

# URGENT NEED IN PAKISTAN TO ALIGN HEALTH PROFESSIONALS' EDUCATION TO 21ST CENTURY CHALLENGES

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“Knowing is not enough; we must apply. Willing is not enough; we must do.” —Goethe

The benefits of the scientific revolution are most strikingly manifest in the field of health. The dramatic advances in knowledge generated through the application of the scientific method is responsible for the increasing understanding of diseases and their effective management, doubling of human life span and improvement in the quality of life. To align health professionals' education with the rapid advances in knowledge a series of reports led by the 1910 Flexner report triggered the first health professionals' education reforms early in the 20th century. Science was integrated in health professionals' education curricula shifting them from an idiosyncratic apprenticeship model to a more rigorous, systematic biomedical and educational approach.<sup>1,2</sup> Post world war I a second generation of reforms began, in which along with schools and university development, tertiary care hospitals and academic centres started offering health professionals training programmes in which research and service delivery were integrated. The outcome of these reforms was the development of problem-based learning and interdisciplinary integration in curricula.<sup>3</sup> At the dawn of the 21st century the fast-spaced advancement in science and technology and the daunting current and emerging challenges to the health of the human

race are making a third generation of reforms imperative.

According to the vision of the 2010 Lancet Commission on Education of Health Professionals for the 21st Century, “all health professionals in all countries should be educated to mobilise knowledge and to engage in critical reasoning and ethical conduct so that they are competent to participate in patient and population-centred health systems as members of locally responsive and globally connected teams.” To achieve this, the Commission recommends a series of instructional and institutional reforms, which should be guided by two proposed outcomes: transformative learning and interdependence in education respectively. The Commission describes three levels of learning: informative, formative and transformative. Informative learning according to them is about producing knowledgeable and skilled experts; formative learning is about socialising students around values and ethics to produce professionals; and transformative learning is about developing leadership attributes with the purpose to produce enlightened change agents.<sup>1,2</sup> The Commission considers Interdependence as a key element in a systems approach, “because it underscores the ways in which various components interact with each other” and recommends a team-based approach to training of health professionals. The team-based or inter-profes-

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sional approach to health professionals education is expected to break down professional silos and prepare health professionals to function effectively as team members in collaborative practices and systems.<sup>2,4</sup>

The World Health Organisation (WHO) also recommends the transformative scaling up of health professionals' education and training “to increase the quantity, quality and relevance of health professionals.” WHO believes that the global Health Work Force crisis cannot be addressed by producing more health professionals alone; what is needed is a health workforce with the right competencies to respond to evolving health needs.<sup>5,6</sup> The United States Institute of Medicine (IOM) proposes a set of simple, core competencies for health clinicians, regardless of their discipline, that include capacities to provide patient-centered care, work in interdisciplinary teams, employ evidence-based practice, apply quality improvement and utilise informatics.<sup>7</sup> Integration of public health in to clinical curricula, development of research skills, understanding of policy, management, law and ethics and leadership development are also advocated.<sup>2</sup> For public health professionals who are concerned with population health the IOM emphasises the need for their understanding of the Ecological Model of Health—a model that goes beyond biological risk factors that affect health and seeks to also understand the impact on health of environmental, social, and behavioral factors and the linkages and relationships among these multiple factors (or determinants) affecting health. Public health professionals according to IOM, need to be familiar with the theoretical underpinnings of the Ecological Model in order to

be able to develop research that further elucidates the pathways and interrelationships of the multiple determinants of health.<sup>8</sup> respective societal healthcare needs The current thinking in the field of health professions education has led to the redefining of the term curriculum, which in its traditional sense refers to the content of a course, to a broader more comprehensive definition to include how content is to be learned, the pedagogical approaches to be adopted, the resources and assessment methods to be used as well as the overall evaluation of its effectiveness. This necessitates the development of more rigorous and comprehensive conceptual frameworks to guide curriculum designers to approach their task critically, systematically, yet flexibly, in order to accommodate different educational contexts and to meet their respective societal healthcare needs.<sup>1</sup> The broadened definitions and the varied competency needs of the health professionals of the 21st century has led to preference being given to the competency-based framework for curricular development over the linear objectives oriented framework of Tyler. The Tylerian model is being criticized for its reductionism and over simplification. A third framework currently being used is outcomes-based. Advocates of the approach focus more on the philosophy, politics and organisation of education than on curriculum per se, with an emphasis on outcomes as opposed to the inputs to education.<sup>1</sup>

The debate on the need for health professionals' education reform is unfortunately centered in the western

countries with little contribution from countries like Pakistan where the need for such reform is several fold more urgent. The current situation of medical education in Pakistan is comparable on many counts to that of North America at the turn of the 20th century as described in the Flexner Report.<sup>9</sup> Proprietary institutions are sprouting all over the country, quality of faculty and availability of teaching and training resources is variable and research is near to nothing. There is non-critical adoption of the educational models of the West rather than their creative adaptation to address local needs and priorities and methods of instruction remain didactic, passively transferring knowledge and promoting rote learning. Health systems' needs are not a consideration in the development and prioritization of educational programmes and there is little or no robust evidence to guide these programmes. As mentioned earlier this needs to change and change urgently if Pakistan is to overcome the immense challenges it faces in the field of health. The numbers and quality of the health workforce is the lynch pin of an effectively functioning health system and Pakistan is facing a health workforce crisis as per the WHO report 2006.<sup>5</sup> The Lancet Commission's recommendations and WHO guidelines are available to guide the much needed Health Professionals Education reforms.<sup>2</sup> To conclude let there be no doubt that without addressing the health workforce numbers and quality issues, there can be little progress in enhancing the health of the people of Pakistan.

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