



Dental Interns's Motivation Towards their Professional Career and Perception of Career Path during the Pandemic (COVID-19) in India

Gargi. S. Murthy^{1*}, Vishnu Aithal², Zuwaina Khan³, Kavitha. M⁴

¹Reader, Department of Pediatric and Preventive Dentistry, Dayananda Sagar College of Dental Sciences, Bangalore, India.

²Ex- Intern, Department of Pediatric and Preventive Dentistry, Dayananda Sagar College of Dental Sciences, Bangalore, India.

³PG Student, Department of Prosthodontics, Vokkaligara Sangha Dental College, Bangalore, India.

⁴Senior Lecturer, Department of Pediatric and Preventive Dentistry, Dayananda Sagar College of Dental Sciences, Bangalore, India.

[Original Article](#)

***Corresponding Author:** Gargi. S. Murthy, Reader, Department of Pediatric and Preventive Dentistry, Dayananda Sagar College of Dental Sciences, Bangalore, India.

E-mail: gargismurthy@dscds.edu.in

Crossref doi: <https://doi.org/10.36437/ijdrd.2023.5.2.C>

ABSTRACT

Background: The reasons for the selection of a particular profession can be very complex, and the choice of dentistry is no exception. The pandemic has had an immediate impact on the field of dental education, such as students having anxiety regarding their safety, unavailability of learning resources, retaining the efficiency of patient care after dental schools fully reopen, and uncertainty about their future prospects.

Objectives: Assessment of the motivation behind students selecting dentistry as a career and the impact of the pandemic on the career path of dental interns.

Methodology: An online questionnaire-based cross-sectional study comprising 208 students representing different public and private dental colleges in Bengaluru City.

Results: About 90% of the participants wanted to continue with dentistry as their profession before the pandemic while the remaining 10% did not want to continue with dentistry as their profession. About 61% of the participants who wanted to continue with dentistry as their profession, considered the pandemic as a setback to their career.

Conclusion: Most of dental interns regarded the pandemic as a setback to their careers due to reduced job opportunities and patient turnover. Re-evaluation and prioritization of patient safety protocols by dental institutions are essential. Teledentistry and e-oral health education should be encouraged.

Keywords: COVID-19, Career Path, Dental Interns, Pandemic.

Introduction

The selection of a particular profession can be very complex, and the choice of dentistry is no exception. Many factors influence the choice of a

profession; an individual's strengths and weaknesses, personal interests and desires, willingness and financial ability (or inability) to endure a long period of training related to a

specific profession, the social prestige of the profession, the actual type of work that is inherent in the profession, working conditions, financial compensation associated with the profession and the availability and attractiveness of alternative occupations.^{1,2}

In December 2019, a cluster of atypical cases of pneumonia was reported in Wuhan, China, which was later designated as Coronavirus disease 2019 (COVID-19) by the World Health Organization (WHO) on 11 Feb 2020. On 11th March 2020, the WHO declared the outbreak a global pandemic.³ The Occupational Safety and Health Administration (OSHA.gov) classified dentists in the very-high-risk category, as COVID-19 spreads through close contact with respiratory droplets and aerosols. Due to specific characteristics of dental care like aerosol generation and close proximity to patients, dentistry is associated with nosocomial spread of infection.^{4,5}

Shortly after the COVID outbreak, the need for social distancing and reducing all face-to-face contact such as teaching and training programs, has had an immediate impact on the field of dental education, such as students having anxiety regarding their safety, availability of learning resources, retaining their efficiency of patient care after dental schools fully reopen and their future prospects.^{6,7}

The present survey thus aims to study the motivating factors behind students choosing dentistry as a career and the impact of the pandemic on the career path of dental interns.

Materials and Method

A cross-sectional study involving a convenient sample of 250 interns representing different public and private dental colleges in Bengaluru City was conducted between December 2020 to March 2021. The questionnaire was mailed to the participants out of which 208 responded.

