

Factors Influencing Study Choices, Career Preferences, and Interest in Oral Medicine Among Senior Dental Students in Riyadh, Kingdom of Saudi Arabia, A Cross-Sectional Study

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Abstract

Background: Choosing a career is one of the most important aspects in terms of dental students' future, it is a complex and critical decision. Therefore, this study aims to identify career preferences among senior dental students, factors influencing their future specialty choices and their opinion about oral medicine and interest in pursuing Oral Medicine specialty in the future.

Methods: A cross-sectional observational analytical study using a convenient sampling method was conducted to final year dental students in governmental colleges in Riyadh, Kingdom of Saudi Arabia, In October 2020. Data were collected via an online survey using Survey monkey, the survey consisted of demographic data questions and 3 questions that were measured on a 5-point Likert scale and one multiple choice question. Participants were given 3 minutes to fill in the survey anonymously.

Analyses included descriptive statistics (means, SDs, and frequencies); test relationship between variables (GPA, gender, and university) with factors by using chi-square test, and analysis of ANOVA for comparing more than two groups.

Results: One hundred and sixty-nine final year dental students in Riyadh, Saudi Arabia from three governmental universities King saud university, King saud bin abdulaziz university for health science, and Prince noura university participated in this study. There were 98 (58%) male respondents, while females were 71 (42%) of the total sample. In this study, we measured career preference among senior dental students, factors influencing future specialty choice, opinion about oral medicine and interest in pursuing Oral Medicine specialty in the future.

Conclusion: The majority of the senior dental students in governmental dental colleges in Riyadh prefer to work in government dental hospitals. Receiving good income as a professional specialist was the most influential factor for future specialty choice. Pursuing oral medicine specialty in the future was not considered by the majority of students.

Keywords: Oral Medicine; Senior Dental Students; Career Preferences; Dental Specialties

Abbreviations

KSU: King Saud University; KSAUHS: King Saud Bin Abdulaziz University for Health Sciences; PNU: Princess Nourah University; GPA: Grade Point Average

Introduction

According to The American Academy of Oral Medicine, Oral Medicine is “the specialty of dentistry responsible for the oral health care of medically complex patients and for the diagnosis and management of medically-related diseases, disorders and conditions affecting the oral and maxillofacial region”.

An oral medicine specialist is qualified for diagnosis and management of various conditions such as salivary gland disorders, orofacial pain, oral mucosal diseases and oral manifestations of systemic diseases. Therefore, they provide clinical care and treatment of salivary gland dysfunction, viral, bacterial, and fungal oral infections, soft and hard tissue lesions, oral mucosal diseases, headache disorders, maxillofacial sensory or movement disorders, burning mouth syndrome, orofacial pain disorders and oral complications from chemotherapy and/or radiotherapy [1].

Oral medicine is considered mainly as a non-surgical dental specialty which includes the diagnosis, physical examination, and therapeutic management of oral medically related disorders [1].

Choosing a career is one of the most important aspects in terms of dental students’ future, it is a complex and critical decision. In one study the students were asked to identify the single most important factor that impacted their decision to choose a specialty or career path out of the following options: cost of program, enjoyment of providing that type of specialty care, exposure prior to dental school, faculty influence, future salary as a professional specialist, length of program, location of program, types of patients seen in that specialty of service, and others. The enjoyment of providing care in that field was reported as the single most important factor by half of the respondents. Faculty influence, location of the program, and cost of the program were reported as the least influencing factors to impact their decision in choosing a specialty or career path [2].

An institutional study conducted at King Saud University measured the most and the least preferred dental specialties among dental students, and the results showed that oral medicine and radiology were the least preferred specialties among male students where only 3% considered pursuing these specialties, while female students had a higher percentage of (9%) [3]. Another study conducted among senior dental students from seventeen universities in Saudi Arabia measured the top three preferred specialties. There were 649 respondents in total, and 5% chose oral medicine and diagnosis as their first choice of specialty, 7% chose it as their second preferred specialty, and 5% chose it as their third preferred specialty [4].

