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A CROSS SECTIONAL STUDY ON MEDICAL KNOWLEDGE OF STUDENTS JOINING MBBS

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Abstract

Background: Medical profession is a much chosen profession today. It is a noble profession, which requires a great deal of commitment. Ignorance of medical students or doctors can endanger the lives they handle. The present study attempts to find out the medical knowledge of students joining MBBS and the association between medical knowledge and family members being doctors, type of admission (government, management, NRI) and reason for joining the course.

Methods: The present study was carried out among 100 first year MBBS students of Azeezia medical college, Meeyannoor, Kollam on the first day of the joining of MBBS course. The study was done in the month of September 2014. Data was collected using a predesigned questionnaire. It consisted of 50 questions related to medical knowledge. Questions were all of multiple-choice type. Data was collected and was analyzed using SPSS software (20 th version). Chi square test was used to find out the association p value <0.05 was considered statistically significant.

Results: Out of 92 students, the performance of 44 (47.8%) was good (score 40-50), 38 (41.3%) were average (score 30-39) and 10 (10.9%) were poor (below 30). 31(33.7%) were male and 61(66.3%) were female. Among the 92 students, 44(47.8%) were admitted under government seat, 32(34.8%) under management quota and 16(17.4%) under NRI seat. The relationship between type of admission and performance was highly significant ($p = 0.000$). The reason in 88(95.7%) students for joining MBBS was by their own interest, 1(1.1%) under peer pressure and 3(3.3%) on family interest. We found that the relationship between reason for joining MBBS and performance was significant ($p=0.03$).

Conclusions: Our study showed that the medical knowledge among students joining MBBS was average. There was no relationship between parents being doctors or family members being in the medical profession and medical knowledge of students. Those who joined on their own interest rather than under peer or family pressure had better knowledge than others. It was sad to notice that some of the students were not aware of the duration of the course and many of them were ignorant of even the basic things.

Keywords: MBBS, Medical knowledge

Background

Medical profession is a much chosen profession today. It is a noble profession, which requires a great deal of commitment. Ignorance of medical students or doctors can endanger the lives they handle. It is

important to know how many joined this profession on their own interest with adequate basic knowledge. It is seen today that many join MBBS due to parental pressure and students who join under merit seat score better than others who got admission through management or NRI seat.

At the time of independence in 1947 India had just 20 medical colleges admitting about 3000 students. Sixty years later the number of colleges has increased 13 - fold and the number of seats has reached to 30,000 [1]. Despite the numbers quality still remains a major issue [2].

Azeezia medical college, Meeyanoor is a private medical college. This college was started in the year 2008 under Podikunju Musaliyar Memorial charitable and educational trust. It is affiliated to Kerala university of Health sciences. It is a self-financing college where admission is on the basis of government merit, management and NRI quotas.

Unlike government medical colleges, where all admissions are made on the basis of merit, self-financing colleges tend to have a mixture of merit, management and NRI students. The merit students seek admission through a common entrance test, mostly on their own interest after entrance coaching and strenuous preparations. The students in management and NRI seat may join because of their families' interest or peer pressure. This may affect their performance and knowledge. Some may have their parents or family members as doctors. So they may have more exposure and interest towards medical profession. It is generally expected that students who join the medical profession should have basic medical knowledge.

The present study attempts to find out the medical knowledge of students joining MBBS and the association between medical knowledge and family members being doctors, type of admission (government, management, NRI) and reason for joining the course.

Aims and objectives

1. To assess the medical knowledge of students joining MBBS
2. To know the association between medical knowledge and
 - a) Parents being doctor
 - b) One of the family members being a medical professional
 - c) Type of admission (merit, management, NRI)
 - d) Reason for joining MBBS

Materials and Methods

The present study was a cross sectional study carried out among first year MBBS students of Azeezia medical college, Meeyanoor, Kollam on the first day of the joining of MBBS course. The study was done in the month of September 2014.

There were 100 students who were admitted to MBBS course. On the day of the study, 92 students were present in the class and the remaining 8 were absent. Students who were not willing to participate in the test were allowed to leave the hall, but all 92 students who were present were willing to take part in the study. The purpose of the study and other details were explained in detail to the students and they were asked to answer question sincerely. The questionnaire was filled in the class in the presence of invigilators. They were assured about the confidentiality.

