Selection Process for Medicine – Time for Rethinking about Entrance Tests

Praveenlal Kuttichiraa, Kalyanikuttyb

a. Government Medical College, Mulangunnathukavu, Thrissur, Kerala b.Department of Physiology, Government Medical College, Alappuzha*

ABSTRACT

Published on 30th December 2011

Background: The best method of selection to any education course should address balancing the students' potential, society's need and social justice. Method of selection to medical profession in India has not been scientifically evaluated till date. The present study is an attempt in that direction.

Methodology: Information gathered from all undergraduate students of three consecutive batches and Post Graduate students of Government Medical College, Trissur, about the number of attempts and the entrance coaching they underwent. The results were tabulated.

Observations: All those who could get admission to undergraduate or post graduate medicine courses had undergone specific entrance oriented coaching. Only less than one third could get admission in their first attempt and the number of repeaters getting admission showed an upward trend.

Conclusions: It was the ability to approach entrance tests, rather than the training during the qualifying course, which determines the admission to courses in medicine. The repeaters gaining admission, is leading to loss of manpower. This is important as the loss is in the prime period of a brilliant group. Giving weightage for the performance in the qualifying examination along with the entrance rank is suggested. Entrance oriented coaching can be included in the routine curricula. These two measures can minimize the negative impact.

Keywords: Medical Education, Selection process, Entrance Examination, Qualifying Examination

INTRODUCTION

"The practice of Medicine is an art, not a trade; a calling, not a business; a calling in which your heart will be exercised equally with your head. Often the best part of your work will have nothing to do with potions and powders, but with the exercise of an influence of the strong upon the weak, of the righteous upon the wicked, of the wise upon the foolish". — William Osler

Effective student selection is important in any higher education system, because the quality of students affects the quality and internal efficiency of the educational programs offered. Opportunities for study can be allocated to those who are most likely to benefit academically, if selection criteria have good predictive validity. Students perform best when they follow courses of study that match their abilities and interests. Selection and admission processes are often thought to be inefficient and biased in favour of particular social, ethnic and geographic groups. Students belonging to social and economically backward sectors often lack

appropriate academic preparation for tertiary study.

There is widespread agreement that selection of future doctors should be on a wider criteria than scores of academic success. In practice many medical schools have valued pre-admission academic scores at the expense of other considerations. Getting the right policy of admission to medical school is a balancing act: be fair to society, by choosing people with the potential to become good doctors and be fair to the applicants. Although mounting criticism and concern are expressed over the manner of selection of medical students, the statuesque continues. Selection is not an exact science but the evidence for best practice is to be searched and practiced. There is room for experiment in methods of selection.

Medical education in India is controlled and monitored by the Medical Council of India (MCI). Selection based on a one time OMR based entrance test is the current practice in India. This system is not evaluated till date. This study is an attempt in that direction.

Corresponding Author:

Dr. Praveenlal Kuttichira, MBBS, DPM, MD, Dip. NB Principal, Government Medical College, Mulangunnathukavu, Trissur, Kerala. Mobile: 9895647935. E-mail: imaksb@yahoo.co.in

^{*}See End Note for complete author details

AIMS AND OBJECTIVES

Objective of the study was to assess the need for undergoing specific entrance coaching to secure admission to Medical colleges.

METHODOLOGY

All the students of three Under Graduate batches belonging to 2005-06, 2006-07, 2007-08 and all PG students of year 2008 admission batch were approached for information regarding the coaching they underwent and the attempts they made, to secure these at. The information received was tabulated and analyzed. No statistical methods were used.

OBSERVATIONS AND RESULTS

In the 2005-2006 batch, one student could secure admission to Medical College, Trissur without undergoing the entrance coaching. In the subsequent years there were none who could secure admission without undergoing special coaching. Progressively more and more students required repeated coaching and repeated attempts to secure admission, in comparison with the figures of previous years. The proportion of first chance entrants showed a decreasing trend from 29% to 20%. The figures for 2nd attempters were in the reverse, i.e., from 67% to 75%. The figures for 3 and more attempters showed inconsistent directions through years, but the numbers were too small to make any conclusions [Table 1].

Among Postgraduate students, who got admission through entrance test, none could secure a seat without undergoing a special coaching program. No attempt was made to search the trend through years as the PG seats of previous years were limited to 2 departments only and the number was a single digit figure.

Table 1. Distribution of attempts						
Batch		No of stu- dents	Number of attempts			NA*
	Year		1	2	3 and above	
1	2005-06	100	29 [29%]**	67 [67%]	4 [4%]	
2	2006-07	150	34	97	19	
			[22.67%]	[64.67%]	[12.7%]	
3	2007-08	150	30 [20%]	113 [75.3%]	7 [4.7%]	
4	PG	45	3 [6.7%]	18 [40%]	11 [24.2%]	13 [28.9%]

^{*} Candidates from service. Selection based on seniority only.

DISCUSSION

The selection of students for a medical school is an important duty which demands and should receive time and thought from medical school authorities both in planning and arranging. A proper selection will weed out the failures in the early part of the course,² which will avoid wastage of resources.

