## **EDITORIAL**

## IS THERE A NEED TO REFORM THE UNDERGRADUATE MEDICAL EDUCATIONAL SYSTEM IN PAKISTAN?

## Dr. Anila Jaleel

Professor and Head of Department of Biochemistry
Asstt Dean Basic Sciences, Fatima Memorial College of Medicine and Dentistry
Nur International University, Lahore, Pakistan

This is the most frequently asked questions by doctors. We were taught in traditional system of education. Are we not competent doctors? Doctors of our time are performing well internationally and nationally than why to change it? Yes there is no second opinion about it. Let's look at it in the perspective of the required competencies of the 21st century doctors, the standards of medical education and its control, the problems that the health care system is facing in developing country.

PM&DC has laid down the outcomes of the doctors as seven star doctors in its revised curriculum document of 2011.¹ The competencies defined for seven stars doctor are that they should be; Skillful, Knowledgeable, Community health promoter, Critical thinker, Professional and role model, Researcher, Leader (PMDC, MBBS draft 2010-11)

Curriculum is a dynamic process which responds to the changing needs of the society and country. Rapid changes and advancements are taking place in the biomedical sciences, educational psychology (particularly adult learning) and in the practice of medicine. The needs and demands of the community are changing. The questions of equity and cost of health care have become important which influences the practice of medicine and are important for medical education. The International Handbook gives a summary of the situation in 28 countries as it existed ten years back<sup>2,3</sup>.

The curriculum implemented currently is traditional curriculum in most of medical schools in Pakistan with the exception of few, which does not reflect the strategies to produce all the required outcomes for tomorrow's doctor and professionals. To keep pace with the current load of information in the field of medicine and to extract the relevant and contextual information, there is a need to transform the medical education system to keep pace with the changing needs of the time.<sup>4,5</sup>

Let's have a look on the health care condition of our country with no provision of simple basic need of safe drinking water. The health indicators are on the rise for e.g. infant and maternal mortality rate is highest in Pakistan compared to other Asian countries like India, Bangladesh and Sri-Lanka. Tuberculosis is common in Pakistan which where eradicated in other countries long time ago. Epidemics like polio and measles are still a dilemma in Pakistan which is also eradicated throughout the world <sup>6-7</sup>. Currently, preventive medicine is being practiced throughout the world, to lessen the cost of treatment burden on Governments, which is still not practiced mostly in Pakistan.

The global independent commission on education of health professionals for the 21st century has highlighted some major healthcare and educational issues. Persistent gaps and inequalities in health, new infections and viruses, environmental and behavioral risks are new challenges. Moreover fragmented, outdated and static curricula are producing ill-equipped graduates and professionals, who have failed to keep pace with current challenges.<sup>8</sup>

The challenge can be met by upgrading the standards of the educational institutes. The standards should be set keeping in mind our cultural and social issues. Focus on faculty development, effective feedback system; vertical and horizontal integration of subjects with community based curricula, incentives and funding for research to the institutes and inculcating the research methodologies in the undergraduate curriculum from first year will address some of the needs for Tomorrow's leading doctor.

Different models are in place for undergraduate medical education in various institutes of Pakistan. The integrated models are more applicable where one medical college is attached with one university and the teaching/learning, assessment (continuous and summative), evaluation and outcomes are measured and

being monitored by the university. The case based modular curricula with basic and clinical objectives built around the themes and professionalism, critical thinking, medical ethics and research in longitudinal themes may address the cognitive overload faced by the students of the 21st century. The assessment of the modules may include written assessment with case based MCQs starting from year one and increasing the difficulty of the same with more specialties added and assessed in the following years. Similarly OSCE stations at the end of module may include all the stations addressing the same theme and the different specialties. For e.g. theme of diabetes in endocrinology module may have 8 OSCE stations. a) structure of pancreas. b) hormones secreted from pancreas. c) Estimation of blood glucose by glucometer and interpretation of lab reports (including ABGs). d) significance of micro-albuminuria and HbA1c. e) prevention of diabetes in genetically susceptible individuals/ prevention of complications of diabetes. f) Counseling of diabetic patients regarding dietary modifications and complications. g) Management of diabetes or diabetic ketoacidosis (including writing the prescription).14 to 18 stations after each module will cover three to four themes and will provide objective assessment and holistic approach of the student (Knowledge, skills, attitude).

Moreover strict monitoring of basic standards of PMDC in medical colleges for imparting medical education, the emphasis on faculty training and continuous development, provision of adequate remuneration to the teachers, development of infrastructure to cater the student centered learning approach and licensure exam at the graduation to assess the competencies of the medical graduate of different medical colleges before allowing them to practice will increase the quality of medical education in Pakistan.

## **REFERENCES**

- 1. PM&DC curriculum draft 2011. Available on www.hec.gov.pk
- 2. Sajid AW, McGuire CH, Veach RM, et al. Editors. International Handbook of Medical Education. Westport, Connecticut. London, Greenwood Press, 1994
- 3. Jafarey NA. Integrated curriculum. JPMA 2001 (Editorial)
- 4. General Medical Council. Tomorrow's Doctor: Recommendations on undergraduate Medical Education. London, General Medical Council, 1993.
- 5. Genn JM. AMEE Medical Education Guide No. 23 (Part 2): Curriculum, environment, climate, quality and change in medical education a unifying perspective. Med Teach 2001; 23(5):445-54.
- 6. National Health Survey of Pakistan Health profile of people of Pakistan. Pakistan Medical Research Council Islamabad, 1994:176.
- 7. World Health Organization. Fact sheet.2003; Global strategy on Diet, Physical activity and health, Cardio vascular diseases Internet: www.who.int/hpr/gs.fs.cvds.shtml
- 8. Hafizullah M, Wajid G. Vision to promote health professions education in Pakistan. Adv Health Prof Educ 2015;1(1):1-3.