Pak Armed Forces Med J 2015; 65(5): 701-05

EFFECT OF CAREER COUNSELLING ON POSTGRADUATE EDUCATION PREFERENCES OF DENTAL STUDENTS

Azad Ali Azad, Shoaib Rahim

Armed Forces Institute of Dentistry Rawalpindi Pakistan

ABSTRACT

Objective: To determine the factors responsible for and the effectiveness of career counselling on postgraduation preferences.

Study Design: Sequential mixed method study.

Place and Duration of Study: Army Medical College and Armed Forces Institute of Dentistry Rawalpindi Pakistan.

Method: Data was collected by means of a questionnaire. In which questions were asked under different themes. All those participating in the survey were being delivered a series of 2 lectures on career counselling, with 1 week gap between the lectures. After that the same questionnaire, containing some additional questions, were filled up by the participants.

Results: A total of 100 students/ house officers participated in this study. Eighty eight percent had knowledge about post-graduation programs in dentistry. McNemar's test showed that difference in choice of post-graduation was not significant (p=0.458). Marginal homogeneity test used for the 1st option of post-graduation before and after counselling session was statistically significant (p=0.046). Factors affecting the choice of specialty were better chances of getting job 62% (n=62), better chances of earning 84% (n=84) and would be less hectic 71% (n=71) and 78% (n=78) were passionate regarding the choice of specialty. Marginal homogeneity test applied for 1st choice of institution for post-graduation was statistically significant. Fifty nine percent (n=59) participants described low income and no stipend as a major barrier for post-graduation. Ninety two percent (n=92) of participants described that the career counselling session has increased their knowledge and broadened their horizon.

Conclusion: Career counselling made statistically significant difference in the choice of specialty before and after the session and it was very effective for participants in selecting their preferences.

Keywords: Career counselling, Dentistry post-graduate studies.

INTRODUCTION

The pursuit for postgraduate studies by dental graduates is increasing all over the world. The importance of postgraduate studies is well understood worldwide and is therefore the reason why the inclination towards postgraduate studies is increasing¹

Dentistry and all of its clinical specialties require a high level of training; skill acquisition and aptitude. Students who choose to specialize in dentistry need to possess a special skill or talent unique to that specialty. So postgraduate studies and continuing professional development has a very important role in the dental profession¹.

Correspondence: Dr Azad Ali, Classified Prosthodontist, AFID Rawalpindi, Pakistan *Email: pakprosthodontist@hotmail.com Received: 28 Nov 2014; received revised: 11 Dec 2014; accepted: 15 Dec 2014*

Pakistan is facing acute shortage 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. According to American Dental Education Association, 38.6 percent of dental school graduates pursue a residency in advanced general dentistry or in one of the nine recognized dental specialties .i.e., Orthodontics and dentofacial orthopedics, pediatric dentistry, periodontics, prosthodontics, oral and maxillofacial surgery, oral and maxillofacial pathology, oral and maxillofacial radiology, endodontics, and dental public health².

Report of 26th Asia Pacific Dental Congress shows that for 96% of the 386 general dental practitioners who attended the congress, the most popular subjects for clinical degree programs in dentistry were orthodontics (20%) and prosthodontics (14%) whilst oral Implantology and Cosmetic Dentistry were the highly preferred subjects for continuing education courses³.

A study of Saudi dental practitioners shows that 90% of postgraduate dental practitioners were interested in obtaining higher dental education⁴ and residents preferred the specialties of Orthodontics (20%), Endodontics (19%), Operative Dentistry (15%), Prosthodontics (14%), Pediatric Dentistry (10%), Periodontics (7%) and the Saudi Board in Advanced Restorative Dentistry Program (SBARD; 5%)⁵.

In order to organize and streamline this pursuit for postgraduate studies it is important to give orientation to the undergraduate and graduate students who are planning to opt for postgraduate studies so that they may make decisions in choosing their specialty with some baseline knowledge which will in turn be beneficial in the long run. Findings of a study in Nigeria calls for career education and counselling to empower final year medical students in specialty choice decisions⁶.

Career counselling can be an important tool to help the students decide. As per a study in Taiwan in 2001 such career counseling reduced the scale of career indecision among the students⁷.

As per a study in Faisalabad, Pakistan, 62% of the faculty members believed that career counseling should be an integral part of medical education⁸.

Hence career counseling does have an important role which cannot be denied. Due to this reason this study has been designed to evaluate the effectiveness of career counseling on postgraduate education preferences of dental students.

Of the numerous problems confronting dental education and training in Pakistan today, shortage of trained personnel in specialty areas seems to rank very high. The problem is further compounded by the uneven distribution of graduates into the different fields of dentistry. While there are large number of trainees in some disciplines, it usually occurs at the expense of other not so popular disciplines. In order to operate a meaningful and balanced oral health care delivery system and maintain standards in dental education, it is essential that all aspects of dentistry be adequately staffed at the specialist care centers.

Students' motivation in choosing a career in the health professions are of great interest for educators and admission committees, particularly in the field of dentistry⁹. It will be helpful to plan/impart dental postgraduate education by College of Physicians & Surgeons Pakistan (CPSP), Pakistan Medical & Dental Council (PMDC) & Higher Education Commission (HEC).

