



Knowledge and Attitude Towards Choosing Public Health Dentistry as a Choice for Post Graduation among Interns of Dental Colleges in Bangalore City

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ABSTRACT

Introduction: In India, before 1980, there were only 39 dental colleges with few dentists being available for services. This scenario changed completely after 1980, with an intense increase in the number of dental colleges, which reached around 240 in 2007. Public Health Dentistry is considered as a non-clinical department, though it is a clinical specialty offering preventive and comprehensive treatment to the masses, and is given less priority by the students as their choice in post-graduation. Hence, the present study was carried out with an aim to explore the Knowledge and attitude towards choosing Public Health Dentistry as a choice for post-graduation among interns of Dental Colleges in Bangalore city.

Methods: A pretested closed-ended questionnaire was created on Google forms and forwarded to the interns of various Dental Colleges in Bangalore via email. The first section of the questionnaire consisted of demographic details of the study participant such as name, age, and gender. The second section consisted of questions to evaluate their knowledge and attitude towards Public Health Dentistry. The questionnaire survey was conducted over a period of two months from September to October 2019.

Results: 402 out of the total 755 dental interns responded to the questionnaire. Only 2% of respondents took a liking/interest in the subject of Public Health Dentistry during their under graduation, and also were keen to pursue a post-graduate degree in the same. The findings of this study suggest that though a vast majority of interns were aware of the importance and scope of Public Health Dentistry, only a meagre number of interns wanted to pursue post-graduation in the subject.

Keywords: Public Health Dentistry, Attitude, Career, Interns.



Introduction

Public Health Dentistry can be defined as “The science and art of preventing oral disease, promoting oral health and improving quality of life through the organized efforts and informed choices of society, organizations, public and private, communities and individuals”.¹ Dentists carry an important place in the society as professional health care workers.² In India, before 1980, there were only 39 dental colleges with few dentists being available for services, but this scenario changed completely after 1980, with an intense increase in the number of dental colleges, which reached around 240 in 2007.³

Correspondingly, the number of Dental Surgeons in the country has also increased from a few hundred to almost 80,000. This massive increase in the number of new graduates every year leads to stress among the fresh graduates due to the fact that there is a high burden of oral diseases in the country, but very few job opportunities.³ Most often, fresh graduates have only 2 options to choose from. Either begin the practice of clinical dentistry or pursue a post-graduate degree in one of the specialties.³ These are the only available options for these graduates, selection of which is again influenced by several factors like work conditions, financial rewards, security and status, nature of the occupation, working with people, and interest in science and research.^{2,5}

Master of Dental Surgery (MDS) is a 3-year long Post-graduate program offered by dental schools in India. The minimum qualification for this program is a degree in Bachelor of Dental Surgery (BDS). B.D.S. degree in India, consists of a five-year-long dental education including one year of compulsory internship. The Dental Council of India (DCI) recognizes and regulates these courses.⁴ Among the various disciplines of dentistry in India, Public Health Dentistry is considered as a non-clinical department, though it is a clinical specialty offering preventive and comprehensive treatment to the masses, and is given less priority by the students as their choice in post-graduation.³

Several studies have been conducted to determine the characteristics, motivations, and aspirations of dental students across the world. Results from these studies indicate that dental students are more inclined towards clinical specialties, and Public Health Dentistry was not a favorably considered specialty for pursuing post-graduation.⁶ Keeping this in mind, a study was conducted to explore the Knowledge and attitude towards choosing public health dentistry as a choice for post-graduation among interns of Dental Colleges in Bangalore city.

