

MOTIVATIONS AND CAREER PLANS OF SENIOR DENTAL STUDENTS AT KING SAUD UNIVERSITY, RIYADH, SAUDI ARABIA

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ABSTRACT

The aim of this study was to investigate senior dental students' motivation for studying dentistry and their future plans following graduation. This descriptive, cross-sectional study was conducted using a structured questionnaire administered to dental students during their final (senior) year at King Saud University, Riyadh, Saudi Arabia. The questionnaire consisted of sections on demographic details, motivational factors, and selection for career choice. Data were analyzed using quantitative totals and percentages. Ranking of motivating factors was based on calculation of mean and standard deviation. The most popular reasons for choosing dentistry were altruism, career independence, and both financial and job security. The majority of the students planned to work in a government dental clinic or hospital (67.9%) and continue postgraduate education abroad (45.9%). Preferred areas of specialization included endodontics, which was chosen primarily by male students, and operative dentistry, chosen by more female respondents. It can be concluded that the ability to help others was the underlying factor behind students' motives for studying and pursuing a career in dentistry. The majority of students' future plans involved pursuing a postgraduate degree abroad or working at government dental clinic or hospital.

Key Words: Motivation, career choices, dental students, dentistry.

INTRODUCTION

Motivation in this study is considered as the phenomena involved in the stimulation of action toward a particular objective or objectives where previously there was little or no movement toward those goals.¹ Motivating factors for students choosing the speciality of dentistry have been of interest to educators and admission committees for years, due to the potential to better understand these students' psychological backgrounds, future job satisfaction, and to identify expectations of the profession.²

Because these factors vary over time and between students in different countries, a variety of studies have been conducted to explore students' motivations for choosing dental studies and their future career plans.³⁻⁹ The most commonly reported factor for choosing a dental career in existing literature is altruism, with prestige/social image, financial stability, and the ability to balance their personal and professional lives as dentists have been reported as prominent motives across respondents in various countries.¹⁰

Choosing a career path can have a major impact on the future life of the student, as it is a multi-faceted and complex decision; choosing a career in dentistry is no exception. Dentistry provides a range of career and business opportunities, such as serving as a general practitioner as well as a specialist or consultant in a variety of different specialities.¹¹ The College of Dentistry of King Saud University (KSU) was established in 1975 as the first university-based dental training institution in the Arabian Gulf. The dental specialties in the college are oral medicine and diagnosis, oral pathology, oral radiology, oral and maxillofacial surgery, prosthodontics, orthodontics, preventive and community dentistry, pedodontics, periodontics, operative dentistry, dental material, and endodontics.¹²

Continued research into the career motivations and future plans of dental student is vital because it can help educators to modify and design appropriate and effective plans for undergraduate programs as these motivations change over time, and also in providing students with a complete and accurate picture of their professional future. The aim of the present study was to investigate the particular student motivations for choosing dentistry as the future career in senior-year students from the College of Dentistry at KSU, Riyadh.

METHODOLOGY

This study was a descriptive, cross-sectional survey that targeted senior-year dental students enrolled in the College of Dentistry at KSU, Riyadh, Saudi Arabia,

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for the 2016/2017 academic year. Ethical approval of the study was obtained from the College of Dentistry Research Centre (CDRC), KSU, Riyadh, Saudi Arabia (Registration Number #FR0354).

The purpose of the study and confidentiality of the information obtained during the study were explained in an introductory first page attached to the study questionnaire. A written informed consent was then obtained. The questionnaire utilized in this study was adopted from a study conducted in India with minor modifications.⁸ The questionnaire consisted of three parts with a total of eleven closed and open-ended questions. The first part contained questions concerning sociodemographic data (age, gender, educational background of parents, whether dentistry was their first choice, and persons who influenced their choice of dentistry). The second part contained a list of factors that could have influenced students' choice of dentistry as a field of study and career path. These factors were rated from 0–4 on a Likert scale: 0 = not important, 1 = disagree, 2 = slightly agree, 3 = agree, and 4 = strongly agree. Students were asked to rate the importance of each motive for attending dental school using this 5-point scale. The third part contained a question on future plans after graduation and the student's preference subjects for specialization.

