation also highlighted the need for education development geared towards local needs. The Task Force agreed that a "one size fits all" educational model or system was neither practical nor desirable. The development of optimal educational systems should progress through a cycle that first seeks to assess and understand local health needs. Once local needs are determined, the services (broadly speaking) required to meet those needs can be defined, such as research and development, production, distribution, patient care, and public health. The competencies of the workforce should be aligned such as to enable optimal quality in the delivery of these services. Education should be geared towards preparing a workforce that is competent and meets the

local needs. In focusing efforts towards areas where global collective activity would be beneficial, such as those described in the 2008-2010 Pharmacy Education Action Plan, the taskforce will harness opportunities for the global exchange and analysis of experiences in education development, thus stimulating the development of an evidence base which is significantly lacking. The Action Plan process also engages a broad base of stakeholders from different sectors and strengthens networks for pharmacy education advocacy, dialogue, and international collaboration to achieve long-term progress.

DOMAINS FOR ACTION

Each domain of action represents a work stream that is phased over the three years to include country case studies, consensus building and policy guidance. The focus of these case studies is the sub-Saharan African region due to the urgency of the health workforce crisis and extreme pharmacy workforce shortages.

The domains encompassed in the Action Plan include:

- Vision for pharmacy education
 - Establish a global sharing platform for dialogue
 - Gather data in country studies on education infrastructure, delivery (cross-border, e-learning, work-based), teaching and assessment strategies
 - Develop roadmap for education development
- Competency framework for pharmaceutical services
 - Gather and review competency frameworks for pharmaceutical services
 - Explore cultural influences on competency
 - Develop broad pharmaceutical services competency framework
- Quality Assurance
 - Finalise and endorse quality assurance framework for pharmacy education
 - Examine accreditation and quality assurance models and systems in country case studies
 - Provide guidance for quality assurance system development
- Academic and institution capacity (workforce and infrastructure)
 - Gather data on academic workforce and institution infrastructure and codify
 - Review strategies for academic workforce and institution capacity development at national level

- Publish report and provide guidance for academic workforce and institution capacity building

Figure 1 outlines the 2008-2010 Action Plan and the annual goals for each domain. Given the link between the lines of work on developing a vision for pharmacy education and a competency framework, both of these domains are being accomplished by one project team. There are 2 other Project Teams focusing on quality assurance and academic and institution capacity.

Vision

Against the background of complex pharmacy workforce trends, changes in the roles of pharmacists and growing health challenges, an essential need exists to have a clear and shared vision for professional pharmacy education as well as a process for building collective action and momentum to develop quality pharmacy education. Further consultation and research is needed in addition to the establishment of an effective global sharing platform. Guidance on mechanisms by which educational efforts can be developed via an “educational roadmap” is envisaged. Plans are also currently in the advanced stages of development for the establishment of a global pharmacy education network, *GPhEd*, of pharmacy schools through the UNESCO UNITWIN (university twinning) programme.

Competency

Commitment to academic development and excellence does not necessarily dictate a need to follow any one particular national model for professional pharmacy education. Such commitment, however, does ensure that education is mapped to the required competencies of the professional pharmacy workforce to provide the relevant pharmaceutical services in any given country context. Existing competency frameworks and experiences are currently being examined and a consultative process will be initiated to form a broad competency framework for pharmacy services. This framework can be used by countries to develop national competency frameworks and as a tool for workforce planning.

Quality Assurance

The development of quality assurance (QA) systems for pharmacy education varies greatly among countries. Many countries have their own QA system and standards for pharmacy education that reflect contemporary pharmacy practice and education and meet the specific needs of the country. However the principles and core elements for QA of pharmacy education are unlikely to differ significantly, if at all, from country to country. There was broad recognition by stakeholders contributing to the FIP

International Forum for Quality Assurance of Pharmacy Education (2001-2008) that countries seeking to establish or improve their QA system would benefit from an internationally developed and adopted QA framework.

The objectives of the Forum were to: (1) to promote excellence in pharmacy education; (2) provide an international forum for information exchange, collaboration, and cooperation; and (3) facilitate and promote communication among stakeholders. More than 260 people from approximately 60 countries representing international and regional pharmacy associations were “members” of the network. The Forum has now evolved into the Taskforce’s QA Community of Practice and through various workgroups is developing policy guidance and tools for QA.

With the input from diverse experts, a “global framework” for QA has been developed iteratively and was formally adopted by FIP and launched at the FIP Congress in Basel, Switzerland, September 2008.¹² A QA self-assessment tool for institutions is currently being developed and piloted in collaboration with WHO; the School of Pharmacy, Kwame Nkrumah University of Science & Technology, Ghana; and the Department of Pharmacy, University of Zambia.

Academic and Institution Capacity

Given the expansion of the pharmacy workforce in recent years, there has been an increased demand for the academic faculty workforce. Many of the issues highlighted by the International Campaign to Revitalise Academic Medicine¹³ also apply to academic pharmacy. There are considerable disincentives towards careers in academia including lack of pay parity with practicing colleagues, absence of clear career pathways, particularly for clinical teachers, and a culture that is, even in low income countries, centred around publications in peer-reviewed journals and attainment of research grants.¹³ Further research and review of strategies to build academic workforce capacity is warranted. One key barrier to academic faculty workforce retention and quality needs-based education, particularly in developing countries, is poor physical institutional infrastructure where basic facilities as well as learning and teaching resources may be insufficient or not even exist. A Project Team is leading the development of recommendations for academic workforce capacity and institutional infrastructure development.

FIP is also working closely with WHO, the World Federation for Medical Education (WFME) and the University of Copenhagen on an initiative to improve information on academic institutions and health professions education.¹⁴ *Avicenna*, the Global Database of Directories of Health Profession Education Institutions, will pub-

lish basic information about medical, public health, dental and pharmacy schools in 2008 through an online directory. It aims to provide information about distribution, production, and fulfilment of accreditation procedures. In the future the directories will offer more comprehensive and reliable information regarding the quality of institutions.

CONCERTED AND COLLECTIVE GLOBAL ACTION

There is a need for global mechanisms that enable the sharing of experiences, evidence and formation of advocacy and guidance for pharmacy education development. The FIP Pharmacy Education Taskforce provides a conduit and mechanism for such concerted and collective global action. The Taskforce has the added goals of developing a vision for pharmacy education, ensuring a sustainable pharmacy workforce relevant to needs (healthcare, education for pharmaceutical needs and market), and addressing the limited capacity of pharmacy higher education institutions, particularly in developing countries. The Global Pharmacy Education Action Plan 2008-2010 represents the greatest opportunity to date for stakeholders to support, participate, contribute towards, and commit to action for pharmacy education development.

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