Almost no student selected for MBBS course could secure a seat without undergoing an entrance oriented extra coaching. Only less than one third could get admission at the first attempt. In other words, only very few could get admission immediately after their 'Plus two' course, with out losing year. The proportion of first chance entrants are thus decreasing. More than two-thirds of those who could secure admission had to attempt repeatedly, there by losing years after passing the qualifying examination. The percentage of repeaters showed a rising trend. A similar trend was observed for selection to the Post Graduate Courses also.

It appeared that, the skill in securing marks in Objective Multiple Response type questions was the determining factor for securing admission for medical course rather than the knowledge and skill received during the study period of the qualifying course. Waiting for years after passing the qualifying examination to secure admissions in medical colleges, amounts to wastage of human years during the prime period, especially of a group of academically brilliant students.

The observation that there was need for undergoing special entrance coaching for securing admission to Medical Colleges was true for the Post Graduate courses also, which convert a doctor to a specialist. Undue importance given to entrance coaching undermines the practical training period during internship, which closely follows the end of the course. During the period of internship, students concentrate on entrance oriented coaching at the expense of, hands-on training of skills under supervision.

A major reform to the rules, related to the selection process to Medical Colleges seems to be an urgent requirement. For the selection to the Undergraduate courses, marks secured in the qualifying examination also have to be considered with reasonable weight age along with the performances in the entrance tests. The course curriculum needs modification, to incorporate the experience in dealing with the OMR type questions and answering them.

^{**} One student didn't attend any coaching class.

There are recognized drawbacks to the use of school examination performance even as a measure of intellectual competence. Some 'would be medical students' focus on sciences for their school leaving exams because high marks are more easily achieved in physical sciences than in humanities. The conviction that only exam results give valid and reliable data has been dismissed as a "seductive but fallacious" belief in the precision of quantitative tests.

In any doctor, some characteristics are essentially demanded. To be a good doctor, one requires skills and personal qualities in addition to the academic achievements. 3 Enough intellectual ability to do the job, honesty, integrity and conscientiousness must be at the heart of good practice. Helpfulness and willingness to cooperate come close behind, while patients give high priority to inter personal skills and empathy. The personal welfare of the profession is another consideration. The ability to deal with stress also has to be considered.

"The purpose of admission procedures is to select students who will complete the educational program and go into professional careers, do well in the program, perform creditably in professional practice and possess the trace of character and ethical values desired of a professional person".4 To achieve this, the admission process should include assessment of both cognitive and non cognitive characteristics of applicants. All selection instruments depend on subjective judgments and each must be accountable to the rules of reason, fairness and public scrutiny. However, if only cognitive criteria are considered, a legitimate concern is that many specialties of medicine need diverse skills that should not be too narrow. If non cognitive characteristics are included, the reliability is to be ensured and it has to predict personal character over years of practice. Selection criteria should include desirable personal qualities, measured by reliable and valid methods.5On going research is needed to find more reliable and valid ways in assessing non-cognitive characteristics of the applicants.6 A reliable pre- interview non-cognitive measure would relax dependence upon screening based entirely on cognitive tendencies.7

In addition to assessing intellectual and personal attributes of candidates, the selection policy must be

able to "assure the potential applicant, the consumer and government agencies that the admission process is rational".

Perhaps there is a long way to go before addressing the above factors and finding a full proof system.

END NOTE

Author Information

- Dr. PraveenlalKuttichira, MBBS, DPM, MD, Dip. NB Principal, Government Medical College, Mulangunnathukavu, Thrissur, Kerala
- Dr. Kalyanikutty, MBBS, MD, Professor, Department of Physiology, Government Medical College, Alappuzha

Conflict of Interest: None declared

Acknowledgement

Our acknowledgement is due to both the undergraduate and postgraduate students for their co-operation and to Mr. Humayoon Kabeer, Senior Grade Librarian for gathering references and editing the article.

Cite this article as: Praveenlal Kuttichira, Kalyanikutty. Selection Process for Medicine – Time for Rethinking about Entrance Tests. Kerala Medical Journal. 2011 Dec 30;4(4):124-126

REFERENCES

- Campbell EF, Rank BK, Sinclair. AJM. Selection of medical students- a burning question. Med. J Aust.1974.1,755-758
- Smyth DH. Some Principles in Selection of Medical Students. Br Med J. 1946 Sep 14;2(4471):357–67.
- 3. Best.J. The Politics of sand-pit. Med J Aust 1989.150, 158-61
- Nayer M. Admission criteria for entrance for Physiotherapy School: How to choose among many applicants. Physiotherapy Canada, 1992;44: 41-46
- David A Powis. Selecting medical students [Editorial]. MJA.1886, 17 March 2008.
- Salvatori P. Reliability and Validity of Admissions Tools Used to Select Students for the Health Professions. Adv Health Sci Educ Theory Pract. 2001 May;6(2):159–75.
- Dore KL, Hanson M, Reiter HI, Blanchard M, Deeth K, Eva KW. Medical school admissions: enhancing the reliability and validity of an autobiographical screening tool. Acad Med. 2006 Oct;81(10 Suppl):S70–3.