

TRENDS OF POST-GRADUATION IN FINAL YEAR DENTAL STUDENTS AND PREFERENCES IN SPECIFIC SPECIALITY

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ABSTRACT

Study was carried out to evaluate trends of post-graduation in final year dental students and preferences in specific specialty. It was a descriptive cross-sectional survey carried out in CMH Medical College Institute of Dentistry. It was done from January 2019 to March 2019. It helps us to understand which specialty is most popular amongst final year dental students. Students were asked what other field they will choose if given a chance again in life other than dentistry. A self-administered questionnaire was distributed amongst students and they were asked questions regarding their interest in post-graduation and their preference in specific field of dentistry. Out of 69, 62 students completely filled the questionnaire, 17 were males and the rest were females. Data were analyzed using SPSS version 20 and descriptive statistics were used to achieve the results. Majority of students were in the age range of 22-23 years and they wanted to pursue postgraduate studies. Regarding the preference of specific field of dentistry, the first choice of specialty for students was Restorative dentistry and Endodontics (58.1%), followed by orthodontics (17.7%), remaining (14.5%) choose oral surgery and 4.8% of the students chose prosthodontics. (1.6%) students were undecided. As the trend towards postgraduate specialization in dentistry is gaining momentum, it is imperative to research this area more for better planning and allowing students to make informed decisions.

Key words: Attitudes, postgraduate, preferences, specialization

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INTRODUCTION

Around the world, dentistry as a profession is considered as an important unit of general health care system. Dental profession is expanding at a rapid rate globally. Many new dental specialties have been introduced in the recent past in dental profession. With the advancement in dental education, there is a paradigm shift to a new research based patient centered curriculum with major emphasis on evidence based dentistry.¹

In Pakistan, specialization in dentistry is a comparatively new concept, as in the past dentistry itself was considered as a specialized subject.² The course of undergraduate program in dentistry is comprised of 4 years and 1 year of house job. After graduation,

there are many avenues for fresh graduates. Some immediately after graduation set up their own private set-ups and start their practice, some decide to go abroad and either clear dental licensing exams there and start practice or opt for post-graduation and get themselves enrolled in dental college. Many pursue post-graduation in their own country, the options are either clinical or non-clinical subjects.^{3,4}

The final year dental students were the target study group in this article as they have had sufficient exposure to the patients while doing clinical work.

To date, there are 19539 general dental practitioners and 1867 specialists registered by the Pakistan Medical and Dental Council in Pakistan.² Pakistan is facing problems in terms of number of dentists. The World Statistics 2012, released by the World Health Organization (WHO), says that Pakistan has less than one dentist (0.6) per 10,000 population.⁵ There is a greater demand of dental specialists in this country² so this is an important area to be explored regarding what dental students think of in terms of pursuing post-graduation and serving the country.

When reviewing the international literature, it is revealed that in each country, trend of post-gradua-

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tion as well as specific preference in terms of choosing a specific specialty is quite varied. This seems to be strongly influenced by the cultural norms followed in that specific region for example, in Japan, the percentage of students favoring specialization has been 38.8% as compared to the UK where it is 83%. With the traditional Japanese business and societal model more focused on generalization, this seems to be a common trend.² In another study by Yu Xang comparing Chinese and Japanese students in terms of interest in post-graduation Chinese students were more likely to specialize (more than 50%) where as Japanese students more likely to work as general dentist.⁶ Many studies have advocated greater interest in post-graduation amongst dental students studying in different countries, this indicates a general trend amongst students around the world to specialize later in their careers.^{7,8}

In terms of chosen specialty, United Kingdom final year students placed Orthodontics as the most preferred dental specialty for post-graduation. This is followed by Restorative Dentistry.² In Sweden, Oral Surgery is the specialty of choice.² Thai students are also most interested in Oral surgery whereas students in Canada prefer Orthodontics.² A study carried out by the Annual American Dental Education Association from 1995-2004 in all the dental schools across the USA placed Orthodontics as the most preferred area for specialization by students followed by Oral and Maxillofacial Surgery and Pediatric Dentistry.²

METHODS

A cross-sectional survey was carried out amongst students of final year. Students from CMH Medical College participated in the study. Verbal Informed consent was obtained from all the participants. In the questionnaire, participants were categorized on the basis of age and gender. The purpose was to evaluate the trend of post-graduation and the interest in any specific dental specialty. Further this questionnaire also helped us to figure out interest in other professional fields apart from dentistry. SPSS 20 was used for compilation of the data.

RESULTS

A total of 69 questionnaires were given to the students. Out of 69, 62 questionnaires (n=62) were completed by final year BDS students. Seven questionnaires were not completely filled by students and were excluded from the study. Out of 62 dental students, 17 were male (27.4%) and 45 were female (72.6%). The age range was from 21-24 years. Seven students (11.3%) were 21 years, 30 students (48.4%) were 22 years of age, 22 students (35.5%) were 23 years of age and 3 students (4.8%) were 24 years old.

Regarding the choice of different dental specialties, the frequencies and percentages of students choosing different dental fields are mentioned in table I.

When students were assessed regarding choice of dental profession, out of 62 dental undergraduates, 46 students (74.2%) selected dentistry. 16 students (25.8%) however, had not taken this profession by their own will. Further studies are needed to figure out the reasons for not choosing profession by their own free will. (Table 2)

Lastly when students were asked to choose any other profession if given a choice again, majority opted for dentistry, few showed interest in other specialties like banking, arts, fashion designing mentioned in table 3.

