

DENTISTRY: BY CHOICE OR CHANCE? A QUESTIONNAIRE SURVEY FOR PRE CLINICAL DENTAL STUDENTS

ABSTRACT

Historically, Indian education has been elitist. Currently, India has the second largest education system in the world preceded by China. In order to meet the demand for coveted dental education, private dental colleges have sprung across the country, making the access easy for the students to enroll into dental education programmes after their higher secondary education. This has led to a suspicion whether these dental students had been forced into a course that they did not aspire of and even if they actually chose the career, are they performing as good as they expected to be once the course commences. This questionnaire survey aims at discussing these issues and to prepare the Indian education system at both school and college level to encompass and implement an orientation and motivation program to overcome this.

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KEYWORDS

Dental education. Dental curriculum. Dental college admission.
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INTRODUCTION

Dental education involves a complex combination of knowledge, attitude, psychomotor and communication skills. Dental education today must ensure that professionals are equipped to deal with the challenges of tomorrow, and in an increasingly globalized scenario, how we educate our future professionals will decide the future of oral health of our country.

It has been widely acknowledged that dental education is associated with increased levels of stress.¹ A class of dental students will be a mix of students with varying capacity of understanding the subject and their education process with the dental school is continuous for at least four years where multiple examination are required.

Formal dental hospitals and dental education which started in India as early as 1883 gained direction with the starting of the first autonomous dental college at Calcutta in 1920.² The four year BDS program was introduced in 1935. Since Independence, all dental colleges started were government colleges until 1966 when the first dental college in the private sector was established³.

In 1950, there were only three government run dental colleges with a total of 100 entering Students.⁴ According to the Dental Council of India (DCI), the present number of entering dental students for the thirty-nine government and 288 private sector

dental colleges is 23,150.⁵ A recent report by the comptroller and auditor general 1 (CAG) revealed the presence of 292 colleges mostly in the private sector and concentrated in 5 states.

⁶ In the state of Kerala where the population is 33,387,677 (2011 census) the number of dental college is 23 including both government & private sector and the number of seats 2050 in Private sector alone. This questionnaire survey is conducted to understand whether it is the students choice or any other associated factor that influences the enormously increasing number of dental students and an attempt is also made to find out if their performance levels of higher secondary years is continuing in to their pre clinical years.

MATERIAL AND METHODS

All the pre-clinical dental students from the four accredited dental schools of northern Kerala were eligible to participate in the study.

A self-administered structured questionnaire was used for the study. The questionnaire was pre-tested on a sample of 25 dental students of Kannur Dental College. Modifications were made to remove areas of ambiguity in the final questionnaire. A total of 1050 questionnaires were distributed. A total of 1000 questionnaires duly completed were included in the final analysis. The final version of the questionnaire had a total of 14 questions which contained subdivisions. The respondents were informed about the nature

of the study and confidentiality was assured. The results obtained were subjected to descriptive statistical data analysis and subjected to Epi-Info 7.1.3 software.

RESULTS

Out of 1050 students 1000 students completed the questionnaire. In the present study the majority of participants belonged to 21 years (40%). Minimum age was 17 years and maximum age was 24 years. So, the participants were either late adolescents or young adults. Majority of participants were females (80%).

Result of the present study showed that majority of students were from southern Kerala (45%) followed by Northern Kerala (40%).

When asked about their schooling 80% students did their schooling in their home town with medium being English. 85% of students acquired above 70% marks in 10th and plus 2. 65% of students were interested in Biology compared to Chemistry (25%) and Physics (10%). 90% students chose dentistry as their career out of their own interest. When asked about their parent's education level 50% of their parents were graduates.

Students were asked about the teaching methodology in the college and 85 % of them were not happy with the teaching methodology. 75% of the students preferred lectures with PowerPoint and 15% preferred

chalkboard. Because of the method of teaching incorporated, majority of student's favorite subject were General anatomy (35%), Dental anatomy (25%) and Biochemistry (20%). The complete results of the study is shown in Table 1.

