

EVOLVING MEDICAL AND DENTAL EDUCATION SYSTEM IN PAKISTAN

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ABSTRACT

Medical science is the backbone for treatment and the foundation for understanding human diseases. Standardization and organization of medical and dental education is required to accomplish goals towards achieving excellence in professional practice. The aim of this publication is to explore the current status of educational system in medicine and dentistry in Pakistan and possible channels for improvement. Medical and dental educational system for undergraduate as well as postgraduate level must comprise of continuing professional developmental sessions both for students and teachers. There is also a concomitant need of well discerned educational system which helps to manage trainee's induction, their curriculum assessment, and examination process. In addition, activities such as keeping the entire medical and dental education system under continuous circle of evaluation in the form of feedback and effective communication are essential at periodic academic stages. An interactive session at multiple levels and its valid quantified evaluation is constantly required to assess the progress of ongoing educational system. A well oriented process of decision making involving syllabus, professional annual examinations, re-certification examinations and licensure requirements must be comprehensively established.

Keywords: Academic; Curriculum; Dentistry; Postgraduate study

INTRODUCTION

The continuous worldwide advancement of medical and dental educational systems resulted in improved quality and greater benefits to the community. To match the global level of education and its upcoming challenges there is an absolute need to reinforce rapid educational organizational strategies in our system as well¹⁻³. Both medical and dental educational curriculums are required to maintain the professional standards, skills and evolution; so that students utilize more ardently and provide services more efficiently to both their patients and the profession³⁻⁵. This is meant to be an aspect of lifelong comprehensive learning carrying both basic and advance components for either personal or professional reasons. Considering the educational systems in Pakistan, the current syllabi are pretty similar at undergraduate and post graduate level. There is no marked difference regarding recommended books and subjects. Things are not stratified upon post graduate priority. Everything is summoned under a single heading. There is a

need of separately enumerating the topics which are covered under one specialty and their relevance to clinical practice. In additions, the academic curriculums are not reviewed for modifications or advancements on regular basis, hence not updated according to the global standards. There is intense need of continued curriculum assessment to be integrated in the education system.

The induction of a trainee in specialty should be assessed on the basis of their proficiency and interest in the required field. The interest of the candidate must be assessed on the basis of skills and long term commitments⁴⁻⁶. There should be a structured integrated selection procedure and criteria at every academic and professional level. The interest in continuous professional development courses must be assessed during candidate's induction. The introductory professional program before specialty training should be included to prepare the candidate for the insight knowledge of specialty in terms of patient treatment protocols and management. This is required essentially because during undergraduate level the detail of few subjects are delivered at a superficial level and there is lack of clinical or practical exposure in these subjects. The main objective of this review is to explore the current status of educational system

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in medicine and dentistry in Pakistan and possible channels for improvement. In addition, recent developments in healthcare education and projected impact have been discussed.

Global Standardization for Medical and Dental Education

In medical and dental education systems, standardization provides efficient means to integrate advance professional education into the ongoing educational system. The educational process and its core effectiveness are periodically examined upon the feedback provided by both the students and the teachers. Following are the staged standardization components which need to be assessed¹⁻³.

Assessment upon licensure at every professional stage.

Modernization through annual certification or recertification process.

Continuing advanced professional development sessions.

Professional clinical Practice evaluation based on standards.

Interactions and assessment through an effective feedback.

Constant monitoring of clinical professional development

Comparative Assessment and Global Standardization in Developing Countries

Professional education requires uniform advance standardization through primary to postgraduate professional studies. There is an essential need of comprehensive strategic staged evaluation for professional medical and dental educational systems regardless of the study level. The role of continuous professional development is very obvious. Optimization of basic licensure and recertification steps are essential for every institution and need to be enforced (Figure-1).

Comprehensive assessment through informative means is required to effectively check professional competency of both trainees and trainers. Timely evaluation, comparison and assessment through continuous upgrading at various professional educational levels are required¹⁻³.

The practical implementation of above mentioned elements are challenging particular at postgraduate levels. During postgraduate education, there is a less chance for students to provide their assessment or feedback on syllabi or curricula particularly if students are overloaded with clinical or practical sessions or managerial responsibilities. No evidence could be found from the published literature that there is any assessment on annual basis for any specific specialty. How the postgraduate education can be upgraded without assessing the current educational system on regular basis? It seems to put more serious consequences in the near future. As a result, there is an increased burden towards examination preparation and decreased competency of trainees and their educational performance⁴.

The communication gap among health educationists and student can be another serious issue. For example, for effective interlinking between the learner and the tutor, the feedback (to each other) and continuous communication play a vital role. This helps in recognizing and identifying problems together and will result in changes in the training and trainee's development plan. Educational assessment both at undergraduate and postgraduate levels with its valid proof evaluation is required to assess the required progress. Uniform guidelines followed globally are required to be set so that analysis of educational system can be made from both student and teacher perspectives. This can also exhibit balanced and quantified valuable productive results on our professional practice.

