Faculty Development: A Big Contributor in Medical Education and Clinical Training.

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To grow institutions, competent faculty is required. Growth of competent faculty needs continuous training of faculty in new teaching methods, innovations in medical education and research and various faculty development activities. [1] In 1996, there were only 7 institutions offering master level degrees in health professions education in the world. This number increased to 76 in 2010. This explains the importance of faculty development in institutional growth. [2]

The team approach has changed the teaching dynamics opening the doors to faculty training. Faculty transfers knowledge, skills and attitudes to students. Each component requires different techniques and these requirements provide faculty development opportunities.[3] There is difference between what teachers perceive as effective teaching and what students perceive as effective teaching. Methods of feedback are different for students and teachers, while both are important. Effective feedback is essential for growth of students and faculty. With evolving healthcare dynamics and new teaching methods, faculty development is required in effective feedback techniques. Teachers should be able to develop their own learning activities with self-reflection, student evaluation and peer feedback. [4]

Last few decades has seen changes in healthcare because of various new developments, such as technological advancements , computers and new medications . [5-9] There has been various new publications related to medical research and this fast pace has influenced changes in healthcare delivery systems.[10] These changes have indirectly led to the discussions about how the medical subjects are taught in medical schools and later during training programs. [11] As a result, we have seen changes in the medical curriculum in various institutions. There has been a paradigm shift from traditional curriculum to integrated curriculum.[12]

Looking at the big picture, the paradigm shift is noticed at both pre-clinical and clinical teaching in undergraduate years and also in post-graduate years.[13] The paradigm has also shifted in post-graduate clinical training programs with introduction of various new sub-specialties.[14] There are generalists and specialists in various fields and this change has given more options to patients.[15,16,17] Medical research has also expanded exponentially with development of new medications and new surgical procedures leading to changes in medical practice.[18-21]

With growth of institutions comes the responsibility of staff development and continuous training. [22]There is also need of continuous quality assurance to keep up the good work. [21] Each and every step starting from the first year of medical school needs competent faculty. Automatically, there is a need of faculty development at all these levels. [23,24]

As the medical curriculum changes from traditional to integrated, it is associated with changes in methods of teaching.[25] Besides traditional lectures in pre-clinical years of undergraduate medical education, we see addition of self-directed learning, problem-based learning and team based learning.[26-28] Medical students not only learn through lectures; they also learn by observations, hands on training, shadowing, peer presentations and discussions as well as audio-visual tools, just to mention a few. [29-31] When these students reach the clinical years of their undergraduate education, they start seeing things differently. With more student engagement in their education and training, there is a natural spike in the interest for research. [32,33] This can bring improvement in patient care. [34,35]

With developments in integrated curricula in medical education, there is active student involvement as various curricula are student centered. The increase in student engagement influences changes in the role of faculty from delivering lectures to being facilitators. [26-28] Similarly, assessment and program evaluation methods also change emphasizing the need for faculty development opportunities.

This adult learning is full of treasures of opportunities in learning about clinical patient care, teaching, research, administration, healthcare delivery systems and leadership.[22,25,36-40]Faculty needs are also different depending upon clinical departments, such as medicine, surgery, radiology, cardiology, emergency and trauma. Each clinical setting has its own teaching,

research and administrative challenges, which adds to the diversity in faculty development.[41,42] Universities and institutions emphasize evidence based practice which can be a challenge for faculty in clinical departments where very quick decision making is required, such as Emergency department, Cardiology and Trauma. Advanced healthcare systems in United States and Europe have allocated resources for faculty development in these fast-paced settings also.[43,44] In hospital settings, there is more emphasis on multidisciplinary evidence based practice.[45] Development of new courses, needs assessment, curriculum development, collaboration between departments, assessment and evaluation all need training of faculty. [26] Simple things as Recall questions and Predict questions need faculty to understand the importance and implications of these concepts. These basics define objectives of courses, seminars, tutorials, lectures and various other teaching methods.[46]

I am old Rawalian and studied traditional curriculum. Recently, with the upgradation of the institution to Rawalpindi Medical University, I envision needs for various new departments and also expand the scope of existing departments for my Alma Mater. In every area of teacher-student interactions and faculty-trainee interactions, there are separate defined roles both for teachers and students. They require the faculty to be well-equipped with effective teaching and feedback techniques in these situations. There are definitely more opportunities for research which require resource allocation and training of faculty. In the last few years, there has been introduction of Problem-Based Learning in pre-clinical years of undergraduate medical education and now the transition to integrated curriculum has taken place formally leading to faculty development opportunities to facilitate student centered curriculum. The opportunities are also in clinical settings, various patient care settings in diagnoses, therapies, surgeries and procedures, role of administration and nursing in various settings and roles of higher leadership and decision makers. All these aspects have a research angle starting from data collection leading to interpretation of that data with the ultimate goal of these basic statistics directing necessary resources allocation and management. This not only helps the decision makers and administration, but also improves patient care.

During the last few years, I had the opportunity to participate in international scientific conferences at RMC as an international faculty. This is a big achievement of my Alma Mater. Prof. Muhammad Umar and his respectable colleagues have done an excellent job in organizing these conferences. I participated in student mentorship, small talks, interactive sessions and workshops. All these activities provided continuous needs assessment for faculty development in these changing times for our Alma Mater. An important aspect I have noticed is the importance of bridging the gap between Western research in medicine and its applications in Pakistan. There are different challenges in student life and faculty life. There are challenges in patient care, availability of resources, teaching, research and administration of these processes. Dissection of these challenges in a scientific manner leads to excellent research opportunities. Research articles in journals are the best source of EBM; leading to EB healthcare and EB culture in the institution.[47] In essence, effective faculty development is the backbone for institutional development.

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