

Factors Influencing Immediate Career Plans Among Dental Students, India

Dhaman Gupta

PG Student, Department of Public Health Dentistry, Vyas Dental College & Hospital, Jodhpur, Rajasthan, India.

Bharath K. Garla,

Professor and Head, Department of Public Health Dentistry, Vyas Dental College & Hospital, Jodhpur, Rajasthan, India.

Rushabh J. Dagli

Associate Professor, Department of Public Health Dentistry, Vyas Dental College & Hospital, Jodhpur, Rajasthan, India.

Jitender Solanki

Associate Professor, Department of Public Health Dentistry, Vyas Dental College & Hospital, Jodhpur, Rajasthan, India.

Geetika Arora Bhateja

Assistant Professor, Department of Public Health Dentistry, Vyas Dental College & Hospital, Jodhpur, Rajasthan, India.

Rajeev Mahajan

PG Student, Department of Public Health Dentistry, Vyas Dental College & Hospital, Jodhpur, Rajasthan, India.

Abstract

Aim: To study the importance of various factors on career decision making among dental students, India. **Material and Methods:** A self administered close ended questionnaire study was conducted among 113 students from one dental teaching institute of India. The survey was based on a collection of responses to a 17-item questionnaire, in the month of August, 2014. Final year students and interns were participant of the study. Data was analyzed using SPSS (social package of statistical software) Chicago, USA, version 18.0 software. Chi-square test and multivariate logistic regression analysis were used to analyze variables. **Results:** A total of 109 participants were included in the final study with response rate of 96.5%. There were 59.6% Females and 40.4% males. Among personal motivation factors, "Earning of money" was having highest odds of 1.523. For all the specialties, prosthodontics (2.95) and orthodontics (1.83) were having higher odds compared to others. In private practice, factors like "Marital status", "Influence of spouse", "Education debt taken" are affected more in deciding career plans. **Conclusion:** Various factors are important in career decision for dental students in India like Anticipated Educational debt, influence of spouse and other family member. Debt repayment facility should be revised for the students interested to continue post graduate studies so that they are not forced to leave studies and earn for debt repayment.

Keywords: Career; Dental Students; Interns; Private Practice.

Introduction

The healthcare professionals are important elements of society and a vital resource including dentistry [1]. The choice of a dental career is motivated

by the financial and social status of this profession, but some of the dental students are initially motivated for prestige, status, variety of work, and to apply their theoretical knowledge into practice, not only this but also motivations regarding helping people and to improve their own appearance as ideal for others. Most of the students after choosing dentistry as a career also expect a secure and bright professional future which provides motivation for students during the course of their dental education [2]. In society; dentist has an important role as licensed

Corresponding Author: Dhaman Gupta, SF-9, Staff Quater, JNU Campus, Narnadi, Jhanwar Road, Jodhpur, Rajasthan. Pin code- 342001.
E-mail: drdhaman19@gmail.com

health care workers. Socialization of dentists begins with admission to dental college and continues through the entire period of their study [3,4,5]. Career choice is a critical decision that has a direct impact on a future life style. It is of utmost importance to understand the priorities and their sociodemographic backgrounds of the students to choose dentistry as a profession because of monetary factors which influence an individual's level of commitment towards the profession. The extent to which societal changes influence the choice of dentistry is of ultimate interest [6].

The majority of Indian dentists are engaged in dental private practice. In the present scenario, new graduates enter mostly in to private practice just after their graduation. As the proportion of general dentists has increased, the proportion entering academics and research has declined so as the proportion of specialists has decreased. Since 1966, all dental colleges in India were either run by govt. or aided by govt., in the same year the first dental college in private sector was established. Now the dental manpower has greatly increased in private and public sector [7]. Most of the students opt career choice according to the advice given by their parents, spouse, influence of family dentist, family member in dentistry, educational debt etc. To keep these points in view the present study was designed to assess the importance of various factors on career decision making among final years and interns of Vyas dental college and hospital, Jodhpur, Rajasthan, India.