Role of Feedback

Feedback helps to convert both medical and dental education system into a more productive and logical system. There are currently no supportive steps in this regard. There is a minimum chance of interaction between a trainee, a teacher and the decision making professional standardization bodies¹⁻⁴. Feedback can be obtained in both documented and electronic format. There is a need to evaluate feedback exclusively as an ongoing process. The comprehensive learning stages

through licensure, verification, data accountability must be assessed⁶⁻⁸. Any change in professional performance through these means favor the exuberant recognized effort in terms of both supervision and professional learning. Both teachers and students must share benefits equally which include comprehensive understanding of required curriculum with evidence based practice⁶⁻⁹. Medical and dental educational policy must also carry both basic and advance educational development plans. Planned and strategic contributory data is required to be evaluated in different steps in order to check its timely progress. During the four years of undergraduate training and 4 years of post-graduate training there is no specific format or platform where students are given the chance to give feedback about the trainers. The feedback given by trainers is revealed during the examination and usually is exhibited in the grades the students are granted.

Personal Development Plans

The priority should be to make the student aware of their own needs. There is no such plan or program currently in both medical and dental education system which helps the professionals to recognize their learning needs and then building the personal development plan reflecting their learning needs. The students need to take the ownership of their learning. They are stuffed with multiple problems related to their lengthy written assignments, examinations, and scheduled time table of their clinical duties. All are constantly damaging their clinical practice, their interactions amongst themselves and with their patients as well. Problem handling and solving strategies must be formulated with the help of interactive sessions^{10,11}. Effective time management must be taught at all professional levels in order to train them to deal with the tense situations without exhausting their mental capabilities.

Professional Competency; A Track Role

Competency acquisition in both medical and dental education is explained to be as ‘the educational system which is being quantified, evaluated and appreciated. Altogether it has an

ability to define a specific role of every individual’. This not only means the advance combination of knowledge, skills but rather both behavioral and psychological upsurge and later its ability to utilize and improve its relevant professional attribute at multiple levels in both medical and dental education system. With wide range of learning activities including continued educational development programs and professional training are essential to develop professional standards (Figure-2,3). In addition, the proficient knowledge and skills throughout the learning career of a trainee can be improved significantly.

Factors Affecting Medical and Dental Education

Education is a life-long learning process. There are numerous factors that can affect this

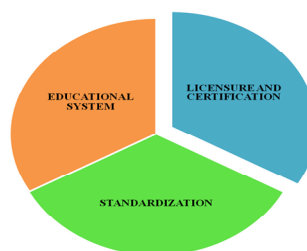


Figure-1: Integration among different processes for professional education.

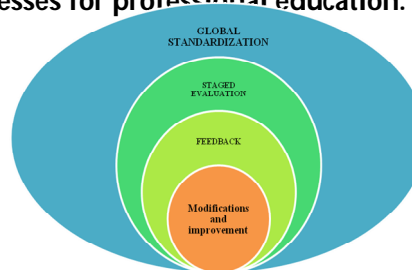


Figure-2: Interlinked chain in professional educational system.

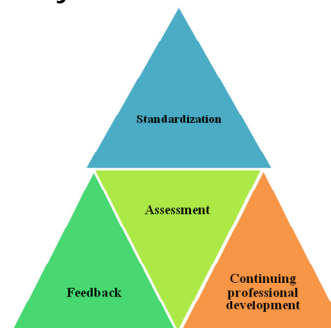


Figure-3: Components of pyramid of competency in educational system.

process generally. These may include one or more of the following^{5,7,11};

- Lack of competency in the subject matters in contrast to the instructor.
- Authority organization and their own interpretations.
- Fear of being an inferior or embarrassed.
- Anxious study behaviors.
- Bad educational experience in the past.
- Coming with multiple problems in mind; unable to focus.
- Interests and focused on other priorities.
- Personal barriers or biases about the education due to own self beliefs.
- Learner has culturally based inhibitions to discuss or learn about the topic.

CONCLUSIONS AND RECOMMENDATIONS

A well-organized educational plan for each institution will let them to train their professionals, and evaluate their exponential educational outcome. Identifying the clinical fundamental deficiencies can be helpful in establishing an educational reform and continual development.

Continuous educational sessions, feedback process and curriculum management should be mandatorily checked during the postgraduate training years and these should form the foundation of trainee's career progression.

Tutors should understand that training years are a gateway for the trainees to enter their profession. A sense of confidence and responsibility is felt while trainees are given a chance to provide feedback. During the postgraduate training, problem solving and brain storming should be done by the trainee with trainer's guidance which will result in their confidence boosting. The educational system should provide the space for the development of trainee and trainer.

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