The current literature has reported the levels of interest in different postgraduate specialties and the career choices of graduate dentists, however there are no studies that have explored senior dental students’ perceptions and interest in oral medicine as a specialty and the factors that influenced their specialty choice. Consequently, this study was conducted to investigate senior dental students’ attitudes and interests pertaining to oral medicine and diagnosis as a career choice, using a questionnaire we designed.

The hypothesis was there’s no relationship between students’ variables (GPA level, student’s gender and governmental institutes) and factors influencing study choices, career preferences and opinion and interest in oral medicine.

Methods

The target population

The target population was senior dental students (those in the final year of study before internship) in governmental dental colleges in Riyadh, Kingdom of Saudi Arabia.

Exclusion criteria: Non-dental students, Non-senior students and Non-governmental college students.

Questionnaire administration

An anonymous, self-administered online questionnaire was distributed to senior dental students in governmental dental colleges through social media channels. 169 students participated in the survey.

The questionnaire consisted of four sections

The first section consisted of questions regarding demographic data which included: the students' gender, academic GPA, and the institute that the student was attending.

The second section aimed to assess the respondents' career preferences. The students were asked to indicate their preferences to work in each of eight available fields in dentistry after graduation by using a 5-point Likert scale where 1 represented the least preferable career choice and 5 represented the most preferable one. The validity of this question was evaluated in a previous study [5], which matched the purpose of this study. Three additional fields were added: Dentist in military section, Management of dental business, and Business outside dental field. Two fields were removed: postgrad studies in India and postgrad studies abroad.

The third section aimed to assess the factors influencing students' specialty choices. The question was selected from a previously published study [3], The students were asked to rate 12 factors that could influence their specialty choice using a Likert scale with points ranging from 1 to 5, where 1 represented a factor that had no influence on their decision and 5 represented a very influential factor.

The fourth section evaluated students' opinion and interest in oral medicine. This section had two questions: The first question was taken from a previously published study with some modifications [6]. The question was changed from pediatric dentistry to oral medicine to correspond with the purpose of this study. The respondents were asked about their opinion about oral medicine using a 5-points Likert scale with points ranging from 1 to 5, where 1 represented strong disagreement and 5 represented a strong agreement. The second question was a multiple-choice question which assessed the students' consideration of pursuing Oral Medicine specialty in the future.

Data analysis

The data were analyzed using the Statistical Package for Social Science (SPSS) software version 21. Analyses included descriptive statistics (means, SDs, and frequencies); test relationship between variables (GPA, gender, and university) with factors by using chi-square test, and analysis of ANOVA for comparing more than two group. $P < 0.05$ was considered statistically significant.

Ethical considerations

The questionnaire included a cover page explaining the rationale of the research. The informed consent indicated the purpose of the study and the participants' right to withdraw at any time without any obligations toward the study team.

Results

Participants' profile

The study sample included senior dental students attending governmental dental colleges in Riyadh, which includes: king Saud University (KSU), king Saud bin Abdulaziz University for health sciences (KSAU-HS), and Princess Nourah University (PNU). One hundred and eighty-nine senior dental students participated, but only 169 students completed the survey. As shown in figure 1 there were 98 (58%) male students and 71 (42%) female students. The highest percent of the total sample were KSU students by 51.5% of the total sample, followed by KSAU-HS students by 36.7% of the total sample, while 11.8% of the total sample were PNU students. The GPA level of the

students were (4.50 - 4.74) by 36.1% of the total sample, followed by (4.25 - 4.49) by 26.6% of the total sample, then 20.1% of the total sample were (3.75 - 4.24), followed by 11.8% for (4.75 - 5.0).