Materials and methods: The present study was a questionnaire-based descriptive cross-sectional study. The study was conducted among 755 interns of dental colleges in Bangalore city, of which 402 responded. Data regarding the list of Dental Colleges in Bangalore city was obtained from the Rajiv Gandhi University of Health Sciences website.⁷ The administrative section of each of these colleges were contacted to obtain the total number of interns in each college and a representative of interns from each college was contacted and the link to the questionnaire set up using Google forms was forwarded to the representatives via email. A pilot study was conducted among 10 participants to assess the feasibility and applicability of the questionnaire. The reliability statistics obtained for the questionnaire using Cronbach’s alpha coefficient was 0.84, indicating good internal consistency. Reminders were sent to the study subjects at regular intervals to fill the questionnaire. Ethical approval was obtained from the institutional review board of Krishnadevaraya College of Dental Sciences, Bangalore. The first section of the questionnaire consisted of demographic details of the study participants such as name, age, and gender. The second section of the questionnaire consisted of 23 questions to evaluate their knowledge and attitude towards Public Health Dentistry.

Results: 402 out of the total 755 subjects across all the dental colleges in Bangalore City participated in the study. Among them, 82.6% were females, and only 17.4% were males.

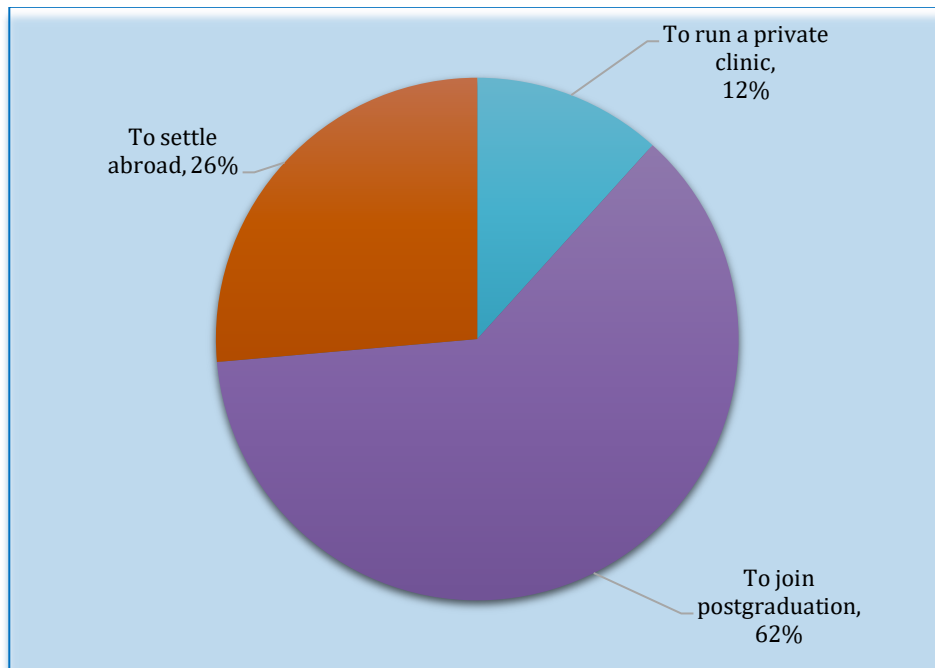


Figure 1: Future plans of the study population

In the present study, 62% of the study population aspired to pursue post-graduation, followed by 26% wanting to pursue higher education & employment outside the country, and 12% wanting to establish their private clinics.

Table 1 describes the knowledge-based response of the respondents on the subject of Public Health Dentistry. 80% (321) of the respondents were aware of the fact that Public Health Dentistry has a role to play in the health surveillance system of the society, while 4% (15) disagreed. 61.4% (247) respondents agreed to the fact that the subject offers a platform to attain research-oriented goals of a student, while 25.9% (104) were not sure about this fact and 12.7% (51) disagreed. 61.9% (249) respondents agreed that the subject of Public Health Dentistry is a vital component in creating oral health awareness in the society, whereas 8.2% (33) respondents disagreed with this. The knowledge on the fact that the subject offers job opportunities beyond the field of dentistry was limited to 43.3% (174) respondents, with 35.1% (141) being unsure about this fact and 21.6% (87) respondents disagreeing.

