Original Research Article

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Career choices of the first year students of Madha Medical College

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ABSTRACT

Background: It is not very clear about the factors that influence the career choices of the undergraduate medical students. Experiences in the college during their curriculum are the strong determinants in developing an attitude to different subjects and attitude plays a very important role in choosing the speciality. This study is sought to find out the career choices of the first year medical students and what influenced them to take up that particular career

Methods: A cross sectional questionnaire based study was conducted in the first semester students of the Madha Medical College. The questionnaire was designed to find out the first choice of speciality, awareness of various subjects taught in a medical college, location preferences, and reasons influencing the preference, education level and occupation of their parents.

Results: Out of a total of 150 students 141 (94%) were present on that day who had completed the questionnaire successfully. The mean age of the students was 17.8±0.6 (min=17, max=20). About 54% of the students were females and the rest 46% were males. The students belonging to urban area were 67% and that of rural area were 33%. The reasons quoted by the students for joining the MBBS course were personal interest 82%, parent's interest 18%. None of the students could correctly answer the number of subjects taught in a medical college during the course. About half of the students did not know the duration of a specialization course after MBBS. The students interested to do specialization were 97% and interested to do IAS, or IPS were 2%. The most preferred career choices among the students were clinical subjects (71%), of which General Medicine and obstetrics & gynecology topped the list, followed by surgery and paediatrics; 24% chose pre-clinical subjects and anatomy was the most favoured, followed by physiology and the least preferred was biochemistry; only 2% were interested in paraclinical subjects of which community medicine, pharmacology and forensic medicine shared equal status but none of them wanted to specialize in pathology and microbiology. Personal interest was rated among 81% of the students in influencing their choice of speciality. After completion of education about 45% of the students wanted to settle in urban area and equal percentage of students in rural area. The students who wanted to settle in India after specialization was 87%, who wanted to go abroad were 7%. About 46% of the students wanted to join the corporate set up after specialization, 36% wanted to become private practitioners. About 46% of the students felt that 1 year is adequate for basic sciences.

Conclusion: The career choices among the students of our institution were biased among the clinical subjects. The choices may change during the course of time which would be followed up. The role modelling by the faculty could be a factor in influencing their choices.

Keywords: Career choices, MBBS curriculum, Post-graduation

INTRODUCTION

It is not clear about what influences the medical students to prefer one speciality to the other. The factors

considered were personality, demographic characteristics and attitudes about the specialties themselves, with the latter apparently being the most important factor. Career choices are influenced both by the graduate's inclination

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before starting medical school as well as exposure during training in medical school.² Other factors that have been suggested to play a role include the characteristics of the medical college, lifestyle preferences, prestige, job opportunities, expected income, longitudinal care, preclinical and clinical experiences, and role models.^{3–5} Material rewards, societal appreciation of the speciality and pressure from the parents also have a role in choosing a particular speciality.⁵

This study was conducted in Madha Medical College, a private college established in 2011. Medical education system in this part of the country includes a traditional way of teaching pattern which is lecture-based, teachercentered, discipline-based, examination-driven, and hospital-oriented. Medical curriculum is divided into basic sciences, paraclinical and clinical sciences. The Bachelor of Medicine and Bachelor of Surgery degree is a four and half year's program followed by a 1-year internship period.** In our college we are trying to make the curriculum in such a way that it is integrated, problem based learning. Students are exposed to a defined community from the 1st year itself under the department of Community Medicine where they spend time with the families in imparting knowledge regarding basic hygiene, balanced diet, vaccination etc.

Various studies carried out in Asia had shown that medical students were interested in hospital-based clinical specialties and they prefer to practice in main cites. A study conducted among students, interns, and house officers in Nepal found that half of the participants of this study wished to migrate to a developed country after graduation. The reasons quoted were comparatively less remuneration, quality of training, and the working atmosphere of their home country. The objective of our present study was to assess the First year Medical Students attitudes towards their choice of the Post Graduate Subjects and the factors influencing them.

The present study would serve as a baseline to identify the career preferences of the students and the factors that influenced them. These findings can help determine the current status and the future directions of the curriculum.

METHODS

We did a cross sectional questionnaire based study on the first semester medical students in September 2013. Out of a total of 150 students, 141 were present on the day of the administration of the questionnaire in the Community Medicine theory class.

After ethical clearance from the Institutional Ethics Committee- Human Research, medical students of the first semester (at that time) were requested to selfadminister the questionnaire. Participation was voluntary and applied only to the students who were present in class on that day. The questionnaire requested socio demographic detail, awareness of the subjects taught, and their preference of specialty on that day and the factors influencing it.

The data was analysed using SPSS version 17.