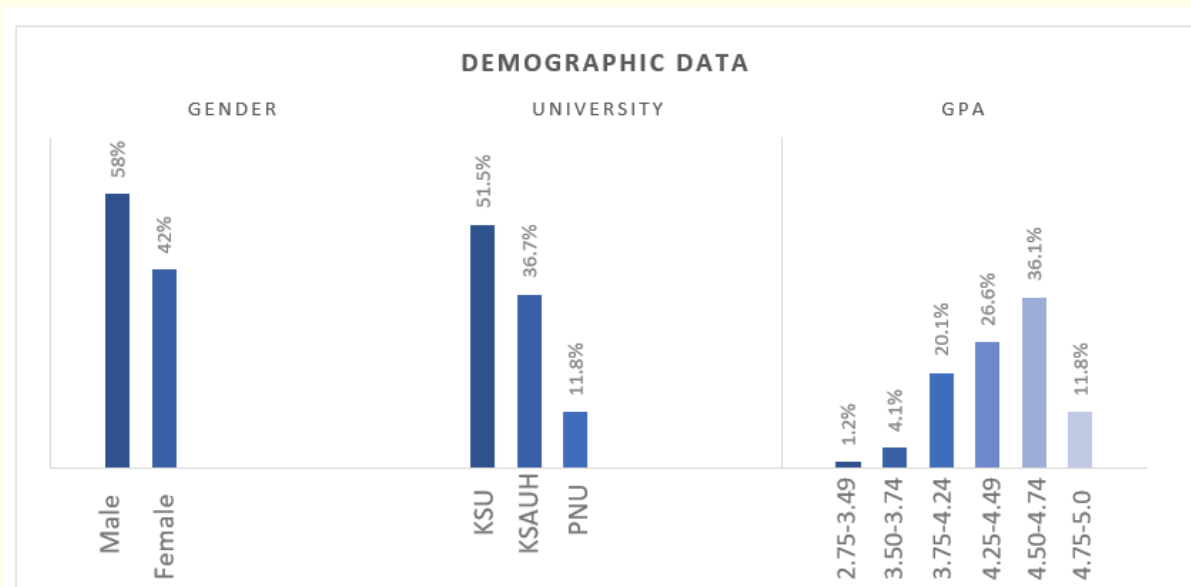


Figure 1

Career preference among students

Figure 2 shows the mean scores of dental students' career preference. The most preferred career option was working in Government dental hospitals, followed by Academic services dentist (at universities), then working abroad followed by working in the private sector. The least preferred career option was working as a researcher followed by management of dental business. There was statistically significant relationship between gender and the career choice (Dentist in military field) as (29.6%) of female students reported that it is the most preferred career, while (7.1%) of male students reported that it is their most preferred career. There was statistically significant difference between governmental institutes and career preferences as a researcher, where KSU and KSAU-HS students did not prefer the researcher career pathway. However, PNU student were neutral to this option.