| Aspects of Public Health Dentistry | Agree | | Undecided | | Disagree | |
|---|-------|-------|-----------|-------|----------|-------|
| | N | % | N | % | N | % |
| Has a role to play in the health surveillance system of the society | 321 | 80% | 66 | 16% | 15 | 4.0% |
| Platform to attain research oriented goals of a student | 247 | 61.4% | 104 | 25.9% | 51 | 12.7% |

| | | | | | | |
|--|-----|-------|-----|-------|----|-------|
| Vital component in creating oral health awareness in the society | 249 | 61.9% | 120 | 29.9% | 33 | 8.2% |
| Provides job opportunities beyond the field of dentistry | 174 | 43.3% | 141 | 35.1% | 87 | 21.6% |

Table 1: Knowledge based response on the subject of Public Health dentistry

Table 2 describes the attitude-based response of the study subjects with only 12.2% (49) finding the subject interesting and 31.8% (128) disagreeing. A vast majority of the respondents 61.7% (248) agreed that they had plans to work for the community, while 16.4% (66) were not sure and 11.9% (48) disagreed on having any such plans. 20.6% (83) respondents believed that the subject offers easy employment, whereas, 36.8% (148) disagreed with this statement. On asking their opinion on whether the subject can help become a responsible social health activist 70.6% (284) respondents agreed and 8.2% (33) disagreed. 58.2% (234) respondents believed that the subject provides an opportunity to become a good academician/teacher, while 31.1% (125) weren't sure and 10.7% (43) disagreed. The statement that the subject provides job opportunities to work abroad was agreed on by 58.2% (234) respondents and 10.9% (44) disagreeing with this. 38.3% (154) respondents agreed that the subject was rewarding emotionally, socially, and financially, which was similar to the number of respondents who weren't sure 37.8% (152) and 23.9% (96) disagreeing to this.

| | Agree | | Undecided | | Disagree | |
|---|-------|-------|-----------|-------|----------|-------|
| | N | % | N | % | N | % |
| The subject of Public Health Dentistry is interesting | 49 | 12.2% | 225 | 56.0% | 128 | 31.8% |
| I have plans to work for the community | 248 | 61.7% | 66 | 16.4% | 48 | 11.9% |
| The subject offers easy employment | 83 | 20.6% | 171 | 42.5% | 148 | 36.8% |
| Can help become a responsible social health activist | 284 | 70.6% | 85 | 21.1% | 33 | 8.2% |
| Provides opportunity to become a good academician/teacher | 234 | 58.2% | 125 | 31.1% | 43 | 10.7% |
| Provides job opportunities to work abroad | 234 | 58.2% | 122 | 30.8% | 44 | 10.9% |
| Rewarding emotionally, socially & financially | 154 | 38.3% | 152 | 37.8% | 96 | 23.9% |

Table 2: Attitude based response on the subject of Public Health Dentistry

Table 3 describes the subject preference of the respondents based on the most preferred subject during under graduation and the most preferred subject to pursue a postgraduate degree in. The favourite subject of the respondents during their undergraduate curriculum was Oral Surgery 31.6% (127), followed by

Orthodontics 29.8% (120), and Conservative dentistry & Endodontics 17.4% (70). Only 2% (8) respondents preferred Public Health Dentistry during their undergraduation.