DISCUSSION

A contemporary dental curriculum requires students to attain diverse proficiencies including acquisition of theoretical knowledge and interpersonal skills⁷. A challenge that dental educators face today is improving the level of student satisfaction with the learning environment. It has been observed that today's dental students are not so keen to learn and do not like their experiences in dental school, perhaps because of a stressful learning environment.⁸

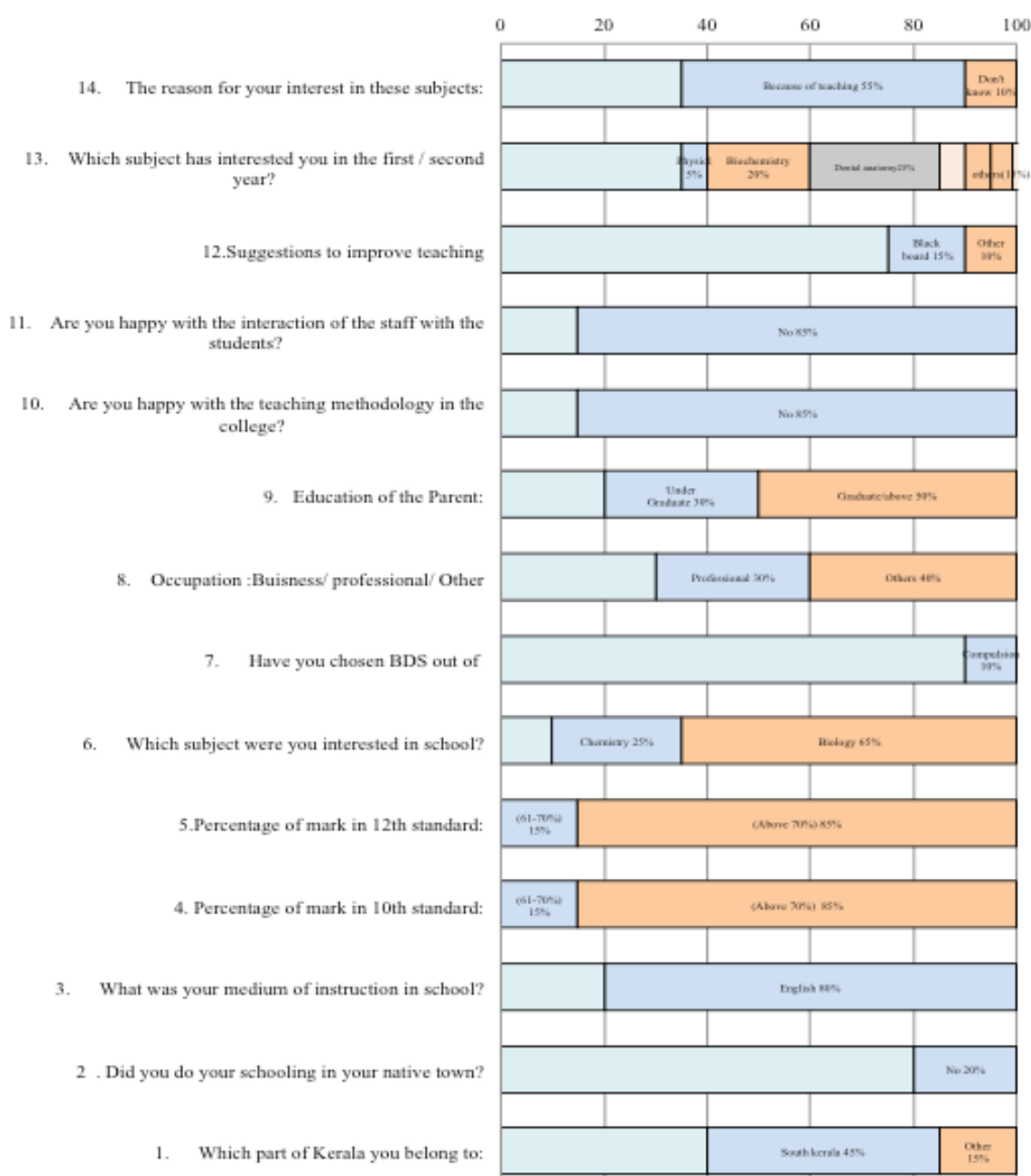
In predoctoral dental education in India, didactic and preclinical training is condensed into 2 years.⁹ Although integration of science with clinical practice is a key objective of any dental curriculum, students often perceive that the mantra of survival in school is to pass the science courses by rote memorization and to discover the relevance of this material in actual practice.¹⁰

