Admission Procedure as Predictor of Performance in Medical Colleges

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In Pakistan medicine is one of the most sought after profession. Admission to medical college is highly competitive like in other parts of the world. For the past several years, the selection procedure was entirely based on a high score or percentage in science subjects of high school leaving examination (HSC) of Pakistani system and/or A Level (British) system of education. Recently most medical colleges, in addition, consider entrance examination score mostly in subjects of Biology, Physics, Chemistry and English. Very few medical colleges have reported admission interviews as a basis of admitting students for medical studies. The regulatory body Pakistan Medical and Dental Council (PMDC) admission guidelines too, does not include interviews, however weightage to entrance test has been added in addition to SSC (9th and 10th grades) and HSC (11th and 12th) orA Level[1].

In Pakistan the studies by Huda et a! and Baig[2,3]. found no significant relationship between the overall scores for selection with the performance in professional examinations. However, significant correlation was found between 1st, 2nd and 3rd MBBS professional examination. In both studies applicants presented with SSC, HSC, entrance test scores and in addition Huda and her colleagues reported interview scores. In another study Rahber and colleagues[4] compared student population entering medical school with backgrounds of Pakistani education system (HSC), British (A-Level) and a combination of both Pakistani and British with performances in medical college examinations in various years. Results revealed significant difference in performance in Physiology and Community Health Sciences of students with UK system in comparison to other two systems, although the top 1-2% of students coming from Pakistani system were accepted.

In the UK as early as 1982, little evidence was found pertaining to high A level grades indicating an increased likelihood of success at a preclinical or clinical course or an increased competence or ability in actual practice of medicine[5]. International studies have shown that admission tests comprising of science subjects predict students performance only in the pre clinical years. However, if the test includes reading skills it would be a better indicator of later physician competence[6].

What should constitute medical college admission procedures? This is an issue which continues to inspire interest worldwide in medical educators, researchers and administrators. The need is first to defme our desired end product, the 'good' doctor not forgetting the growing challenges of the new millennium and community expectations. Boelen[7] made an attempt by describing Five Star Doctor which includes characteristics not only of a care provider, but a decision-maker, communicator, community leader and manager. Undoubtedly assessment of personal characteristics is gaining more prominence in literature, in addition to academic achievements, when selecting for a medical career. Time and again the need to evaluate personal characteristics during the admission process has been stressed by many, but there appears to be no reliable way of doing this. A traditional interview probably does not enhance the ability to predict performance in medical school and beyond. Although structured interviews have better validity and reliability, very few institutions have reported successful correlation either with clinical or preclinical years after adding a lot of cost on interviewers' training and following its outcome. In Pakistan, only two medical colleges report using interviews for personal qualities assessments. Others use interviews largely for information gathering and verification of applicant's data.

WhiIe defming the selection criteria, we cannot ignore the movement for change in medical education which has gained momentum worldwide for over two decades. Change is now not only focussed on

what should be learnt but why, how and where should medical students learn. Literature reports that selection procedure entirely based on a high academic score did not assess an applicant's learning skills or ability to succeed in the new style of curriculum. This is supported by recommendations of Committees constituted by various governments worldwide, national and international Conferences, accrediting bodies including the General Medical Council[8,9].

There is no denial that academic standards for entry to school should be maintained and personality characteristics be given appropriate priority in the selection process. However introducing entrance test may not necessarily lead to better selection. There is evidence that students aspiring for admission, undertake preparatory classes to secure the score accepted for entry. For developing countries such as Pakistan, preparatory classes have lead to increased financial burden on students. This again finds the elitist group at an advantage for securing admission in medical schools.

Further evidence is needed to help mount our cases for introducing or contemplating changes to selection. We do not need to retract but need to understand that there is growing evidence, that relying only on one criteria does not yield the desired result. Further studies need to be conducted to ascertain how and which non-cognitive. characteristics influence medical student performance in a medical school curriculum. Many medical schools now have reported using criteria such as motivation, communication skills, problem-solving ability and empathy in addition to an academic score. We need to find evidence of such or other criteria in our medical education.

Changing selection criteria alone is not the solution for producing the "desired doctor." Institutions assuming responsibility for medical education have a major responsibility that is creating an environment, conducive for learning. This includes encouragement to gain good study habits early in the course. Opportunities should be made available for students to become self-directed learner rather than rote learners. Institutions must realize that times have changed and continue to change at an accelerated pace.

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