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RESEARCH ARTICLE

TO ASSESS THE ATTITUDE AND APTITUDE OF UNDERGRADUATE STUDENTS TOWARDS DENTAL DEPARTMENTS AND AREA OF SPECIALIZATION - A PILOT STUDY

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Abstract

Introduction: Knowledge regarding the attitude and aptitude of dental students towards the various specializations of dentistry in India is a topic that remains largely untouched. This is an because much of the thought process of the students formed in these formative years as undergraduates decides what kind of career they will have.

Methodology: This is a cross sectional questionnaire study, which included the interns of the dental colleges in lucknow city. Around 267 replies were gathered. Basic frequency analysis and bar graphs were made to understand the results.

Results: A pattern was seen to emerge, where students found the specializations of Oral surgery, Orthodontics and Conservative Dentistry as the most interesting subjects, they were the most sought after subjects for post-graduation (PG). Periodontics, Pedodontics and Oral pathology were seen to be the least interesting and preferred for PG. Prosthodontics and Public Health Dentistry were seen as the most difficult subjects, with a difficult theory and practical were the chief reasons.

Discussions: This study was the preliminary work done to gain an understanding of the minds of the under-graduate students, their reasons to join the profession of dentistry and what their thoughts were regarding the various subjects.

Conclusion: This study gives some very important insight in the minds of the student population. When followed by a more extensive research at a national level, it may help us understand the lacunae in the profession (Clinical and Academic). This is a pilot study to be followed with a more detailed work.

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Introduction:-

Research into the impetus of individuals who choose dentistry as a professional career demonstrates a wide range of motivational factors. [1,2] Prior to 1966, all the dental colleges in India were government-aided. In that year, the first dental college in the private sector was established. [3] Students motivation for choosing a career in the health sector is of great interest for educators and admission committees, particularly in the field of dentistry. [4]

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The process of getting into the field of dentistry in India is by means of a national level competitive examination, which enables a student's selection into the field of either medicine (MBBS) or dentistry (BDS). This exam was earlier named as PMT (pre-medical test) and now is known as NEET (National Eligibility cum Entrance Test).

Apart from this there are a number of factors which help a student to decide if he wishes to become a dentist. However, literature search of the topic did not give out many studies explaining why students opt the felid of dentistry in India. This formed the basis of conducting this cross sectional questionnaire study which aimed to understand the reason for students to pursue dentistry in India. As a part of the study some questions were also framed to understand the perception of students regarding the various areas of specialization once they entered the undergraduate course. These questions were typically framed to understand the attitude and aptitude of undergraduate students towards dental departments and what are the factors which help the students to decide their felid of specialization in case they plan to pursue a post-graduate course. This was considered important as literature search could not provide any studies which gave the students perspective regarding the dental subjects once they enter the course. Also, it was thought that a study of this kind will help understand which subjects in the undergraduate curriculum are popular/un-popular among the students and what could be the possible reasons for the same.

Knowledge regarding such questions will go a long way in making amendments and improvements in the manner in which subjects are explained to the under-graduates. As this will play a huge role in determining the subjects they take up for post-graduation and also enable us in understanding the psyche of the students regarding dentistry as a profession.

Methodology:-

This cross sectional study has been conducted as a pilot study which will be followed by a pan India study to assess the attitude and aptitude of undergraduate students towards dental departments and their areas of specialization. It included five dental colleges in the city of Lucknow. Only interns of these respective colleges were included. They were selected as they form the ideal population since they will provide the most unbiased opinion on the questions framed. They were also selected as they have reached a point where they have a basic idea of theory and clinical aspect of all the subjects based on which they make up their minds and decide which area of specialization they will proceed with. Their participation was entirely anonymous and voluntary.

Questionnaire was sent to the whatsapp group of students in the form of Google form link. Post Lockdown due to the COVID 19 situation in the country, it was seen that most colleges were adopting the online medium of education which also saw most of the students on a common whatsapp group of their batch. So, because of the unavailability the students email data base, it was decided that the questionnaire of the study will be sent to the whatsapp group of interns of different colleges. The questionnaire was developed originally by the authors and consisted of 17 questions. It was pre-tested on 25 interns who were not included in the main study. The Kappa statistic for the questionnaire was found to be 0.78.

All of the dental colleges in the city have a strength of 100 students in the under-graduation course per batch, and similar strength of students is seen in the intern's batch also. Hence a total of 500 responses were expected. Though we could not get the exact number of students in each batch of interns in different colleges owing to the fact that the entire batch of students does not reach internship together. However, a total of 285 responses were received of which 18 forms were rejected as they were incompletely filled. Hence a total of 267 replies were taken into final consideration. Simple frequency tables and bar-graphs were developed for the analysis of the results.