A questionnaire was developed after a comprehensive review of the literature, to assess the common factors associated with motivation and rationale behind choosing dentistry as a career choice and the impact of the COVID-19 pandemic on their career path. A pilot study was conducted on 25 participants, wherein the questions were asked orally to the dental interns, and common answers were chosen and added as prompts in the questionnaire. The purpose of the study was explained in the introductory part of the questionnaire. The questionnaire was validated and a digitised version was circulated through Google Forms.

Statistical Analysis

The data were analysed using SPSS software for Windows Version 22.0 released in 2013. The participants' responses were determined and represented in percentages.

Results

Out of the 250 interns, 208 interns responded to the questionnaire. The age of the participants ranged between 18-32 years, with a mean of 23 years. Out of the 208 participants, 134(69.4%) and 56 (29%) were male and female respondents respectively. The age and gender distribution of the participants are represented in Figures 1 and 2 respectively. The results revealed that dentistry was the first choice for 30.1% of the participants as represented in Table 1. The most common professional factor related to dentistry being the first choice was that it is a prestigious profession (75.5%), followed by the reason that dentistry does not deal with life and death cases on a routine basis (34%) and there are no on-call duties (30.2%). Studying dentistry was considered to be easier in comparison to medicine (11.3%). Amongst the personal factors, personal interest in healthcare (52.6%) followed by flexibility in work schedule (33.3%) were the most common reasons for choosing dentistry. The presence of relatives/friends as dental surgeons (42.6%) and the financial feasibility of pursuing dentistry constituted the common family factors (34%). The

economic factors contributing to the selection of dentistry included the impression of high socio-economic status (58.1%) and job security (37.2%).

The factors for choosing dentistry as a career are represented in Table 2.