DISCUSSION

Post-graduation education worldwide has significantly bloomed in the past few decades.⁹ The pursuit for postgraduate studies by dental graduates is increasing all over the world. The importance of postgraduate studies is well understood worldwide and that's the reason why the inclination towards postgraduate studies is increasing.¹

Similarly in Pakistan, as a large number of students are now attracted to dentistry. About 2400 dental students graduate from over 45 dental colleges annually. Out of which 810 students graduate from 13 different dental colleges of Karachi. However, nothing is found valuable on the post-graduation preference of dental students.⁹ Therefore this study was done to evaluate the trend towards postgraduate specialization among final year undergraduate dental students and interest in specific field of dentistry. The questionnaire response rate was 89%. Majority of the students in this study were interested in post-graduation after completion of their undergraduate dental program. This is promising as the trend of post-graduation is higher amongst students. The reason might be personal preference or their teachers and supervisors influenced them to opt for post-graduation. This area needs to be further explored.

Regarding the trend of post-graduation interest in international dental students a study by James puyer on UK dental students, almost half of dental undergraduates were undecided whether or not to pursue a specialist career.⁴ However in another study contrasting results were obtained. 71% OF UK dental undergraduates wanted to pursue a specialist career. This could be accounted to the fact that encouragement from the educational institution plays an important role in the decision making process.⁴ However, it must be remembered that dental undergraduates have yet to experience professional life after qualification, so

TABLE 1: PREFERRED SPECIALTY

Preferred specialty	No of students	Percentage
Operative dentistry	36	58.1%
Prosthodontics	3	4.8%
Oral surgery	9	14.5%
Orthodontics	11	17.7%
Paedodontics	0	0%
Periodontics	0	0%
Not decided	3	1.6%

TABLE 2: CHOSEN FIELD OF DENTISTRY BY CHOICE

No of students	Chosen dentistry by choice	%
46	Yes	74.2%
16	no	25.8%

TABLE 3: GIVEN THE CHOICE AGAIN WILL THE STUDENTS CHOOSE DENTISTRY OR ANY OTHER PROFESSION

Other profession	Number of students	%
Dentistry	31	50%
MBBS	4	6.5%
Banking	3	4.8%
Arts	5	8.1%
Fashion designer	3	4.8%
Engineering	1	1.6%
Armed forces	1	1.6%
Architect	1	1.6%
journalism	4	6.5%
Pilot	3	4.8%
Astronaut	2	3.2%
Law	2	3.2%
Music	2	3.2%

it would be understandable that many would still be uncertain as to which career they wish to follow⁵ hence the difference in the results.

A study conducted amongst 17 dental universities in Saudi Arabia the choice of specialty was as follows; Restorative and Aesthetic Dentistry was the most preferred specialty followed by Endodontics, Prosthodontics and Orthodontics.⁴ In another study on Saudi dental students regarding preferred dental specialty amongst dental students, Orthodontics was considered as the most popular specialty followed by

Oral Surgery. Regardless of the dental specialty chosen majority of the dental students had shown interest in post-graduation. However contrasting results have been found in another study that involves 233 Saudi dental graduates carried out in the past. The overall trend of specialization in 2005-2015 showed a marked decline in both local and international post-graduation (p value 0.013). The study concluded that specialization in the dentistry field was experiencing a decline in the number of graduates both locally and internationally. Thus it can be concluded that the career counselling and specialization orientation especially among the final year students guide them in choosing their future specialties.¹¹ Hence the increase trend in post-graduation amongst dental students in later studies. In another study regarding "post-graduate dental education the Ghanaian experience", majority of dental students preferred specialist training after their graduation and the preferred specialty was Oral and Maxillofacial surgery followed by Orthodontics, Conservative Dentistry, Paedodontics and Periodontics.⁶ Another study carried out to evaluate the choice of dental specialty amongst students, Orthodontics was considered as the most favored specialty followed by Maxillo-facial surgery.¹² An article by Yee Lung¹³ evaluating post-graduation trend amongst students, oral surgery was the most popular specialty followed by orthodontics.

Another study that determined specialty choices among dental students of Ibadan, Nigeria, majority of the students preferred maxillofacial surgery. The least favored specialty was Prosthetic Dentistry.¹⁴ An article by Saima Razzaq that involves dental students of Lahore Medical College, de, Montmorency College of Dentistry and Fatima Memorial Hospital,¹⁵ regarding preferred specialty for post-graduation 32% graduates selected maxillofacial surgery, 28% orthodontics, 20% operative dentistry, 16% prosthodontics and 6% selected Periodontology. This is an interesting finding but when it came to post graduate training, they were keen to learn Advanced Surgical Procedures (32%) but there was little (6%) interest shown in Periodontology. When they were asked to state the reasons of this preference, 44.4% students stated that they expected to earn better in dental practice with advanced surgical skills. Interestingly, high or low levels of confidence in a certain kind of procedures was not the main reason (7.8%) that affected specialty selection for post graduate education.¹⁵

CONCLUSION

This study showed that majority of undergraduate students had an intention to specialize, in restorative dentistry and endodontics, maxillofacial surgery and orthodontics.

Majority of the dental students had joined dentistry

by their choice. Few of the dental students showed interest in professions other than dentistry, more likely fields were arts and fashion designing followed by law and journalism.

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Concept ,writing the manuscript ,statistical analysis.
Data collection, statistical analysis.
Data collection.