Results:-

Around 267 students participated in the study of which 82.9% were females, 87.5% belonged to the 20-25 years old age group. About 70.7% wanted to pursue post-graduation after they pass out. On asking which area of work as a dentist interests them, 44.5% said they were interested in becoming an academician and clinician both, while 37.3% wanted to practice in clinics only, 8.7% wanted to become academicians only and about 9.5% wanted to change their field entirely on passing out.

On asking which subject interested them the most during their course Figure 1, 26.7% said it was Oral and Maxillofacial Surgery and 2.7% opted for Oral and Maxillofacial Pathology making it them the most and least popular subjects for students.

Majority (27.9%) of students wanted to pursue their post-graduation in Conservative Dentistry and Endodontics and (0.8%) students wanted to opt for Oral and Maxillofacial Pathology for their post-graduation.

If unable to get the subject of their choice, majority of the students (55.9%) said they would choose the next best subject available during the counselling, while 20.9% said they would prepare again to get the subject of their liking, 18.9% will not attempt any further and look for other options and 4.3% will take any subject for their post-graduation even if they are not interested in the same.

On asking which field of specialization according to them provides adequate financial stability in future, around 39.85% (majority) answered Orthodontics and Dentofacial Orthopedics and 0.4% opted for Oral and Maxillofacial Pathology.

On asking which subject interested them the least during their course, 41.2% said it was Public Health Dentistry. On asking why the subject was uninteresting 52.3% said it was because subject is not interesting practically, 21.9% said it was difficult to understand.

Discussion:-

The results presented in this study are one of the first of its kind analyzing the attitude and aptitude of undergraduate dental students towards dental departments and their area of specialization. While a number of such studies have been conducted in various other countries, literature search however did not reveal any such studies conducted in India assessing the attitude of dental students towards their subjects, in India.

Reason for Becoming a Dentist

On asking for their reason for becoming a dental doctor, 37% the students said it was because they could not get admission into a medical college. In India, getting admission in a medical college is by means of a common entrance examination which has multiple choice questions. Every year lakhs of students take up NEET to seek admissions into medical and dental colleges in different parts of the country. The number of students in 2019 was 14,10,755 seeking admissions in 542 Medical colleges, 64 stand alone PG Institute as recognized by Medical Council of India and 347 dental colleges (Government and private included). Selection in college is dependent on the rank of the student, the top rank holders get admission in the medical college following which admission into dental colleges are open for the lower rank holders. This is unlike the admission process in countries like United States of America and Canada where there is a separate entrance examination for students aspiring to become dental surgeons. This is probably the reason as to why dentistry is mostly never a first choice of profession for aspirants, making it a less desired and a second grade choice of profession among students.

With most medical colleges offering 100-150 seats and dental colleges offering 100 seats per year, the competition is very tough. The other factor, which plays a big role is the high fees of the private medical/ dental colleges, restricting admissions into private colleges for a selected few. The next biggest reason to take up a career in dentistry was for it to be the best option available at the time of deciding career options. Lastly 10.3% said it was because of their parents wish that they had taken up the decision to enter the profession which was lower than 20% of Thai and 30% of Japanese students who citied family as the reason to take up dentistry. [5]

BDS Subject Preferences:

When asked which subject had interested, students the most during their under-graduation, the order seen was Oral and Maxillofacial Surgery, closely followed by Conservative Dentistry and Endodontics and then Orthodontics and Dentofacial Orthopedics. While Pedodontics and Preventive Dentistry, Periodontics and Oral and Maxillofacial Pathology were found to be the least interesting subjects.

Similarly, on asking in which subject they would like to do post-graduation, majority voted for Conservative Dentistry and Endodontics, followed by Oral and Maxillofacial Surgery and Orthodontics and Dentofacial Orthopedics. The least preferred subjects were Oral Medicine and Radiology, Pedodontics and Preventive Dentistry

and Periodontics with 3.8% votes, Prosthodontics with 3.4% votes and lastly Oral and Maxillofacial Pathology with 0.8% votes.

Future Prospects and Work Satisfaction:

On asking which subject has the brightest future prospect (Figure 2), most students opted for Orthodontics, followed by Conservative Dentistry and then Oral and Maxillofacial Surgery. The three subjects which were considered to have the less better career options as per students opinion were seen to be, Oral Pathology, Oral Radiology and Periodontics and lastly Pedodontics.

Similarly it was seen that Oral Surgery, followed by Conservative Dentistry and Orthodontics were considered by students as the subjects which provide the most work satisfaction (Figure 3). The least votes were taken by Public Health Dentistry, Pedodontics and Oral Radiology with similar votes and last one was Oral Pathology with the least votes.

Financial Security and Consultation calls:

A similar trend was seen in the question asking financial security, which subjects the students thought were seen to provide the most financial security, the order seen was Orthodontics, Conservative Dentistry and Oral Surgery. The least financially secure subjects were seen to be Pedodontics, Periodontics and Oral Pathology.