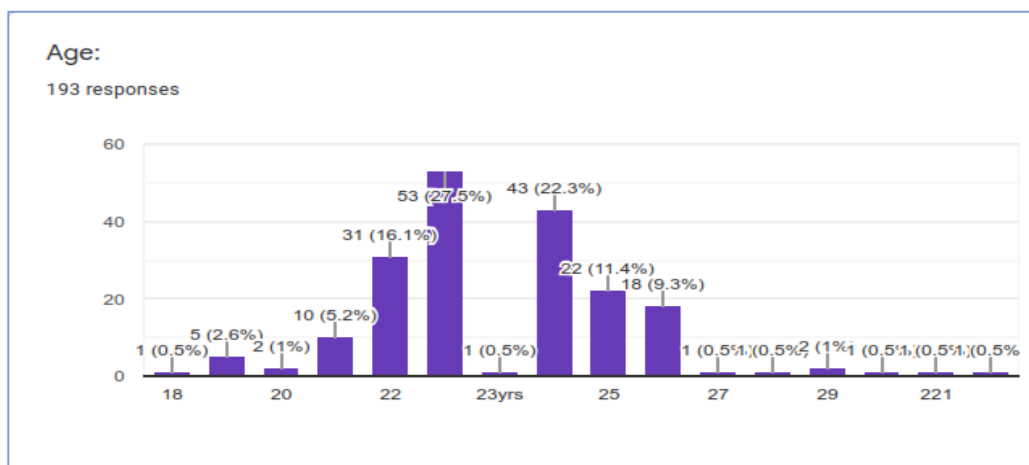


Figure 1: Demographic Data

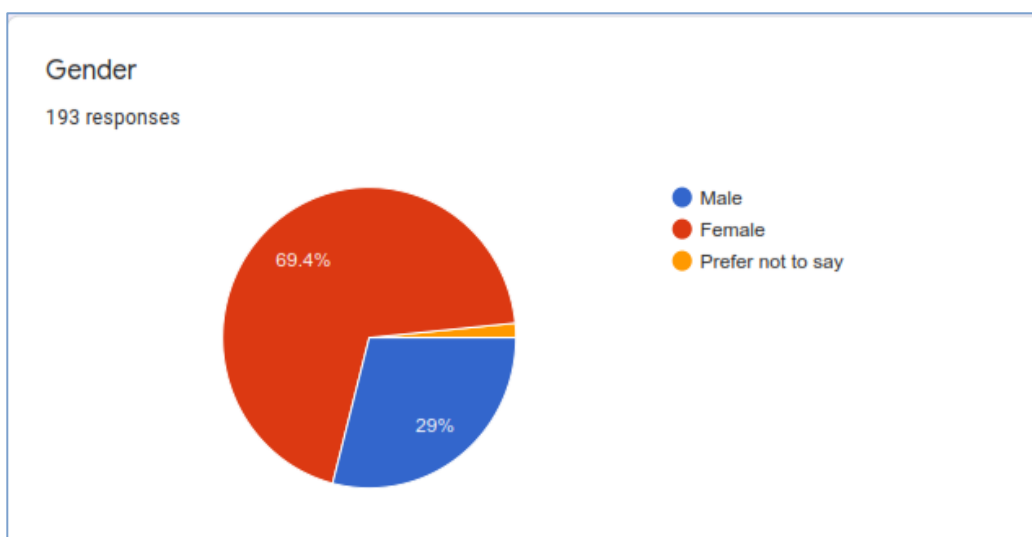


Figure 2: Gender Distribution.

Characteristics	%
Was dentistry their first choice	
Yes	30.1%
No	69.9%

Table 1: Characteristics.

Profession Related Factors	
Dentistry is a prestigious profession	75.5%
Studying is easy compared to medicine	11.3%
Doesn't deal with life and death cases on a routine basis	34%
No on call duties	30.2%
Personal Factors	
My entrance exam rank encouraged me to choose dentistry as a career	26.3%
Personal interest in healthcare	52.6%
Good technical skills and artistic hand	28.1%
Flexibility in my work schedule	33.3%
Family Factors	
One or more of my relatives/friends is/are a dentist	42.6%
To satisfy my family ambition	29.8%
Dentistry was a financially feasible option for my family	34%
Economic Factors	
Easy to find employment	27.9%
Offers a job security	37.2%
Offers a lucrative income	23.3%
High Socio-economic status	58.1%
Reason for Interns whose first choice was not Dentistry	
My first choice was MBBS	91.5%
Limited employment opportunities	14.6%
Difficult coursework in dentistry	3.8%
Lack of social life	1.5%

Table 2: Factors which influenced the Interns who chose dentistry as their first choice.

Pursuing MBBS was the first choice for 91.5% of the participants. Limited employment opportunities (14.6%), difficult coursework in dentistry (3.8%), and lack of social life (1.5%) constituted the other reasons for dentistry not being the first choice.

About 90.2% of the participants wanted to continue dentistry as a career in the future before the pandemic. Pursuing higher education (post-graduation) (69.8%), securing a government job (19.8%), and establishing a private clinic (19.2%) included common future plans.

About 9.8% of the participants did not want to pursue dentistry. Reduced employment opportunities (64.7%), a saturation of jobs in academia (41.2%), difficulty in establishing private

clinics (35.3%), and tough competition to secure a post-graduation seat (23.5%) were the reasons attributed to the same. Their other likely areas of interest after quitting dentistry included their own business (29.4%), business administration (47.1%), civil services (17.6%), graphic designing (23.5%), and research (17.6%).

About 86.5% of the participants wanted to continue dentistry after the impact of the pandemic. Amongst the 13.5% of the participants who did not want to continue dentistry, about (52.4%) discovered new interests during the lockdown. Reduced patient turnover leading to reduced income (28.6%) and reduced job opportunities (47.6%) constituted the other reasons. About 4.8% feared contracting the

pandemic. The impact of the pandemic on the career plan of interns is represented in Table 3.

Were you going to continue dentistry as a career in the future before the pandemic	
Yes	90.2%
No	9.8%
The career plan of interns who chose to continue dentistry	
Their future plan	
Pursuing higher education (post-graduation)	69.8%
Specialty training	13.4%
Admission in advance training abroad	15.7%
Securing a government job	19.8%
Securing a job in a private dental clinic	14%
Establishing a private dental clinic	19.2%
Reasons for some interns to quit dentistry	
Reduced employment opportunities	64.7%
Difficulty in establishing private clinic	35.3%
Saturation of jobs in academia	41.2%
Tough competition to secure a post-graduation seat	23.5%
Their other likely area of interest after quitting dentistry	
Own business	29.4%
Business administration	47.1%
Civil services	17.6%
Graphic design	23.5%
Research	17.6%
Interns, if they wanted to continue dentistry after the impact of pandemic	
Yes	86.5%
No	13.5%
Their reasons for not continuing dentistry	
Reduced patients turnover leading to reduced income	28.6%
Reduction in job opportunities	47.6%
Fear of contracting COVID 19 infection	4.8%
Discovered new interests during lockdown	52.4%
Others	4.8%

Table 3: Interns career plan before the impact of pandemic.