RESULTS

The total number of students present on that day was 141. All of them successfully completed and returned the questionnaire.

Table 1: Demographic and other characteristics of students.

Characteristic	1 st semester students	
Mean age in years	17.8±0.6	
Female students	76 (53.9%)	
Urban background	95 (67.4%)	
Doctor in the family (yes)	38 (27%)	
Joined MBBS out of	115 (81.6%)	
personal interest		

The demographic and other characteristics are depicted in Table 1. The mean age in years of the first semester students was 17.8 with a standard deviation of 0.6. About 54% of the students were females. Most of the students 67% were from urban areas. The number of students having a doctor in the family was 27%. The number of students who joined the MBBS course out of personal interest was about 82%.

Knowledge regarding MBBS and PG courses is depicted in Table 2. None of the students were aware of the number of subjects taught in MBBS course. Less than half of the students (45%) were aware of the number of years of specialization. About 91% of the students were interested to pursue the specialization.

Table 2: Knowledge regarding mbbs course and post graduation.

Characteristic	1 st semester students
No. of subjects taught in MBBS (incorrect)	141 (100%)
No. of years of specialization (3 years)	63 (44.7%)
Interested in specialization	129 (91.4%)

Table 3 shows that less than one fourth of the students were interested to pursue in preclinical subjects (anatomy, biochemistry, physiology), only 1% were interested in para clinical subjects (Pathology, Pharmacology, Community Medicine, Forensic Medicine) and most of the students 71% were interested to pursue in the clinical subjects (Surgery, Medicine, Gynecology, Pediatrics, Orthopedics, Radio diagnosis, Skin & STD, ophthalmology, ENT).

Table 3: Distribution of students according to their first choice of subject for specialisation.

Subject of choice	No.	(%)
Anatomy	28	(19.9%)
Physiology	4	(2.8%)
Biochemistry	2	(1.4%)
Pharmacology	1	(0.7%)
Forensic medicine	1	(0.7%)
Community medicine	1	(0.7%)
General medicine	42	(29.7%)
OBG	15	(10.6%)
General surgery	9	(6.4%)
Paediatrics	7	(5%)
Orthopaedics	5	(3.5%)
Ophthalmology	5	(3.5%)
Radio diagnosis	4	(2.8%)
Dermatology	3	(2.1%)
Psychiatry	1	(0.7%)
Anaesthesia	1	(0.7%)
Not interested	12	(8.5%)
Total	141	(100%)

Table 4: Reasons quoted for not pursuing the Post Graduate course.

Reason	No.	(%)
Interested in IAS/IPS	7	(5%)
Wants to join management course	2	(1.4%)
Satisfied with MBBS	1	(0.7%)
Confused about the career	2	(1.4%)
Total	12	(8.5%)

Table 4 shows that a sizable proportion that is around 9% of the students was not interested in pursuing the PG course. Some of the students 5% of them were interested to pursue their career in civil services, around 1% was interested to join the management course, less than 1% does not want to do any specialization, and around 1% is undecided about what to do with their career.

Table 5: Distribution of students according to the reason for choosing that particular subject.

Reason	No. (%)	
Ambition	114 (80.8%)	
Parents wish	9 (6.4%)	
To make money	18 (12.8%)	
Total	141 (100%)	

Table 5 shows the factors influencing their career choice. Around 80% of the students said that it was their ambition to pursue their career in a particular subject, 6% of the students want to pursue their career in a particular subject because their parents want them to do so and

around 13% of the students want to pursue their career in a particular subject to earn money.

Table 6: Distribution of students according to the place they want to serve after completion.

Area	No. (%)
Urban area	63 (44.7%)
Rural area	63 (44.7%)
No special preference for any area	15 (10.6%)
Total	141 (100%)

Table 6 shows the area where the students want to serve after completion of their education. Equal number of students that is around 45% of the students wants to serve in urban area and 45% of them in rural area and around 11% of them have no particular preference for any area.

Table 6: Distribution of students according to the place they want to settle down.

Place	No. (%)	
India	123 (87.2%)	
Abroad	18 (12.8%)	
Total	141 (100%)	

Table 7 shows where the students want to settle down after the completion of education. About 87% of the students want to settle down in India and 13% of them want to make their career abroad.

Table 7: Distribution of students according to their choice where they want to work.