Data was collected using a predesigned questionnaire. It consisted of 50 questions related to medical knowledge. Questions were all of multiple-choice type. Each question had 5 options, the fifth option being "don't know". Each question carried one mark and there was no negative marking. The questionnaire was distributed and time duration of one hour was provided to complete the form without mutual consultation.

Data was collected and was analysed using SPSS software (20th version). Chi square test was used to find out the association. p value <0.05 was considered statistically significant.

The performance of students who scored 40 -50 were considered good, 30-39 average and below 30 were considered poor.

Results and Discussion

In this present study, out of 92 students, the performance of 44 (47.8%) students was good (score 40-50), 38 (41.3%) scored average (score 30-39) and 10 (10.9%) were poor (below 30).

Among the 92 students, 31(33.7%) were male and 61(66.3%) were female. 5(5.4%) students were 17 years, 31(33.7%) were of 18 years, 44(47.8%) were of 19 years,

11(12%) were of 20 years and 1(1.1%) was of 21 years of age. The study showed that there was no significant relationship between age and performance of students. 8(8.7%) students had their fathers as doctors and all of them had their mothers in other profession or as house wives. 42(45.7%) students had at least one of the family members in the medical profession. There was no significant relationship between parents being doctors or family members being in the medical profession and performance of students.

Out of the 92 students, 44(47.8%) were admitted under government seat, 32(34.8%) under management quota and 16(17.4%) under NRI seat. The relationship between type of admission and performance was highly significant ($p = 0.000$). It may be because they had entrance coaching and their studies in plus one and plus two would have been more focused and systematic.

The reason in 88(95.7%) students for joining MBBS was by their own interest, 1(1.1%) under peer pressure and 3(3.3%) on family interest. We found that the relationship between reason for joining MBBS and performance was significant ($p=0.03$). Students who joined on their own interest would obviously be more enthusiastic, diligent and take up studies more seriously. The medical knowledge was good in 65.9% of students who took admission in merit and also in those students who joined MBBS on their own interest.

Among the 92 students, only 82 (89.1%) knew that the duration of MBBS excluding internship which was 4.5 years. 73 (79.3%) knew the full form of MBBS, 76 (82.6%) knew that orthopedics dealt with bones. The fact that Sphygmomanometer was used to measure blood pressure was known to 70 (76.1%). Nearly half i.e 48 (52.2%) students answered correctly that BCG was given for prevention of Tuberculosis. 71 (77.2%) knew that post mortem was dealt under forensic medicine. The causative agent of Tuberculosis was a bacterium, was known only to 59 (64.1). 88 (95.7%) picked up mercury as the metal used in thermometer. All (100%) wrote the full form of WHO correctly. But, only 82 (89.1%) ticked the full form of HIV correctly.

To assess the medical knowledge we have focused on certain selected questions related to tuberculosis, HIV, vaccination etc. It was seen that the results obtained in our study regarding tuberculosis i.e 64.1% was similar to a multicentric study on Knowledge, Attitude, Practice conducted by J Emili e tal in the department of family medicine, McMaster university, Ontario, Canada in June 2001. Response rates were 68.4% in McMaster, Canada, 39.7% in Christian Medical College, India, 78.3% in Makerere University, Uganda [3].

The results obtained in our study regarding HIV were very high 89.1% compared to a Knowledge, Attitude and Practice study conducted by Kuruvila. M et al, which was 64.91% [4]

Conclusion

Our study showed that the medical knowledge among students joining MBBS was average. There was no relationship between parents being doctors or family members being in the medical profession and medical knowledge of students. The students who were admitted under merit seat i.e, government quota, performed better than other students. Also, those who joined on their own interest rather than under peer or family pressure had better knowledge than others. It was sad to notice that some of the students were not aware of the duration of the course and many of them were ignorant of even the basic things.

Recommendations

It is desirable of each medical student that he/she has a basic knowledge about the course. A small workup about the course and its details and brushing up of their higher secondary topics on basic sciences would definitely increase their aptitude, interest and hence the performance. As medical profession is a lifesaving and noble profession it is preferable that only those who have the real aptitude and interest for the course should join, only then we can have good competent doctors who are an asset to the society.

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Design	√	√	-
Definition of intellectual content	√	√	√
Literature search	√	√	√
Clinical studies	-	-	-
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