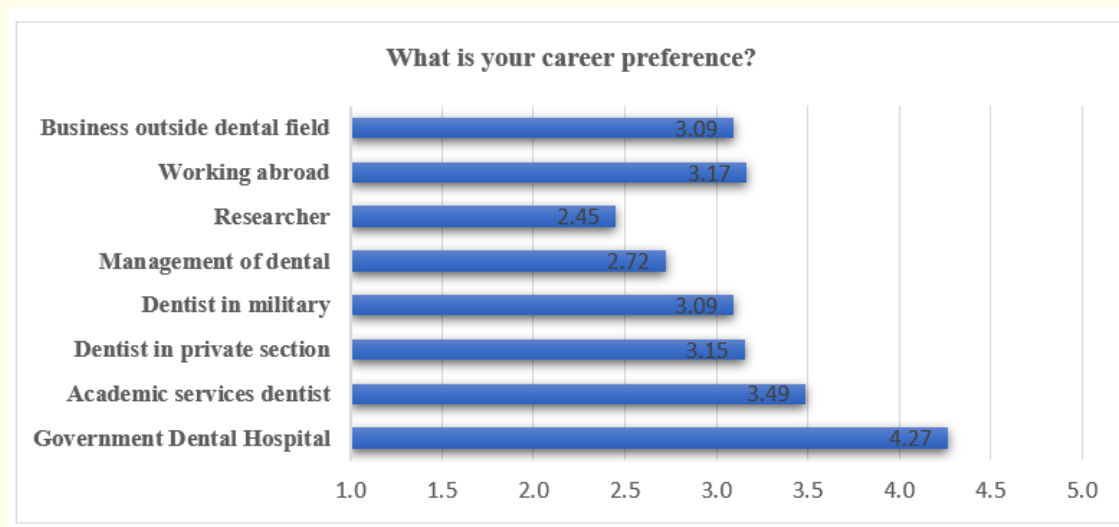


Figure 2

Factors influencing future specialty choice

As shown in figure 3, after analyzing the factors influencing dental students' choice of their future specialty, the results showed that the most influential factor was (enjoyment of providing specialty service) followed by (good income as a professional specialist). Other notable influential factors included: intellectual content of specialty, predictable working hours, cost and length of residency program, and influence of faculty colleagues in dental specialty. The least influential factor for dental students' choice of future specialty was family members. There was a relationship detected between students' gender and some factors influencing study choices such as: enjoyment of providing specialty service, specific interest in population seen and intellectual content of specialty. Male students were more influenced by these factors than female students. ANOVA test showed that there is a statistically significant difference between governmental institutes and some factors influencing students' specialty choices. Lack of overcrowding in the field and cost of residency program were influential factors for PNU students while neutral for KSU and KSAU-HS students. In addition, intellectual content was an influential factor for KSU and KSAU-HS students, and a strong influential factor for PNU students.

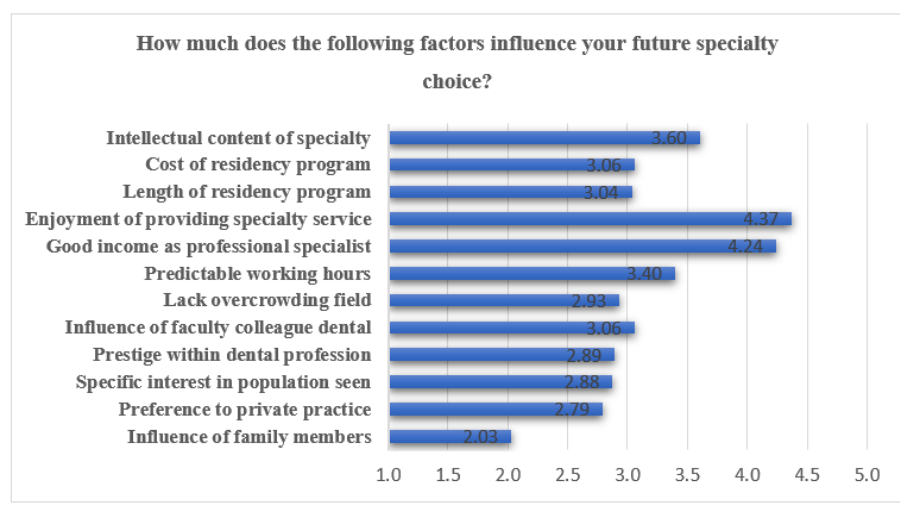


Figure 3

Opinion about oral medicine

Figure 4 shows the dental students' opinion about oral medicine specialty, using a 5-points Likert scale for agreement. The results showed that the majority of senior dental students expressed positive opinion about Oral Medicine specialty. The students agree that Oral Medicine is (useful for the community) and (essential) by 86.4% and 88.7%, respectively. 72.2% of the students agree that that oral medicine provides valuable service. 63.9% Disagree that oral medicine is simple. Only 20.7% agree that job opportunities are available in oral medicine specialty. There was a significant difference between students' gender and their opinion of oral medicine where more male students felt that it is (prestigious) in comparison to female students.