On asking a question regarding which specialist is called most for consultation in a clinical set up (Figure 4), the order voted for was observed as, Conservative Dentistry, Orthodontics and Oral Surgery. The least called specialists for consultation was seen as Pedodontics, Oral Pathology and Periodontics.

Uninteresting subject and reasons:

On asking which subject was seen to be the least interesting, the order seen was, Public Health Dentistry, followed by Prosthodontics. The most commonly cited reason was that the subject was not interesting practically with 52.3% votes, followed by the subject being difficult to understand 21.9% votes, teaching was not upto the mark 16.2% and difficult language of the standard text-books 9.6%.

Difficult Subject:

On asking which subject the students found to be most difficult (Figure 5), the order noted was, Prosthodontics followed by Public Health Dentistry followed by Oral Surgery. The reason cited were (Figure 6), majority of the students found the theory of the subjects difficult, followed by finding the clinical and theory of the subject both difficult and lastly finding only the clinical aspect of the subject difficult.

After assessing and analyzing the results, it was seen that a pattern was seen to emerge. Most of the students found Oral Surgery, Conservative dentistry and Orthodontics to be the most interesting, financially secure, most frequently called for specialist for consultation and they were also seen as the subjects which provide the best and most-safe future prospects. This could be as in India, Oral Surgery is considered the subject closest to the medical field, and since most students who become dentists initially aspire to become medical students, they see Oral Surgery as a window which could be connecting them the most to the medical field.

The reason for Conservative Dentistry's popularity can be credited to it being a subject which is seen as a pain releasing branch with most patients seen in a clinical set-up. Moreover, it is a subject where the students are able to correlate the theory and clinical aspect of the subject most clearly. This can also be attributed to the fact that, students can relate the pre-clinical training while they treat the patients during clinical postings.

Orthodontics was the third most popular branch, largely credited to the life changing/ altering appearance it provides to the patients.

The other pattern which was seen to emerge in the study was that Oral Pathology, Periodontics and Pedodontics were seen to be the least interesting, financially insecure, least frequently called for specialist for consultation and they were also seen as the subjects which provide the least safe future prospects.

Similarly, it was also seen that Public Health Dentistry, Prosthodontics and Oral Surgery came out as the most difficult subjects during their undergraduate curriculum. A large reason for this can be attributed to the difficult

theory of the subject, along with the fact that the students are not able to correlate the theory and practical aspect of these subjects. This could be because, though the students are given a demonstration of most of the clinical work, they only get a chance of working on them/ hands on work experience is achieved only during the post-graduation. This is also the case with Public Health Dentistry, where the students are unable to understand how the theory and practical part are connected and correlated.

Conclusion:-

These findings are a part of the preliminary study, or a pilot study done to understand the perspective of dental students regarding the subjects in their undergraduate curriculum. It gave a meaningful insight to understand which subjects the students considered interesting and uninteresting. A more detailed research in this regard is advised at a larger level (country wide) to understand the thought process of the students throughout the country. Such work will enable the dental fraternity to understand the kind of improvisations which can be used to make the less interesting subjects more student friendly and more interesting. The results of this study could not be compared as literature search did not reveal similar studies conducted in the country, making it a novel area of work.

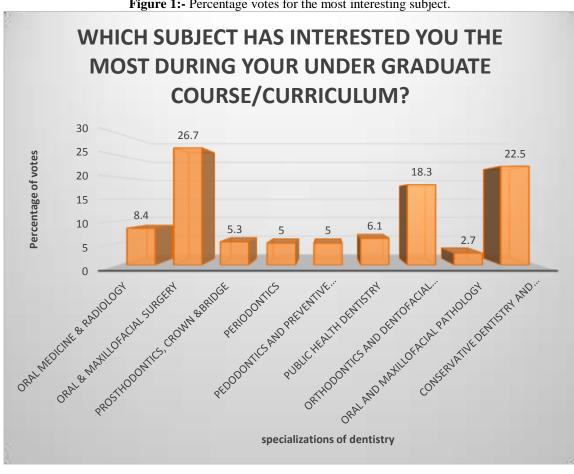


Figure 1:- Percentage votes for the most interesting subject.