Our study was designed to assess about the attitude and aptitude of group of dental undergraduates in their preclinical years from northern part of Kerala.

High school students with a background in physics, Chemistry, and biology are eligible to apply to dental colleges. There are two pathways by which a student can gain admission into a dental college: through a government-administered entrance exam or a private school-administered entrance exam. Government entrance exams are of two types: state-administered entrance exams, which are

specific for each state (only students who have lived in those states are eligible to apply to dental schools in those states), and common all-India entrance exams, for which all eligible students qualify. Based on their performance in the respective exams, the students are ranked and granted admission by rank order.

Table 1. Results of the study in percentages.



Some meritorious students who fail to gain admission into medical schools by a small margin enter dental school, especially in government-aided dental colleges. Students occasionally are forced to join dental schools because their ranking in the entrance examinations was not high enough to secure a spot in medical school or because of financial constraints that preclude them from joining private medical schools, which charge high tuition fees. This is not a healthy scenario as the students are thus forced to accept a career path that is going to be their profession for the rest of their lives. Parental pressure is another factor that plays a role in students' choice of dentistry a career. Few students matriculate into a dental school just because of family pressure. As the years pass by, some students develop interest in dentistry and do very well in it while others fade away.² The results of a survey conducted in one of the Indian dental colleges found that students who clearly indicated that dentistry was their first choice enjoyed the program and felt less stressful when compared to students whose first choice was not dentistry.¹¹ In our study it was found out that majority of the students chose dentistry as their career out of their own interest.

In the present study greater part of the students did their schooling in their home town with medium being English indicating that mode of communication did not have a

remarkable role in the attitude of dental students towards the curriculum in the preclinical years.

As per our survey, around half of the parents of the preclinical dental students were graduates, thus seeming likely that they motivate their children.

In India, dental students are required to read textbooks written by leading international authors in a particular field. Apart from textbooks, students read class notes or handouts. Therefore, students learn the same concepts as a student trained at U.S. dental school. The exams given to students at the end of each academic year are specialty-specific and are designed primarily to test the knowledge base and clinical skills of students in that particular specialty.²

During the first two -years of the program, students enroll in a core curriculum that includes human anatomy, human physiology, biochemistry, pathology, microbiology, pharmacology, dental anatomy and preclinical subjects, At the end of each year of the program, the pre-clinical skills and theoretical knowledge of each student are evaluated through practical based exams, oral exams, and written exams. This survey clearly indicates that the majority of the students secured high marks in their 10th and higher secondary were not able to accept the teaching methodology of dental college and perform well in their pre clinical years. This could be

due to an absolute paradigm shift in the teaching methodology from school to dental college or could be because school students are not properly identified and motivated for dental colleges.

A recent study found that there is an increasing trend in many medical schools throughout the world towards implementing a Problem Based Learning (PBL) curriculum.¹² It creates an environment that is more congenial for learning and improving the knowledge, skills and attitude of students.¹³

CONCLUSION

Establishing an education system by our Government is mandatory where in, after 10th class, the bulk of students who are ready for dental and medical schools should be identified and special orientation should be given. Moreover, the Dental Council of India should try and implement a teachers training programme in all the dental colleges across the country where the newly enrolled dental students are directed and motivated throughout their course period.

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