

Questionnaire Survey to Assess the Choice of Specialisation Among First Year Dental Undergraduate Students in A Private Dental Institution in Chennai

Author : Ramya Anbu¹ & Lalitha Rani Chellappa^{2*}, Sudharrshiny.S

Authors,

1.Ramya Anbu ,

Saveetha Dental college and Hospitals,
Saveetha Institute of Medical and Technical Sciences (SIMATS)
Saveetha University
Chennai - 600077.
E-mail: lalithac.sdc.saveetha.com
Telephone: 8668052146
Email id: 152001017.sdc@saveetha.com

2.Dr. Lalitha Rani Chellappa

Senior lecturer
Department of Public Health Dentistry ,
Saveetha Dental college and Hospitals,
Saveetha Institute of Medical and Technical Sciences (SIMATS)
Saveetha University
Chennai - 600077.
E-mail: lalithac.sdc.saveetha.com
Telephone: 8668052146

Dr. Sudharrshiny

Tutor
Department of Public Health Dentistry ,
Saveetha Dental college and Hospitals,
Saveetha Institute of Medical and Technical Sciences (SIMATS)
Saveetha University
Chennai - 600077.
E-mail: lalithac.sdc.saveetha.com
Telephone: 8668052146

Corresponding author

Dr. Lalitha Rani Chellappa

Senior lecturer
Department of Public Health Dentistry ,
Saveetha Dental college and Hospitals,
Saveetha Institute of Medical and Technical Sciences (SIMATS)
Saveetha University
Chennai - 600077.
E-mail: lalithac.sdc.saveetha.com
Telephone: 8668052146

ABSTRACT:

Background: This study was carried out to evaluate the knowledge of various dental specialities post graduates of dental specialists for post graduates among first undergraduates .

Materials and Methods: This cross-section observational study was conducted among 100 students from saveetha dental college in chennai . participants were chosen randomly after obtaining permission from administration . questionnaire was asked and data was analysed by spss version 2.3 .

Results: There were 100 responses collected from the survey. Among them 91% were males and 9% were females. Out of all specialisation , 78.40% were willing to opt for surgery in master degree in the field of dentistry. At least 0.92% prefer prosthodontics. Which was done using SPSS software of version 23. Chi-square test was used .

Conclusion: This study revealed that most preferred was oral surgery followed by pathology and radiology . Many factors may inspire dental students to choose dental specialists.

Keywords: dental surgery , prosthodontics , radiology , pathology and students ,Innovative analysis.

Running title: Choice of specialisation among first year dental students.

Introduction:

Increasing awareness about dental education among indian population has raised their expectations for dental specialists than under-graduates Factors such as social standing and high professional status seem to be inspiring students to choose their major specialists . While some others quit health care and prefer different fields(1).

With increase in the number of undergraduate dental seats , there is an increase in demand for specialist training , at both graduate and undergraduate levels . Post graduate specialization is perceived as essential for success and there is high competition for post graduates seats , especially in clinical specialties factors influencing choice of subjects during their graduations(2).

Under graduates dental training in India lasts for 4 years followed by a year internship . The interns are posted to all the major specialties . The choice of specialties in dental students is a complex decision - making process depending on multiple interrelated factors . The main factor influencing speciality selection was personality and second by workload and work pressure . Studying career preference can help provide important information to aid (3).

The preference of specialties chosen by dental graduates plays an important part in the future workforce in the health care system , especially in times of over-supply of dentists . Only few studies have been conducted regarding the choice of future specialization among dental students. Factors influencing choice of subject for specialization include determinants which made the students decide to be a dentist and the problem faced in context to different speciality subjects during their graduation . The number of seats available for MDS is only around 3000 compared to each year pass outs of 25000 BDS students (1).

Choice of speciality in dental students is a complex decision making process depending on multiple interrelated factors. Yang and tsai (3) found that the major aspects affecting interns ' choice of specialist were compensation factors .kao et.al (4) found that the main factor , study experience ,other people's expectations ,and main factor influencing speciality selection was personality ,and by second by workload and work pressure .

Studying career preference can help provide important information to aid in planning educational programs , set priorities , and plan for provision of adequate health care . The preference of specialites chosen by dental graduates plays an important role in workforce in health care system , especially in times of over or under supply of dentist(5)(1–9),(10),(11),(12,13),(14),(15),(16–20)

.Hence , this study was done to asses the interest , choice of speciality and factors associated with this choice among interns pursuing bachelors in saveetha dental college.

Materials And Methods

STUDY DESIGN: The cross sectional study was conducted in saveetha dental college among first year students. .

SAMPLE SIZE: The survey was conducted among 100 students of saveetha dental college . The questionnaire contained questions on demographic details. The study used SPSS Version 23 IBM to process and analyze the data collected from the survey. The survey summarised using a chi-square test in the form of logistic regression analysis.

SURVEY INSTRUMENT: The questionnaire comprised a series of questions including the demographic details like age and gender of the participants. The other questions include why did you choose dentistry as a career,what is your choice of specialisation and their NEET score.

DATA COLLECTION: A Self administrated questionnaire of 5 close ended and open questions was prepared and distributed among dental students through online based surveys in google forms .