Work	No.	(%)
Private practitioner	52	(36.9%)
Teaching college	9	(6.4%)
Corporate Hospital	65	(46.1%)
Teaching and private practice	2	(1.4%)
Private practice and corporate hospital	3	(2.1%)
All 3	2	(1.4%)
Not yet decided	4	(2.8%)
Teaching and corporate hospital	4	(2.8%)
Total	141	(100%)

Table 7 shows the choice of work of the students after completing their education. Majority of the students 46% of them want to settle down in the Corporate Hospital, 37% want to settle down as private practitioners, only 6% of them want to join a teaching college, around 1.4% of them want to do both teaching and private practice, 2.1% of them want to do private practice and also be attached to a corporate hospital, 1.4% of them want to do teaching,

private practice and be attached to a corporate hospital and some of the students 2.8% are undecided.

Table 8: Students opinion about whether 1 year is adequate for basic sciences.

Adequate	N (%)
Yes	65 (46.1%)
1.5 years	63 (44.7%)
2 years	12 (8.5%)
3 years	1 (0.7%)
Total	141 (100%)

Table 8 shows about the opinion of the students whether one year is sufficient for the basic sciences. More than half of the students 53.9% felt that more than one year is required to complete the basic sciences.

DISCUSSION

In our study we found that the mean age of the first semester students was 17.8 years with a standard deviation of 0.6. Girl students were more in our study participants. Most of the students 67% were from urban areas. The number of students having a doctor in the family was 27%. Though most of the students joined MBBS course out of personal interest, there were 18% of them who joined because their parents had forced them to do so. The parents should not force their children to pursue what they themselves wished for then these future doctors eventually fail to accomplish and become an uninterested doctor who may ultimately affect the society too. It is always better that parents and children should decide together on the career they would pursue.

The discrimination for para clinical and preclinical subjects from clinical subjects starts from the time they join medical profession. They underestimate the pre and para clinical fields as they think that clinical field is more challenging, more lucrative and with more job satisfaction as there is interaction with patients and the practical aspects of medical profession. Other reasons for discrimination could be that clinicians earn more, have more prestige and status among the people, more productive, intelligent which is the major driver of student behavior. Though the basic subjects form the foundation of the clinical subjects they are labeled as the revenue "loss leader" rather than as a core function or even producer of downstream revenue. This income disparity explains much of the difficulty in achieving the balance in specialty and geographic physician distribution and will continue to inhibit achieving the workforce needed for better quality, efficiency and equity.

Our study also shows that Post-graduation in clinical subjects is preferred over basic sciences. Some subjects

like Pathology and Microbiology have no takers and it may show a long term effect on the health system.

A small proportion (8%) of students did not plan to pursue a postgraduate course. The reasons for not doing so were that they wanted to move to the civil services or management fields. The failure of students to continue in the Medical profession represents a waste of resources. While a trained medical person may be an asset in the Civil services, it does deplete the pool of already scarce healthcare providers. Some of the other reasons relate to dissatisfaction with the system of postgraduate medical education in India. The expectation of bottlenecks in the postgraduate training programmes makes some students consider careers outside the medical profession. ¹⁵

Our study shows that 6.4% of the students had to choose a career option which their parents wished for. Parents play an important role in building as well as diminishing the career of their children. The children should be given the wings to choose what they wish to do for their career atleast after MBBS because during their MBBS career they would have decided what interests them.

Our study shows that 12.8% of the students want to settle outside India. This is a huge loss to the Government because it incurs an expenditure of about Rs 25 lakh on every medical student by allotting seats at subsidised fees in government colleges and government seats in private medical colleges.

Very few students (6.4%) have opted to work in Medical Colleges. Most of the students (46.1%) had opted to work in a corporate set up. Till now government run medical colleges with teaching staff is considered the best in the world in terms of training the students as well as patient care. But now slowly medicine has entered a new era and corporate set up is playing an important role in the delivery of good quality health care. Doctors are satisfied in the corporate set up because there is a scope for continuing medical education, conferences, drug and device development, research funding and personalised health care and good pay. Patients are satisfied because of personalized health care while getting the best of treatments. ¹⁶

Our study shows that (46.1%) of the students felt that one year is adequate for the basic sciences that are Anatomy, Physiology and Biochemistry. Rest of the students felt it difficult to cope up with the basic subjects in one year. Though the total duration of the course has remained the same that is 5 ½ years. The course has been restructured by the MCI so that the students would be more participatory and competent. It has been divided into 2 months foundation course 12 months for 1st MBBS, 12 months for 2nd MBBS 28 months for Final MBBS and one year internship.

CONCLUSION

In our study it is seen that the choice of subjects as their career preference has been biased against the clinical subjects who in the long run may affect the health system. Some of the students do not want to pursue their career in medicine and enter the civil services which are a huge loss for the Government as well as the society. Some of the students want to pursue their career abroad. This study helps us to understand the choice of their career and their location of placement. This requires a solution which should involve the students, universities and the Government.

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Institutional Ethics Committee

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