By virtue of this study, students will be better able to focus on different available avenues for post graduation as well as help the postgraduate studies regulatory institutions to rationalize postgraduate opportunities.

Scope of this study is to find out the existing situation regarding career counseling, which is helping students to select specialty programs and to check their effectiveness.

MATERIAL AND METHODS

This "Pre post study" was approved by the ethical committee of Armed Forces Institute of Dentistry (AFID) in October 2013. The study was carried out between October 2013 and May 2014. We administered survey to 100 dental students of final year of Army Medical College (AMC) and house surgeons of AFID. Sampling technique was non probability consecutive sampling.

All those participating in the survey were being delivered a series of 2 lectures on career counselling, with 1 week gap between the lectures. For lectures, members of faculty from AMC and AFID who were actually involved in teaching and training of house surgeons and undergraduate final year BDS students were chosen based on their relative ease of access.

The data was collected by means of a questionnaire, which was distributed before and after the lecture session. The questions asked were under different themes. Mostly questions asked were factual information such as postgraduate training and available options of postgraduate training, preferences about

special courses and their relation with career counselling.

Responses derived from the questionnaire were used to assess response rate of house surgeons and students and were expressed in terms of percentages using SPSS version 20. Results were displayed in the form of charts pursue post-graduation, where as 88% had knowledge about all the post-graduation programs in dentistry. Using Mc Nemar's test the difference in choice of post-graduation (that is clinical or Non-clinical) was not significant (p=0.458).

Marginal homogeneity test used for the 1st

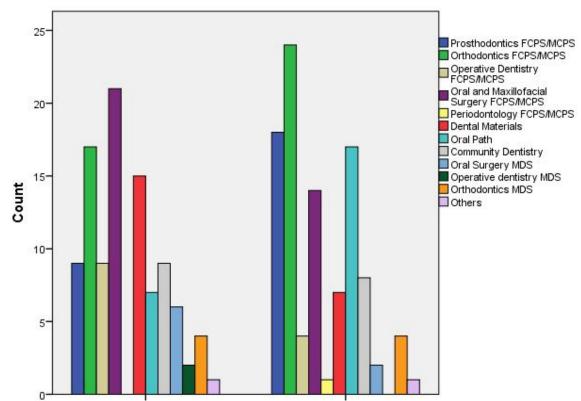


Figure-1: Choice of subject for post-graduation before and after counselling.

and tables. Mean and Standard deviation for age was been used. Frequency and percentages have been calculated for qualitative variables. Factual information after survey have been analyzed. Differences in preferences before and after counselling have been compared using Mc Nemar's test and Marginal Homogeneity test. *p* values of less than 0.05 considered significant.

RESULTS

A total of 100 students/ house officers participated in this study. Eighty two percent (n=82) were females and eighteen percent (n=18) were males. Mean age of participants was 23.47 (SD= 0.937). Forty four percent (n=44) were from final year BDS and fifty six percent (n=56) were house officers. Ninety one percent (n=91) of the participants agreed that they will option of subject of post-graduation before and after counselling session was statistically significant (p=0.046). A Bar chart has been given showing the choice of post-graduation before and after counselling (fig-1).

Seventy eight percent (n=78) were passionate regarding the choice of specialty they chose where as 20% (n=20) neither agreed nor disagreed and 2% (n=2) disagreed about being passionate. Other factors affecting the choice of specialty were better chances of getting job 62% (n=62), better chances of earning 84% (n=84) and would be less hectic 71% (n=71).

Marginal homogeneity test applied for 1st choice of institution for post-graduation was statistically significant (table-1).

Eighty eight percent (n=88) chose the institution because of better training standards. Other factors which determined the choice of institution were better stipend 65% (n=65), less hectic training 60% (n=60) and chances of getting job in the same institute 75% (n=75).

Fifty nine percent (n=59) participants described low income and no stipend as a major barrier for post-graduation. Ninety two percent (n=92) of participants described that the career counselling session increased their knowledge and broadened their horizon. This indicates that career counselling does have a definite effect on the student's ability to make more informed career choices.

DISCUSSION

In this paper we investigated the effects of a career counselling on postgraduate education preferences. We did not find any significant difference in career choices that is, either clinical or non-clinical, after the counselling session because most of the participants indicated that they already had a knowledge about all the post-graduation options. Although the broader option of post-graduation did not change but the counselling sessions show significant difference in choice of specialty selected in the clinical or non-clinical side. This is because most of the participants asked the detailed knowledge of specific specialty before the post-graduation subject was better chance of earning whereas in a study conducted by Dr. Issa the most important factor was "previous experience" in that particular subject¹³. In another study conducted in The United States (US) 'money' also was highlighted as the prime factor, followed by 'people', and then various features of the professional job¹⁴. The difference of factors is because of the presence of professional competition and the insecurity of getting a job in this part of the world¹². But the study conducted in US showed similar results to ours for factors affecting career choice. Both the research questions have been answered, that is, factors responsible for post-graduation and the effectiveness of career counselling as most of the participants indicated that the counselling session has improved their understanding.