Material and Methods

A self administered close ended questionnaire study was conducted among 113 students from Vyas Dental College and hospital at Jodhpur, which is affiliated to the Rajasthan University of Health Science (RUHS). Ethical clearance was taken from "Ethical Committee for Research" from Vyas Dental College and Hospital. The survey was based on a collection of responses to a 17-item questionnaire, in the month of August, 2014. Final year students and interns were invited to complete the questionnaire in their classrooms after lectures rather than outside the class. 109, dental students who were willing to participate were given the questionnaire. The participants were asked to fill the questionnaire of their own. The examiner was available throughout the filling of the questionnaire to explain the question to the participants. The response rate of the study was 96.5%.

A pilot study was also carried out on 30 subjects

(final year students and interns of Vyas dental college and hospital) before starting the main study to check the feasibility of the study and the aim of the study was clearly explained to all the subjects and written informed consent was obtained.

Exclusion Criteria

- The study subject who were not willing to participate.
- The study subject who were absent at the time of the study.

The data was collected by the close ended questionnaire. The original questionnaire was prepared by referring the studies of Nashleanas et al, Omolola O. Orenuga et al. and Jennifer E. Gallagher et al. [6,8,9] few questions were added according to Indian scenario. It included demographic data and questions on anticipated educational debt, plan immediately after graduation, family members in dentistry, influence of spouse, family other than spouse and family dentist.

Data was analyzed using SPSS (social package of statistical software) Chicago, USA, version 18.0 software. Chi-square test and multivariate logistic regression analysis were used to analyze variables.

Results

Table 1 shows 59.6 % of the study subjects were females and 40.4% were males. Among those only 11.9% were married.

Table 2 shows most of the dental students consider dentistry as a career choice followed by medicine irrespective of gender, marital status and location. No statistical significant relationship was found between gender, marital status, location and career choice.

Table 3 shows that among personal motivation earning of money was 1.523 times affected the career plans in males compared to females. Based on level of confidence, there is no effect on career planning, as compared to other branches 2.95 times males are opting for Prosthodontics branch compared to females. Statistically significant relationship was found in both males and females regarding factors affecting career plans.

Table 4 shows that other factors are not playing major role as compared to Influence of other family members on post graduation plans (p value = 0.000).

Table 5 shows that in private practice marital

status, influence of spouse, education debt. Taken are affected more in deciding career plans where as In Military Educational debt, influence of spouse are the important factors Among specialty, males are 1.57 times more affecting the individual

career plans compared to females and statistically significant results were found among study subject who opted for other dental occupation are educational debt. Taken and influence of family dentist.

Table 1: Distribution of study subjects according to their gender and marital status

Variable	No. of Study Subjects (n)	Percentage (%)
Gender		
Male	44	40.4%
Female	65	59.6%
Marital Status		
Married	13	11.9%
Unmarried	96	88.1%

n- Number of patients in a particular category

Table 2: Relationship between gender, marital status, location and career choice.

Variable	Dentistry	Medicine	Pharmacy	Others	Chi-Square value	p-value	Significance
Gender							
Male	24(22%)	14(12.8%)	1(0.9%)	5(4.6%)	0.261	0.967	NS
Female	33(30.3%)	21(19.3%)	2(1.8%)	9(8.3%)			
Marital Status							
Married	7(6.4%)	5(4.6%)	1(0.9%)	0(0%)	3.397	0.334	NS
Unmarried	50(45.9%)	30(27.5%)	2(1.8%)	14(12.8%)			
Location							
Campus	20(18.3%)	8(7.3%)	1(0.9%)	2(1.8%)	9.672	0.139	NS
Off Campus	37(33.9%)	27(34.8%)	2(1.8%)	12(11%)			

(p ≤ 0.05 – Significant, CI = 95 %)

Table 3: Multivariate logistic regression analysis showing factors affecting career plans