About 60.9% regarded the pandemic as a setback due to reduced patient turnover leading to reduced income, decreased practical exposure for postgraduates, and fear of contracting COVID-19. Whilst the remaining 39.1% regarded it an opportunity due to the impression that lesser dental graduates would continue their profession leading to reduced competition (20%), lesser

aspirants for dentistry in the future would lead to less saturation in the field (33.3%), reduction in the applicants for post-graduation seats leading to more availability (26.7%) and introduction of teledentistry would reduce the distance barrier (58.3%). The interns thought of the pandemic as a setback or opportunity is represented in **Table 4**.

Interns who planned to continue dentistry were asked if it was a setback or opportunity	
Setback	60.9%
Opportunity	39.1%
Reasons for setback	
Reduced patients turnover leading to reduced income	64.9%
Decreased practical exposure for post graduates	61.9%
Fear of contracting COVID 19	35.1%
Reasons for opportunity	
Lesser dental graduates who continue their profession leading to reduced competition	20%
Lesser aspirants for dentistry in future, leading to less saturation in the field	33.3%
Lesser applicants for post-graduation seats leading to more availability	26.7%
Introduction of teledentistry which reduces the distance barrier	58.3%
Interns who were going to continue dentistry after the pandemic were also asked if they would like to take a year's break	
Yes, job opportunities may return to normal	14.5%
Yes, patient turnover will increase in clinics	12.6%
Yes, hands on experience in post-graduation will increase	11.9%
No, will not take a year break	73%

Table 4: Pandemic a setback or opportunity.

Discussion

A convenient sample of 250 dental interns was taken as the study was done during the Covid pandemic. Out of the 250 interns, a total of 208 dental interns responded to the questionnaire, among which for 70% of the participants dentistry was not the first choice and the majority (91.5%) stated that their first choice was Medicine. A number of studies have found that dentistry was not the first preference for most students studying dentistry with medicine being the first preference. As a result, students who are not accepted into medicine may decide to go into dentistry.^{8,9}

The remaining 30% who chose dentistry as their first choice, had various other factors determining their choice. The most notable ones are dentists in their social circle, dentistry being considered a prestigious and noble profession or because of a personal interest in healthcare. A study done by Avramova N et al also showed that about 72% opted for dentistry because they thought it is a

prestigious profession and 67.5% thought it provides independence¹¹ which is similar to the present study.

Some of the motivational factors for students to choose dentistry as a profession were they had a personal interest in health care, they wanted a doctor's degree, they had a relative who was a dentist or they considered dentistry as a noble profession.¹⁰

About 90% of the interns were going to continue with dentistry as their profession before the pandemic while the remaining 10% of the interns were not going to continue with dentistry as their profession with the most notable reason being reduced employment opportunities. Amongst the interns who wanted to continue dentistry, 70% of them were planning to pursue post-graduation. The majority of the interns who did not want to pursue dentistry in the future wanted to pursue a career in the administration-related field.

The most surprising result from this study was that there was no significant impact of a pandemic on the intern's career path, i.e., students who wanted to quit dentistry had already made up their minds before the pandemic situation. For a few whose career path was impacted, the reason was the development of new interests during the lockdown and the reduction in job opportunities, but not because of the direct impact of the pandemic itself. These results are in line with the study done by Chi DL et al, which showed that only 12.7% of the participants reported any intention to leave the course.¹¹

A majority (61%) of the interns who wanted to continue dentistry thought that the pandemic was a setback to their career, majorly because of the reduced patient inflow and decreased practical exposure. Some (35%) were also afraid of themselves contracting the disease. But the remaining (40%) were very optimistic and considered the pandemic as an opportunity, with development in Tele and E-Dentistry being the main reason. Some also thought that the pandemic would avert many aspiring dentists, which may lead to the de-saturation of the field. The majority (73%) of the interns who intended to continue dentistry did not want to take a year's break for things to settle down. Of the 28% who wanted to take a year- break felt that the opportunities and patient turnover will return back to normal by then.

