EDITORIAL

# HOW DO WE SELECT THE DOCTORS OF TOMORROW ?

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How do we select the doctors of tomorrow? That is a question that should be posed to the education system of Pakistan. Currently, the selection criteria for medical students in Pakistan rely majorly on the entrance exams conducted by the university under which the medical college falls. Government medical colleges under the UHS rely on the MCAT as the sole determinant along with past secondary exam scores as admission criteria. While private medical colleges affiliated with the UHS or otherwise may have an additional entry exam of their own for admission. These are seldom followed by comprehensive interviews or personality tests that assess whether the students have an eagerness to pursue scientific research or further work in their respective fields. The question that this editorial poses is whether the current system of entrance exams actually provides a good predictor or insight into the future professional performance of its students and whether these students actually go on to make a mark and contribute to their medical profession as both a skill and a constantly evolving science via research.

The unfortunate answer to that question, as recent studies have shown, seems to be a resounding no. In fact, some studies have even gone on to predict a negative correlation between research output, scientific discoveries and CGPA. In a survey of 1320 scientists in Croatia, there was a negative correlation between GPA in undergraduate degrees and research and innovation output in later years.[1] These days a lot of research is going into finding the right balance between assessing an aptitude and attitude towards medical research as well as medicine as a profession for aspiring undergraduates. And such a search has been going on for a long time.[2,3] Recently, the importance of the interview of medical students has been emphasized. A research done in Australia showed that there was a marked increase in gender bias in a university when the interview process was removed. [4]However, one thing seems to be certain is that the current system that our country employs for selecting medical students has largely failed to translate into significant research output and interest over the past few years.[5] In the USA, there is a very high importance given to extracurricular activities in the field of medicine such as clinical electives and researches that improve international students' chances of getting postgraduate residencies. Especially when competitive fields are taken into account, one's research experience is perhaps the only discerning feature among high test scores.[6] A study in which 15 program directors of the Integrated Model of Plastic Surgery programs accredited by the Residency Review Committee for Plastic Surgery of the Accreditation Council on Graduate Medical Education were asked to highlight the most important qualities they look for in their prospective students. They chose leadership qualities and a love for academics to be equally important when compared with test scores and GPAs.[7] Pakistan however, falls quite behind in such selection criteria as even simple interview conduction has not been completely implemented, let alone search for research interest, academic grit, resilience, personality assessment or leadership qualities.And without an interest in pursuing research, these students often fall behind when looking out for major discoveries and recent advances during their practice which may change their medical profession greatly. In short they would simply fall behind, and do.

There is also a higher incidence of burnouts, sleeping difficulties, depression, anxiety and suicide in both undergraduate students and professionals.[8-10]Perhaps such cases could be reduced by simply analyzing the personalities and actual interests that these people show in their undergraduate years to assess whether they would be vulnerable to such stressors or not. One study showed how an interview properly conducted could be able to predict and prevent psychological problems in vulnerable students.[11]

So why do we continue to persist with boasting high GPAs and MCAT scores and even in fact advertise them to run our colleges and universities. There is no alarm over the fact that without medical research skills, our crop of doctors may not be able to adapt and evolve in this constantly changing and developing science that is and always has been fueled by medical research. Although no such device exists that can see inside a student's mind as to what they might achieve, and this author would gladly await such an invention, but what needs to be done is to humbly accept that a system of scores and fact biopsies may not be enough to groom a future pioneer in the field of medicine. The MCAT and FSC system has been changing continuously over the past few years in its syllabi and scorings but surely one needs to see that there is only so much a score on a sheet can prove. We need to employ methods to assure

academic grit, resilience, love and passion for science, discovery and innovation and most importantly the will to persevere in our future doctors. We need to see that these doctors want to take part in the constant revolution of medicine and for that we need to make sure these doctors are going to embrace the art of research.

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