# Editorial

# **CURRICULUM INTEGRATION; A STRATEGY FOR BETTER PATIENT CARE**

Better patient care is the ultimate goal of any undergraduate medical education program. There is an ever increasing gap between public expectations and undergraduate medical education in our country. Growing awareness about patient rights has led to explicit public demands for a safe doctor who is accountable not only for his competence but also professionalism and good communication skills as well. On the other hand the traditional, discipline based curriculum being followed in majority of our medical colleges does not appear to be congruent with such societal needs. The end result is a product that fails to satisfy its consumer and faculty burn out.

The curriculum practically implemented in our medical colleges (with a few exceptions) has a sharp basic and clinical science divide. The 14 major disciplines (Anatomy, Physiology, Biochemistry, Behavioral sciences, Pharmacology, Pathology, Forensic Medicine, Community Medicine, Medicine, Surgery, Gynae/Obs, ENT, Ophthalmology and Pediatrics) that are examined during a five years course are most of the time being taught in isolation; leaving it to the students to integrate the diverse knowledge after graduation, when faced with the real task i.e diagnose and manage a patient. Moreover the compartmentalization of medical education into basic and clinical science disciplines does not prepare the graduates for the complex tasks they are expected to perform as doctors<sup>1</sup>.

Medical education is now considered a continuum from undergraduate to post graduate education and then continuing professional development. Concepts like systems based practice, practice based learning and professionalism, are being highly advocated to improve the safety and quality of patient care. These concepts call for a training that prepares a physician, who considers himself as a part of a larger health care delivery system<sup>2</sup>.

In order to achieve this we will have to move out of isolation and progress towards integration. Integrated teaching and learning activities are designed in a manner that allows knowledge and skills from different disciplines to be presented together in a meaningful way to the learner. These usually focus on patient problems and real life scenarios<sup>3</sup>. There are two common approaches to integration in medical education:

- Horizontal integration&
- Vertical integration

In horizontal integration there is integration among various disciplines taught in one year e.g. Anatomy, Physiology and Biochemistry for first year MBBS. Such courses can be organized on a body system basis<sup>4</sup>.

In vertical integration, there is integration of disciplines taught in different years with early clinical exposure. Such courses are usually organized in themes. It is generally agreed that learning complex tasks in an integrated manner, will allow students to transfer what they have learned to the real life situations more easily<sup>4</sup>.

Harden conceptualized integration as a ladder with 11 rungs, each representing a step towards more integration, starting from teaching in total isolation from each other to interdisciplinary and ultimately trans disciplinary level<sup>5</sup>. Currently, many of the medical colleges in our country that are following a traditional curriculum, stand at the isolation level; where faculty in one discipline is quite unaware of what the other disciplines are teaching. Moreover, in addition to integration of content it is also important to expose the students to an integrated context. Training in tertiary care referral centers with specialized units is more likely to develop a "disease-oriented approach". Therefore it is important to organize more frequent clinical experiences for students in community settings, ambulatory services, general practice, family medicine and primary care so that they develop a "patient-centered approach".

#### CURRICULUM INTEGRATION

Migration of large numbers of doctors across borders has given the concept of a globally safe doctor. International organizations such as World Federation for Medical Education (WFME) have responded to this phenomenon by developing global standards for medical education and advocating the need for international accreditation. WFME standards for educational programs include the following<sup>7,8</sup>

- Preparation for lifelong learning
- Inclusion of behavioral and social sciences and ethics
- Integration of curriculum content
- Definition of elective content
- Interface with complementary and alternative medicine
- Student participation in curriculum management
- Requirement for original and/or advanced research by students
- Definition of clinical placement time in major disciplines

Pakistan Medical & Dental council's recent directive, urging the medical institutions throughout the country to introduce integrated, modular system of teaching from 2016 is probably a response to WFME standards. This directive is likely to be the driving force that may push forward the long awaited curricular reforms, needed to improve the quality of medical education and in turn patient care in Pakistan. However, it demands a prompt, proactive response from the medical fraternity and administration, as developing and implementing a modular curriculum in such a short time period is indeed a challenging task.

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