A pilot study was conducted on 15 students of the study population who were excluded in the final analysis to check the validity and reliability of the questionnaire and no changes were made. Then, the questionnaires were distributed to the study participants by one of the students during a regular classroom lecture where they were asked to complete the questionnaires voluntarily and anonymously. Then the questionnaires were collected immediately. The data were analyzed using statistical package SPSS 17.0 (SPSS Inc., Chicago, IL, USA). Descriptive analyses were carried out and were represented as frequency, percentages, and mean according to gender.

RESULTS

A total of 112 final year BDS students completed the questionnaire. However, three questionnaires were eliminated due to missing data. The remaining 109 questionnaires were coded and entered into SPSS to perform data analyses. The mean age of the students was 23.2 years (S.D = 0.798); 61 (56%) were males and 48 (44%) females.

The educational background of participants' parents revealed that the majority of fathers were university graduates (47.7%), while the majority of the mothers had high school or lower education (48.6%). More than half of the students responded that a career in dentistry was their first choice when applying to the university

(54.1%), and the majority (58.3%) named themselves as their primary influence to study dentistry [Table 1].

Analysis of students' motives for choosing dentistry as a career revealed that the most important factors that influenced this choice were altruistic (i.e., to help people) as well as the ability to have independence within their career. Financial and job security, family/friend's advice and having a prestigious profession with high social status followed as commonly noted motivating factors [Table 2].

TABLE1: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE PARTICIPANTS

Characteristic	N (%)
Father education	
High school or below	31 (28.4)
University	52 (47.7)
Master or above	26 (23.9)
Mother education	
High school or below	53 (48.6)
University	43 (39.4)
Master or above	13 (11.9)
Was dentistry your first choice when you applied to the university?	
Yes	59 (54.1)
No	50 (45.9)
The person who influenced your choice of dentistry is?	
Self	63 (58.3)
Parents	17 (15.7)
Friends	8 (7.4)
Dentist	5 (4.6)
Other	15 (13.9)

N: Number of students

TABLE 2: FACTORS THAT INFLUENCED STUDENTS' CHOICE OF DENTISTRY

Motivating Factor	Mean ± *
Family/friend's advice	3.61 ± 1.114
Prestige and social status	3.58 ± 0.984
Interest in dental science	3.32 ± 1.049
I want to help people	4.14 ± 0.848
Independence in job	4.04 ± 0.937
No emergency work	3.37 ± 1.259
Financial security	3.86 ± 1.004
Good job security	3.83 ± 0.938

* Means of the Likert scale scores.

TABLE 3: STUDENTS' CHOICES FOR FUTURE CAREER PLANS

Future plans after graduation (more than one plan can be chosen)	N (%)
Working at a government dental clinic or hospital	74 (67.9)
Working at a private practice	54 (49.5)
Working at an academic institute	30 (27.5)
Post-graduate studies at KSA	37 (33.9)
Post-graduate studies abroad	50 (45.9)
Working abroad	15 (13.8)
Involvement in research	20 (18.3)
Working as a general practitioner	18 (16.5)
Others	4 (3.7)

* Means of the Likert scale scores.

TABLE 4: STUDENTS' INTEREST IN DENTAL SPECIALIZATION

Preferable subjects of specialization (more than one specialty can be chosen)	Male N (%)	Female N (%)	N (%)
Endodontics	29 (70.7)	12 (29.3)	41 (37.6)
Periodontics	10 (76.9)	3 (23.1)	13 (11.9)
Pedodontics	9 (56.3)	7 (43.8)	16 (14.7)
Prosthodontics	18 (54.5)	15 (45.5)	33 (30.3)
Orthodontics	17 (77.3)	5 (22.7)	22 (20.2)
Operative dentistry	13 (43.3)	17 (56.7)	30 (27.5)
Oral surgery	9 (64.3)	5 (35.7)	14 (12.8)
Oral medicine & pathology	2 (28.6)	5 (71.4)	7 (6.4)
Other	1 (50)	1 (50)	2 (1.8)

N: Number of students

Regarding future plans after graduation, 67.9% planned to work at a government dental clinic or hospital, while 49.5% planned to work at a private clinic and fewer (16.5%) were interested in working as general practitioners. When asked about post-graduate studies, more students (45.9%) planned to pursue postgraduate studies abroad, compared to remaining at KSU (33.9%) [Table 3]. The majority of students preferred fields for specialization in endodontics (37.6%), prosthodontics (30.3%), and restorative dentistry (27.5%) [Table 4].