Limitations

The study may have some recency and hindsight bias involved in the answers of the interns, as this survey collects the pre-pandemic mindset of the interns after the event. Also, the reach of this survey is only limited to interns with social media presence, as the distribution of the survey was done through social media.

Also, the reach of the survey was limited to dental interns in Bangalore with a social media presence as the questionnaire was circulated across social media platforms.

Conclusion

The majority of the dental interns regarded the pandemic as a setback to their careers due to reduced job opportunities and patient turnover. Hence dental institutions should re-evaluate and re-prioritize policies and protocols for patient safety and improving footfall in dental hospitals and clinics. The use of teledentistry and e-oral health education should be encouraged to minimize disruptions to the training and career path of dental students.

Conflicts of interest: There are no conflicts of interest.

References

1. Scarbecz M, Ross JA. Gender differences in first year dental students' motivation to attend dental school. *J Dent Educ* 2002; 66(8):952-961. <https://pubmed.ncbi.nlm.nih.gov/12214843/>
2. Gati I, Osipow SH, Givon M. Gender differences in career decision making: the content and structure of preferences. *J Couns Psychol* 1995; 42(2):204-216. doi: <https://psycnet.apa.org/doi/10.1037/0022-0167.42.2.204>
3. Anand, K.B., Karade, S., Sen, S., Gupta, R.M., 2020. SARS-CoV-2: camazotz's curse. *Med J Armed Forces India* 76-2, 2020, 136-141. doi: <https://doi.org/10.1016/j.mjafi.2020.04.008>
4. Educational Debt. American Dental Education A. Available at: www.adea.org/GoDental/MoneyMatters/EducationalDebt.aspx
5. U.S. Department of Labor, Occupational Safety and Health Administration. Guidance on preparing workplaces for COVID-19. OSHA 3990-03 2020. Accessed April 18, 2020. <https://www.osha.gov/sites/default/files/publications/OSHA3990.pdf>

6. Barabari P, Moharamzadeh K. Novel Coronavirus (COVID-19) and Dentistry-A comprehensive review of literature. *Dent J.* 2020; 8(2):53. doi: <https://doi.org/10.3390/dj8020053>
7. Meng L, Hua F, Bian Z. Coronavirus Disease 2019 (COVID-19): Emerging and future challenges for dental and oral medicine. *J Dent Res.* 2020; 99(5):481-487. doi: <https://doi.org/10.1177/0022034520914246>
8. Aggarwal A, Mehta S, Gupta D, Sheikh S, Pallagatti S, Singh R, Singla I. Dental students' motivations and perceptions of dental professional career in India. *J Dent Educ.* 2012; 76(11):1532-1539. doi: <https://doi.org/10.1002/j.0022-0337.2012.76.11.tb05416.x>
9. Avramova N, Yaneva K, Bonev B. First-year dental students' motivation and attitudes for choosing the dental profession. *Acta medica academica* 2014; 43(2):113-121. doi: <https://doi.org/10.5644/ama2006-124.110>
10. Sarah Fita, Faris Alshuraim, Abdullah Almulhim, Jehan AlHumaid, Muhanad Alhareky, Muhammad Nazir, "Possible Future Career Challenges and Associated Factors among Dental Students and Interns", *International Journal of Dentistry*, vol. 2020. doi: <https://doi.org/10.1155/2020/9730125>
11. Chi DL, Randall CL, Hill CM. Dental trainees' mental health and intention to leave their programs during the COVID-19 pandemic. *J Am Dent Assoc.* 2021; 152(7):526-534. doi: <https://doi.org/10.1016/j.adaj.2021.02.012>

Received: 24 April 2023; **Accepted:** 12 June 2023; **Published:** 25 June 2023