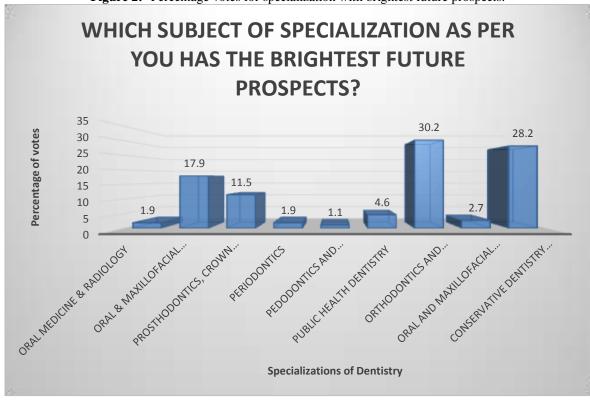
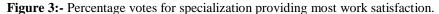
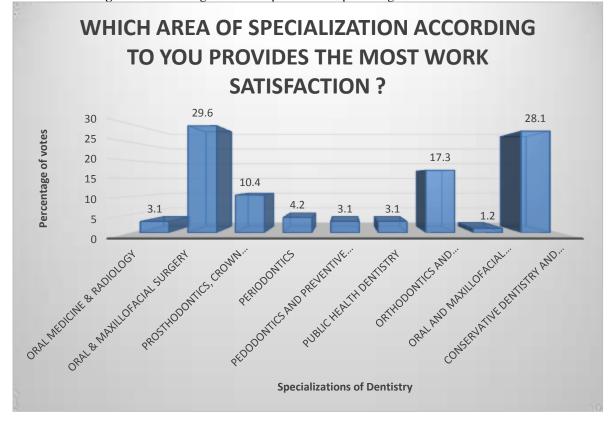


Figure 2:- Percentage votes for specialization with brightest future prospects.





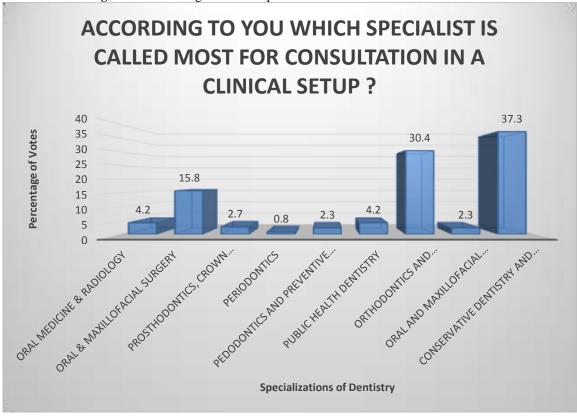
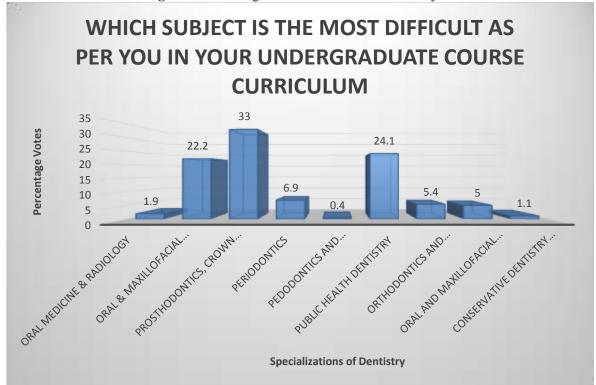


Figure 4:- Percentage votes for specialization with most consultation calls.

Figure 5:- Percentage votes for the most difficult subject.



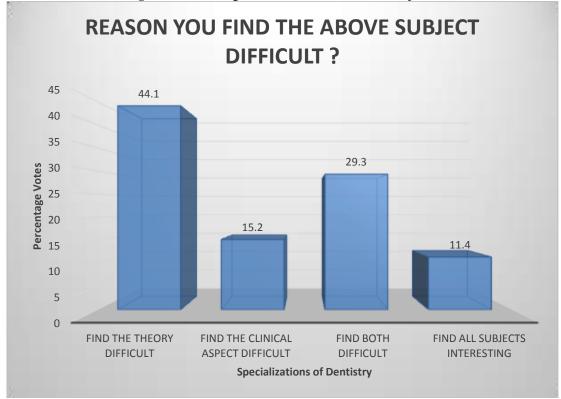


Figure 6:- Percentage votes for the reason of the subject to be difficult.

References:-

- 1. Gallagher J, Patel R, Donaldson N, Wilson N. Why dentistry? A quantitative study of final-year dental students' views on their professional career. BMC Oral Health 2007;7.
- 2. Brand A, Chikte U. Choosing dentistry as a career: part I—a comparison of student motives. J Dent Assoc South Africa 1992;47(11):469–73.
- 3. Tandon S. Challenges to the oral health workforce in India. J Dent Educ 2004;68(7 Suppl):28–33.
- 4. Gallagher JE, Clarke W, Eaton KA, Wilson NHF. Dentistry professional contained career in health care: a qualitative study of vocational dental practitioners' professional expectations. BMC Oral Health 2007;7:16.
- 5. Karibe H, Suzuki A, Sekimoto T, et al. Cross-cultural comparison of the attitudes of dental students in three countries. *J Dent Educ*. 2007;71(11):1457-1466.