DISCUSSION

The present study was conducted to identify the senior year dental students' perceived motivation for studying dentistry and to examine their future plans after graduation. The majority of the students reported that dentistry was their first choice when they applied to the university, and that it was largely their own decision (i.e., without significant influence from others). These results coincide with a previous study performed at the same institute in 2014;⁹ however, a study in India revealed that parents had a major effect on students' decision to select dentistry as a field of study and postgraduate career;⁸ Another study by Aggarwal done in India revealed that 97.7% of participants were encouraged by their families to consider dentistry as a profession.¹³ In Nigeria, fathers were found to be the most important influence in male students, and both parents females students.¹¹

The crucial motivating factors revealed in our results for students who chose dentistry as their career were helping people, job independence, and financial and job security. Belsi et al¹⁴ and Gardner and Roberts-Thomson¹⁵ had similar findings, where the same factors were the most important motives described by their respondents. Other studies conducted in the United Arab Emirates¹⁶ and United Kingdom¹⁷ showed that the primary motivational factors were working in a healthcare field and providing service to other people, which also align with the findings of our present study. In Jordan, a study conducted by Al-Bitar et al⁴ that included all dental students at a university (from the first to the fifth years) found that 46% of the students had selected dentistry as their first choice. Among the motivational factors for choosing dentistry, prestige was given the highest score (44.4%) followed by helping others (43.6%).

In congruence with our study, a separate study conducted in Saudi Arabia that also targeted senior-year dental students from seventeen dental colleges¹⁸ found that 51.1% of students chose working as a civilian dentist in a public sector as their first choice, followed by 23.7% who desired to work in an academic institute, and 11.6% who preferred working in a private institute. In our study, students preferred working in a private institute over an academic one, probably due to heavy workloads associated with academic responsibilities.

In the current study, a relatively high percentage (79.8%) of respondents planned to specialize by pursuing postgraduate education, among which 45.9% planned to pursue the further studies abroad and 33.9% in Saudi Arabia. These results though align with the results of a previous study¹⁸, yet not in agreement with studies conducted by Aditya⁸ and Sapna et al,¹⁹ where students preferred to pursue postgraduate education locally.

Only 16.5% of the students in our study plan to work as general practitioners, which is alarming in wake declining number of general practitioners in Saudi Arabia. This result could be explained by the fact that dental specialists earn higher incomes as compared to general dentists.²⁰

Regarding future specialization options, the majority of male dental students in the present study preferred endodontics, while majority of the females chose operative dentistry. The least preferred areas for specialization among both males and females were oral medicine and pathology. A study conducted by Halawany et al¹⁸ reflected identical findings in both gender preference and the least desirable areas of specialization. However, in contrast to our findings, male participants in their study preferred Oral and Maxillofacial Surgery as a choice for specialization.

Some dental schools, including the College of Dentistry at KSU, are implementing mentorship programs, where students have the opportunity to observe and interact with specialized clinicians who encourage and guide them toward success in their future careers by providing opportunities to clarify professional goals and aid in decision-making. Some students may ultimately consider a career change due to a decrease in satisfaction or dissonance between expectations and reality during their experiences as a dental student.²¹ As such, a follow-up study that involves the same participants within few years after post-graduation could lead to a better understanding of additional factors that affect their education and career plans.

The present study was conducted in a specific institution, so results of this study cannot be generalized to dental students in other countries. Future studies using a randomly selected larger sample size from multiple institutions is advisable to validate these findings.

CONCLUSIONS

Considering the limitations of the present study, the following conclusions could be derived:

- 1 Intrinsic factors strongly influenced the students' motivation for pursuing a career in dentistry.
- 2 The main motivation for pursuing a career in dentistry involved being able to help people, visions of a bright future in terms of prestige and social status, job independence, and security (both financial and job-related).
- 3 Future aspirations of the participants predominantly involved pursuing a postgraduate degree abroad or working at a government dental clinic or hospital.
- 4 The majority of male participants chose endodontics as their preferred area of specialization, while females preferred operative dentistry.

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