Another important aspect to be discussed are the barriers for post-graduation among which unpaid post-graduation was the most important of all. Furthermore, if the influences that fascinate dental students to their chosen professional career are being, or will be, challenged over the approaching decades, it is important that as a dental profession we provide a realistic view to those who seek work experience and apply to dental school. In an era of growing range of programs available for

		Frequency before	Frequency after counseling	Test applied	p value
		counselling			
Preference	of	Government= 29	Government= 14	Marginal	0.00
Institution		Private= 43	Private= 41	homogeneity	
		Armed Forces= 26	Armed Forces= 27	test	
		Abroad= 2	Abroad= 18		

Table-1: Comparison of choice of institution for post-graduation before and after counselling.

counselling session. This study contributes to the literature on dental workforce in a way that it examines the motives of final year students as they prepare to leave dental college. Furthermore this has confirmed the wide range of influences on students' choice of career, lending support to the range of influences raised in similar studies of applicants to or students of dentistry¹⁰⁻¹².

In our study, the main factor selected by most of the students for pursuing a particular

study, aid with choice becomes even more significant. In this scientific era, individual advice is still more important than computerbased advice for career guidance. Evidence from the multivariate analysis that those who report careers advice influenced their choice of dentistry are more likely to be influenced by the range of career opportunities in dentistry is important to note. Whether this relates to the quality of careers advice or the personality of the student seeking career advice, to inform a rational approach to decision making, is unknown.

This study has highlighted the underlying factors, which determine students' choice of dentistry as a professional career. Longitudinal research into the workforce expectations and subsequent career decisions and pathways could contribute to professional debate and inform policy planning.

The limitations of the study that it only involved the students/ House officers of single institute and also the instrument used for data collection could have been improved by incorporating more questions.

CONCLUSION

Factors such passion regarding the choice of specialty, better chances of getting job after training, better chances of earning, less hectic training program, better training standards, better stipend and chances of getting job in the same institute is important regarding the choice of post-graduation for final year BDS students and house officers. Career counselling made statistically significant difference in the choice of specialty before and after the session and it was very effective for final year BDS students and house officers in selecting their preferences.

CONFLICT OF INTEREST

This study has no conflict of interest to

declare by any author.

REFERENCES

- Saeed S, Jimenez M, Howell H, Karimbux N, Sukotjo C. Which factors influence students' selection of advanced graduate programs? One institution's experience. J Dent Educ 2008; 72(6): 688-97.
- Chmar JE, Weaver RG, Valachovic RW. Annual ADEA survey of dental school seniors: 2005 graduating class. J Dent Educ. 2006; 70(3): 315-39.
- Chan WC, Ng CH, Yiu BK, Liu CY, Ip CM, Siu HH. A survey on the preference for continuing professional dental education amongst general dental practitioners who attended the 26th Asia Pacific Dental Congress. Eur J Dent Educ.2006; 10: 210-6.
- Ashri NY, Al-Moslem RK, Al-Mujel MH. General Dental Practitioner's Interest In Postgraduate Dental Education, Riyadh, Saudi Arabia. J Pak Dent Assoc 2007;16 (2): 82–9.
- Al-Dlaigan YH, Albarakati SF, Al-Habeeb F, Al-Hulaily M. Career characteristics and postgraduate education of female dentist graduates of the College of Dentistry at King Saud University, Saudi Arabia. Saudi Dent J 2012; 24(1):29-34.
- Adeleye O, Eze G. Anticipated specialties and influencing factors among final year medical students in a Nigerian University. Pak J Med Sci 2010; 26(3): 510-514.
- Khalid T. Faculty perceptions about roles and functions of a department of medical education. J Coll Physicians Surg Pak. 2013;23(1):56-61.
- Peng H. Career group counseling in undecided college female seniors' state anxiety and career indecision. Psychological reports. 2001; 88(3 Pt 2):996-1004.
- Creswell JW. A framework for design. Research design: Qualitative, quantitative, and mixed methods approaches. 2nd ed. Thousand oaks: Sage Publications 2003:9-11.
- Schiersmann C, Ertelt BJ, Katsarov J, Mulvey R, Reid H, Weber P(eds.). NICE Handbook for the Academic Training of Career Guidance and Counselling Professionals. Heidelberg: Heidelberg University, Institute of Educational Science. 2012.
- Stewart FM, Drummond JR, Carson L, Hoad Reddick G. The future of the profession--a survey of dental school applicants. Br Dent J. 2004;197(9):569-73.
- 12. Skelly AM, Fleming GJ. Perceptions of a dental career among successful applicants for dentistry compared with those of fifth-year dental students. Prim Dent Care. 2002; 9(2): 41-6.
- Issa AO, Nwalo KI. Factors affecting the career choice of undergraduates in Nigerian Library and information science schools. Afr J Libr Arch Inform Sci 2008:18(1): 23-32.
- Scarbecz M, Ross JA. Gender differences in first-year dental students' motivation to attend dental school. J Dent Educ. 2002; 66(8): 952-61.