Variables	Odd's Ratio	p-Value
Personal Motivation		
Forced to join	1	
Want to serve community	0.811 (0.11,1.71)	0.763
To earn money	0.128 (0.29,4.38)	
Interest in dental field	0.015 (0.24,4.25)	
Career Options		
Both	1	0.001
Boys	5.07 (17.7,1.38)	
Girls	8.56 (15.96,3.20)	
Level of Confidence		
Not confident	1	0.277
Confident	0.217 (0.58,6.84)	
Very confident	0.217 (0.492,11.91)	
Specialty inspires the most		
Oral Pathology	1	0.630
Oral Medicine & Radiology	0.658 (0.04,9.4)	
Pedodontics	0.099 (0.006,1.7)	
Orthodontics	1.83 (0.204,16.5)	
Conservative Dentistry & Endodontics	0.748 (0.08,6.3)	
Prosthodontics	2.95 (0.23,37.8)	
Periodontics	0.565 (0.05,5.7)	
Oral & Maxillofacial Surgery	0.349 (0.03,3.09)	
Public Health Dentistry	0.493 (0.04,4.9)	

(p ≤ 0.05 – Significant, CI = 95 %)

Table 4: Multivariate logistic regression analysis showing factors affecting post graduation plans

Variables	ODD's Ratio	p-Value
Reason Behind Choosing The Particular Specialty		
Global Opportunities	1	0.068
Interest	1.73 (0.18,16.7)	
Financial stability	10.09 (0.84,12.6)	
Career development	4.06 (0.38,42.7)	

Social status	4.12 (0.3,56.2)	
Influence of other family members	5.035 (1.11,2.29)	0.001
Family member as a dentist	1.19 (0.37,3.73)	0.766
Influence of Family Dentist	1.38 (0.56,3.39)	0.476
Education Debt Taken		
More than 620000	1	
No debt	0.744 (0.03,18.5)	
155000-310000	0.415 (0.01,13.05)	0.617
310000-465000	0.431 (0.01,13.9)	
465000-620000	2.88 (0.05,16.2)	
Suggest to pursue career in dentistry		
No	1	
Yes	0.617 (0.03,10.3)	0.853

($p < 0.05$ – Significant, CI = 95 %)

Table 5: Multivariate logistic regression analysis showing factors affecting individual career Plans

Variables	ODD's Ratio	p-Value
Private Practice		
Gender(Male/Female)	0.294 (0.21,8.2)	0.751
Marital status(Married/Single or divorce)	1.31 (0.07,12.6)	0.505
Influence of spouse(Yes/No)	1.34 (0.39,48.9)	0.890
Influence of other family members(Yes/No)	0.95 (3.25,45.9)	0.920
Family member as a dentist(Yes/No)	0.13 (0.10,12.1)	0.926
Influence of Family Dentist(Yes/No)	0.90 (0.02,5.64)	0.502
Education Debt Taken(No debt/ Debt)	1.35 (3.04,21.9)	0.769
Military		
Gender(Male/Female)	0.36 (0.16,11.8)	0.758
Marital status(Married/Single or divorce)	0.26 (0.01,13.4)	0.911
Influence of spouse(Yes/No)	2.22 (1.02,8.39)	0.850
Influence of other family members(Yes/No)	0.48 (1.1,2.37)	0.967
Family member as a dentist(Yes/No)	1.03 (0.01,7.8)	0.512
Influence of Family Dentist(Yes/No)	0.68 (0.02,12.3)	0.675
Education Debt Taken(No debt/ Debt)	5.4 (9.09,21.9)	0.326
Speciality		
Gender(Male/Female)	1.57 (0.03,1.33)	0.098
Marital status(Married/Single or divorce)	0.95 (0.04,14.2)	0.640
Influence of spouse(Yes/No)	0.50 (2.4,11.3)	0.961
Influence of other family members(Yes/No)	0.99 (8.2,16.4)	0.922
Family member as a dentist(Yes/No)	0.31 (0.06,8.9)	0.807
Influence of Family Dentist(Yes/No)	0.68 (0.15,25.4)	0.601
Education Debt Taken(No debt/ Debt)	0.33 (7.35,69.9)	0.943
Other Dental Occupation		
Gender(Male/Female)	0.32 (0.09,20.9)	0.814
Marital status(Married/Single or divorce)	1.39 (0.01,10.7)	0.594
Influence of spouse(Yes/No)	1.35 (3.42,4.42)	0.934
Influence of other family members(Yes/No)	2.50 (6.64,9.98)	0.878
Family member as a dentist(Yes/No)	2.6 (0.002,3.5)	0.188
Influence of Family Dentist(Yes/No)	3.48 (0.89,11.8)	0.051
Education Debt Taken(No debt/ Debt)	18.5 (0.02,69.4)	0.012