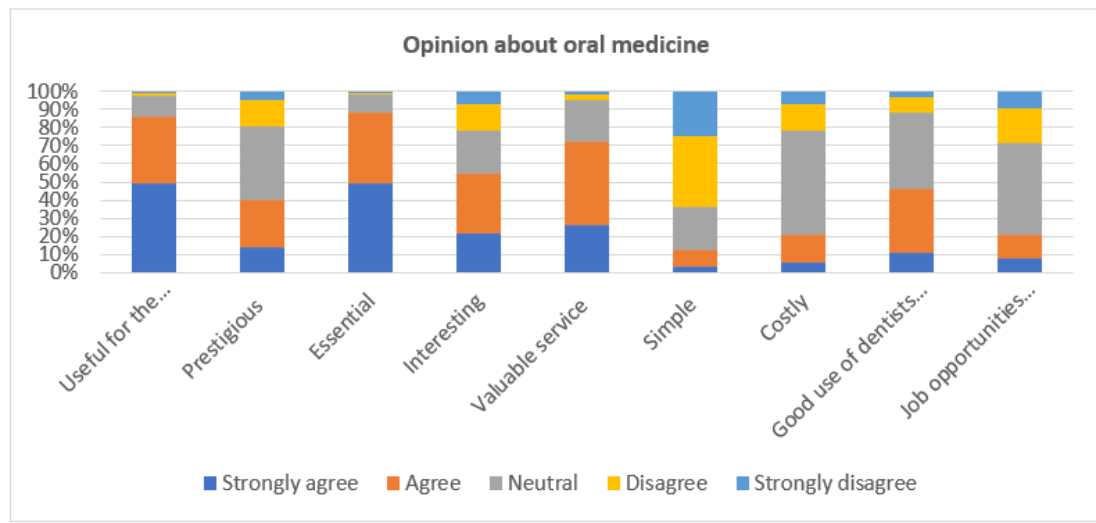


Figure 4

Interest in pursuing oral medicine specialty in the future

As shown in figure 5, when students were asked about their interest in pursuing Oral Medicine specialty in the future, only (14.3%) considered pursuing this specialty. (19.5%) of the students expressed doubts where they somewhat considered pursuing this specialty, and (66.3%) had little to no consideration.

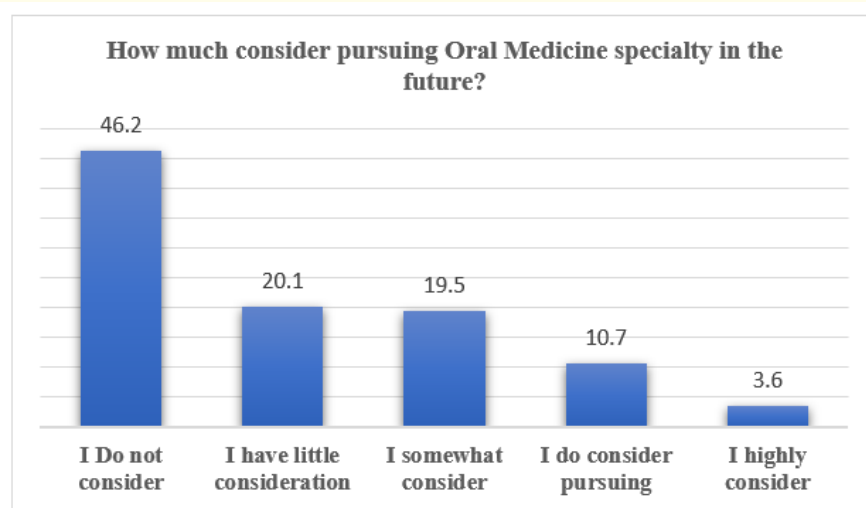


Figure 5

Discussion

This study was conducted to evaluate the career preferences among final year dental students in governmental dental colleges in Riyadh, as well as the factors influencing their choices and selection of postgraduate specialty and to identify their interest in oral medicine specialty with respect to their gender, university they are attending and academic GPA. The senior dental students were the target population in this study as we presumed that they had adequate exposure to most specialties during their academic journey, so they were expected to have a vision about their future plans.