The most preferred subject to pursue a post-graduate degree was Oral Surgery 33.8% (136), followed by Orthodontics 27.9% (112) and Conservative dentistry & Endodontics 19.2% (77). Public Health Dentistry was preferred for Post-graduation by only 2% (8) respondents.

| Dental Subjects | Most Preferred subject during Under graduation | | Most Preferred subject to pursue Post graduation | |
|--------------------------------------|--|-------------|--|-------------|
| | N | % | N | % |
| Oral Medicine & Radiology | 10 | 2.5% | 1 | 0.2% |
| Pedodontics | 28 | 7.0% | 30 | 7.5% |
| Orthodontics | 120 | 29.8% | 112 | 27.9% |
| Oral & Maxillofacial Surgery | 127 | 31.6% | 136 | 33.8% |
| Periodontology | 7 | 1.7% | 1 | 0.2% |
| Conservative dentistry & Endodontics | 70 | 17.4% | 77 | 19.2% |
| Prosthodontics | 24 | 6.0% | 31 | 7.7% |
| Public Health Dentistry | 8 | 2.0% | 8 | 2.0% |
| Oral & Maxillofacial Pathology | 8 | 2.0% | 6 | 1.5% |
| Total | 402 | 100% | 402 | 100% |

Table 3: Subject wise Preference

Discussion: The present study was conducted to assess the knowledge and attitude towards choosing Public Health Dentistry as a career among interns of dental colleges in Bangalore city. A total of 402 interns participated in the study from 13 dental colleges in Bangalore city. Among them 17% were males and 83% were females.

According to the present study, the majority of the respondents (62%) had plans of pursuing post-graduation, which was similar to a study conducted by Deepthi. An et al. (2008)⁸ and Nupur. S et al. (2015)⁹ where 60% of the study subjects aspired to pursue post-graduation.

In the present study, only 2 % of respondents considered the subject Public Health Dentistry as their career of interest, which was much lower than a study conducted by Guntapalli. M et al.(2014)³ & Sharma et.al (2016)¹⁰, where 35.4% of the study population had a high attitude towards selecting public health dentistry as their future career. This downward trend might be due to the growing affinity of dental graduates in establishing themselves as clinicians.

In the study conducted by Gurmukh. S et al. (2011)¹¹ the most liked subject in under graduation was Oral & Maxillofacial Surgery (28.2%) followed by Conservative dentistry (16.5%), whereas Public Health Dentistry was preferred by 12.9% subjects. This is similar to the present study where the most preferred subject was Oral & Maxillofacial Surgery (31.6%) followed by Orthodontics (29.8%), while only 2% of respondents liked



Public Health Dentistry. This may be attributed to the fact that the above-mentioned subjects except Public Health Dentistry is more clinical practice-oriented and might in a way help understand the theory part better.

In a study conducted by Rathod. S et al. (2020)¹² the most preferred subject to pursue post-graduation in was Conservative Dentistry (22%), followed by Prosthodontics (16.7%), while Public Health Dentistry was preferred by only 3.8% of study subjects. In the present study, it was found that the most preferred subject for Post graduation was Oral & Maxillofacial Surgery (33.8%) followed by Orthodontics (27.9%), and only 2% preferred Public Health Dentistry. The majority of the participants in the study might have preferred a clinical speciality due to better job opportunities like clinical consultations.

Limitations: The limitation of the present study is that it is a cross-sectional survey and the responses were self-reported.

Recommendations: There is a need to broaden the scope of the specialty and to make it more practical. There is a need to generate awareness and inculcate interest for the specialty among the students during their graduation. Proper orientation on the subject from the under graduation level is the need of the hour. Prior counselling of the students who are not aware of the future prospects of the subject should be done. The students who seem to view academics/teaching as their future prospects with regards to this specialty require more attention. It is necessary to broaden the limits of the subject spectrum from just being a lucrative teaching option in terms of financial interests to a specialty which is much useful to the people of the country.

Conclusion: The findings of this study indicate that, even though a vast majority of interns were aware of the importance and scope of Public Health Dentistry, only a meagre number of interns wanted to pursue post-graduation in Public Health Dentistry. Among the various specialties in dentistry, Public Health Dentistry forms the basis for dental health care services and holds the key in developing awareness on the social aspects and responsibility of the profession towards the community. Efforts should be strengthened by both the Dental Council and Dental Colleges, to develop and promote this speciality, considering the attitude of dental undergraduates towards the subject.

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