($p < 0.05$ – Significant, CI = 95 %)

(Constant: gender-female, marital status-single or divorced, Educational Debt- no debt, others-No)

Discussion

Most of the studies are conducted on final year students but present study is conducted on both final years and interns, the proportion of female candidate (59.6%; $n=65$) was more than that of Males (40.4%; $n=44$) because now a day's more number of females are taking admission in dentistry in India as compared to males, However contradictory findings

was found in a study conducted in USA by Benjamin M N et al (2014), in which males 139(55.2%) were taking more admission in dentistry as compared to females 113 (44.8%) [8].

Omolola orenuga et al (2006) [6] and Gobichetti PJA et al (2013) [10] found that medicine was generally the preferred first choice followed by dentistry and the most common reason for the dental students to choose the dentistry as a career due to self

interest followed by, did not get admission in medicine. However these findings differ in our study, it was found that dentistry was a first choice of most of the dental students followed by medicine irrespective of gender and marital status. The most common reasons for the student to choose medicine as career choice are their desire to enter prestigious profession.

Our study also found that to earn money, is the most prominent motivational factors in choosing dentistry as a career but in study conducted by Ganesh R et al (2013) [7] in which interest in dental field was the main reason to choose dentistry as a profession. Similar finding was also noted in study by Joanne N W et al (2006) [11] and in another study conducted by C Naidu, where financial gains was the main reason to choose healthcare as a profession [12].

Study by Gobichetti PJA et al (2013) [10] found that students wants to do a master degree in oral surgery because of passionate towards the specialization and in another Study by Hazim H R (2013) [1] orthodontics was the most favored option followed by oral maxillofacial surgery. These two specialties were more opted by dental students in specialization and both were associated with higher income. But in our present study students were more interested in prosthodontics branch followed by orthodontics. According to the students these two branches enhance their status as well as financial gain which attract them towards these branches.

Influence of spouse's occupation and influence of a family dentist have more significant impact on the post graduation career plans, found in study conducted by Benjamin M N et al (2014) [8] where as in another study by Hazim H R (2013) [1] contradictory results were found. In comparison to our study, influence of other family members had great impact on post graduation plans (p value ≤ 0.001)

The logistic regression model demonstrated that influence of spouse, educational debt. taken were important factors for career plans who want to enter military and private practice. Statistically significant results were found among study subject who opted for other dental occupation with educational debt taken and influence of family dentist. Similar findings were noted in the study conducted by Benjamin M N et al (2014) [8] along with certain factors associated such as plans to join private practice just after the graduation, gender and influence of their family dentist. No statistically significant difference was found between marital status, family member as dentist and their future career plans.

Limitation of the Study

This study is conducted only in one institution

which may limit generalizability. A follow-up research is required among these new dentists over several years of graduation which could lead to a better understanding of how different factor can influences their immediate career plans.

Conclusion

Various factors are important in career decision for dental students in India like Anticipated Educational debt, influence of spouse and other family member. Debt repayment facility should be revised for the students interested to continue post graduate studies so that they are not forced to leave studies and earn for debt repayment.

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