The results of this survey showed that working in a governmental dental hospital is the most preferable future career, this result coincide with a previous study done at King Saud University, Riyadh, Saudi Arabia [5]. Another study was conducted among the final year dental students in Saudi Arabia showed that the most two preferred careers were “civilian dentist in public sector” followed by “academic services dentist” with (51,1%) and (23,7%) respectively, while “civilian dentist in private sector” was the third preferred career (11,6%) [4]. In our study, serving in the private sector was less preferable than working as dental academic this is may be due to long working hours in private section. In contrast, other studies done in Nigeria, Iran and British University of Egypt showed that most of the senior dental student prefer entering postgraduate program in dentistry as a first career choice [7-9]. In a middle eastern institution, most of the students preferred to have a career in a private institution, however working in the public domain was more attractive career choice for gulf state and Malaysian students [10].

About (80%) of dental students agreed that good income as a professional specialist and enjoyment of providing specialty service were the most influential factors in their future specialty choices. Another study was conducted in Saudi Arabia to investigate career preferences and influencing factors among final year dental students showed that “Variety of non-clinical duties”, “Access to child care facilities” and “Research opportunities” were ranked as the three most influencing important factors for career choices [4]. While in middle eastern institution, “personal desire” was the most influencing factor for specialty choice [10]. However, 34% of the final year dental students at the British University of Egypt were influenced by their role models in the profession [9].

In our study, the students also were asked about their opinion regarding oral medicine. Approximately (90%) of the students agreed that oral medicine is “useful for the community” and is “essential”. Regarding the students’ likeliness of choosing oral medicine specialty in the future, although the students were convinced that oral medicine is useful for the community and is essential, the majority do not consider pursuing it as a specialty in the future, only 14.3% of the respondents are considering that. This could be due to lack of information available on this specialty program, the presence of few numbers of oral medicine training programs, and lack of guidance provided on career opportunities in this specialty [12]. Oral medicine specialty recently became recognized as the 11th dental specialty recognized by the national commission on recognition of dental specialist and certifying board on march 2nd, 2020.

Limitations of the Study

This survey was only administered to senior dental students attending governmental dental colleges, and did not include students attending private colleges, which may limit generalizability of the results. Additionally, students were asked to rate the most preferable career and factors influencing their future specialty choices rather than ranking them in order, which may have resulted in different conclusions.

Conclusion

The majority of the senior dental students in governmental dental colleges in Riyadh prefer to work in government dental hospitals. Receiving good income as a professional specialist was the most influential factor for future specialty choice. Pursuing oral medicine specialty in the future was not considered by the majority of students despite their recognition that oral medicine is useful and essential for

the community. The presented findings suggest that dental students may need more exposure to oral medicine specialty programs, the clinical applications of this career, and the job opportunities it provides in governmental/ university hospitals and private dental clinics.

Ethical Approval and Consent to Participate

The study was done after taking the approval from the International Review Board of King Saud University Medical City.

Conflict of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Authors' Contributions

Dr. May Alsenani contributed to critical review of the manuscript, Reem Alhoqail Co-Author, literature review, data collection, data analysis and manuscript writing, Sara Albalawi Co-Author, literature review, data collection, data analysis and manuscript writing, Razan bin Dous Co-Author, literature review, data collection, data analysis and manuscript writing, Basmah Alhawsawi Co-Author, literature review, data collection, data analysis and manuscript writing, Modhi AlHussain Co-Author, literature review, data collection, data analysis and manuscript writing, Afnan Alaqeel Co-Author, literature review, data collection, data analysis and manuscript writing. All authors read, critically reviewed and approved the final manuscript.

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