Editorial

Role of Level-IV Post-graduation in Basic Sciences in Research Development and Quality Improvement of Graduate Medical Education in Pakistan

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Medical education has undergone evolutionary and dynamic changes. More emphasis is on curricula to be spirally integrated, learner centered, community oriented and competency-based. The goal remains to provide best evidence-based and patient-centered personalized care. Integration of preclinical and clinical disciplines remains the key to achieve this goal. Thus the role of basic medical science teachers has also evolved to accomplish the required outcome.[1] A detailed knowledge of clinically oriented basic medical sciences is a prerequisite to inculcate the lifelong critical thinking and problem-solving skills in healthcare professionals, acquisition of clinical competence, diagnostic accuracy and selection of most appropriate evidence-based management according to patients' needs.[2] To face the dynamic curricular needs, there are growing challenges to the quality of basic medical education in the country. These include lack of motivated and trained basic science faculty, acquisition of teaching skills according to modern day requirements, stepwise clinical integration, barriers in pursuing undergraduate and postgraduate research, limited access to well-maintained data registries and research software in basic sciences.[3,4] As per global consensus, competency-based learning in basic medical sciences is essential in present century's clinical practice and the ability to apply basic medical science concepts to clinical practice is an essential and relevant indicator of educational outcomes in medical institutions.[5]

Level IV training programs in basic medical sciences provide in-depth knowledge of subjects specially Anatomy, Physiology and Pathology enhancing the understanding of specific medical concepts and their application in relevant clinical practice. Pursuing level IV qualification enables a deeper understanding of complex clinically-oriented basic scientific knowledge, enabling teachers to provide comprehensive instruction preparing their students to face challenges in clinical years and future practice with confidence. Level IV qualifications equip educators with innovative teaching skills and boost confidence in their capabilities to perform in a leadership role. [6] Teachers with advanced qualifications inspire students for interest in basic sciences and motivate them for relevant research. Furthermore, they can cater to diverse learning needs and emphasize evidence-based medicine ultimately improving healthcare community services. These programs may foster collaboration and networking among researchers, health professionals, and scientists, thus fostering interdisciplinary and interprofessional facilitation. Experienced faculty members effectively mentor students, inculcate critical thinking, help them develop research projects, publish articles, and participate in scientific conferences and seminars, thereby polishing their academic skills and research potential.[7]

During progression from traditional to integrated curriculum in Pakistan, challenges at faculty level include academic credibility, teaching and managerial skills/leadership roles.[8] Hence level IV post-graduate training programs in basic medical sciences may enhance the quality of medical education, promote innovation in research and improve healthcare outcomes. There remains a dire need to encourage these programs in basic medical sciences to cope with the emerging challenges of modern-day evidence-based interdisciplinary and interprofessional approach to patient care. Level IV programs in basic medical sciences will help in faculty build up and training to implement the integrated curricula in medical education in its real essence in the country.

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