STATISTICAL ANALYSIS: All statistical analysis was performed using SPSS(statistical package of social science) Version23 IBM. The information was tabulated and extracted from Google in a form of EXCEL sheet.The datas were verified for completeness and entered manually in SPSS software. The information was analysed by comparing demographic details with questionnaires using chi-square test or fisher’s extract test in the form of binary logistic regression designed models. P value less than 0.05 is considered significant. . The list of dependent variables is awareness and knowledge

ETHICAL ASPECT: This study included those who agreed to the terms and informed consent. Ethical approval was granted for the study by an institutional research ethical committee.

Result:

The survey was conducted among 100 students of saveetha dental college in chennai. Out of 100 dental students among which the number of responses that were responded by males 92 (91.1%) and 8 (8.9%) by females .

Out of 100 people 85.7% (30) males and 14.3%(5) females joined dentistry with their self interest . 100% (33) males were forced by parents to join a dentistry course and (0) none of the females were forced by their parents. 80.0%(16) males didn’t get an MBBS seat so they opted for a dental course and 20% (4) females didn't get an MBBS . For some other reasons 100% (13) males and no females , joined this course . By SPSS software it is significant i.e (0.002).

Table 2. 100% (17) males got 720 - 630 marks in NEET and none of the females scored this score. 100% (9) males and no females scored 630 - 540 marks . 69.2%(15) males and 30.8 (4) females scored 540 - 450 marks . 93.8%(9) males and 6.3% (1) females scored 450 - 360 marks . 69.2% (9) of males and 30% 8(4) of females scored 270 - 180 . 100% (10) males and no females scored below 180.

Table 3. 14% males and no females are having a choice of specialisation. 17% males interested in pathology . 16% males and 1% females interested in radiology of specialisation . 23% males interested in surgery . Males of 6% and females of 3% are interested in orthodontics . Males of 3% and females of 2 % were interested in paediatric . 5% of males interested in periodontics . Both males and females of 3% are interested in prosthodontics . 5% of males are interested in dental public health.

Table 1: Association of dental as career with gender in our sample evaluated using Chi-Square test.

Dentistry Career	Gender	P value
------------------	--------	---------

	Male	Female	
Self Interested	30 (85.7)	5 (14.3)	0.032
Forced by parents	33 (100)	0	
Didn't get MBBS	16 (80)	4 (20)	
Others	13 (100)	0	

Table 2: Association of NEET Score with gender distribution in our sample assessed using Chi-Square test.

NEET Score	Gender		P value
	Male	Female	
720-630	17 (100)	0	0.002
630-540	23 (100)	0	
540-450	9 (100)	0	
450-360	9 (69.2)	4 (30.8)	
360-270	15 (93.8)	1 (6.2)	
270-180	9 (69.2)	4 (30.8)	
Below 180	10 (100)	0	

Table 3: Association of Choice of Specialisation with that of gender assessed using Chi-Square test. Oral surgery, followed by oral pathology and endodontics was the most common choice among male students. Among females the most common choice was ortho and prosthodontics. This difference was statistically significant (P = 0.04).

Choice of Specialty	Gender		P value
	Male	Female	
Endodontics	14 (100)	0	0.04
Pathology	17 (100)	0	
Rdiology	16 (94.1)	1 (5.9)	
Surgery	23 (100)	0	
Orthodontics	6 (66.7)	3 (33.3)	

Pediatric	3 (60)	2 (40)	
Periodontics	5 (100)	0	
Prosthodontics	3 (50)	3(50)	
Dental Public Health	5 (100)	0	

Discussion:

Post graduates and underlying influencing factors affecting these have been studied in different types of professional students. The career choices of medical undergraduates students have been studied in different type of professional been very little published work on career choices of dental students .Around 91.1% of subjects were males , representing profession .In the presence of speciality , similar finding was been seen in studies conducted by ravi et.al & garla Bk et.al.

Datta p et.al responded with similar findings with similar results [karibe H et.al]. This may be due to the prestige & reputation of the branch . In contrast to that some graduates won't prefer oral surgery due to reasons like sight of blood, overnight duties, and hectic procedures like handling of trauma cases [karible et.al].Orthodontics as well as pathology were second most responses.

Aesthetic concern and relief from pain / maintenance of normal functions of an oral cavity may be the prime reason behind seeing an orthodontist and endodontist respectively [khami et.al].

These branches seem to yield good financials respectively .These branches seem to yield a good financial reward . Paedodontics was found of our study .As perception is subject to change one time, there is need of longitudinal studies within the same group of students at different points during their studies.The self -reported nature of data could be carried out to changing nature if perceptions regarding future specialization and unidentified factors impact or graduates career preference in the field of dentistry .It is likely that a network of factors operating before , during and after graduation is involved in any individuals career decision .Agr , gender, ethnicity and parents.

Conclusion:

The study has investigated the reasons behind students willingness to pursue postgraduates in respectively choice of subject was mostly due to their personal interest and prestige and reputation of speciality out study reveals that most preferred speciality that study among students were oral surgery followed by orthodontics and endodontics .A variety of factor appear to inspire dental student to choose a future speciality choice .So, further study is needed with large sample size and different areas to confirm the trend of change of behaviour regarding future speciality choice and associated factors among dental students with years of study of dentistry

References:

1. Jain H , Agarwal A . Current scenario & crisis facing dental college graduates in india. J.Clin Res 2012; 6(1):1-4.
2. Pushpa N.Medical scam just got bigger : PG seats for Rs 2 cr.The economic Times.2008 june.
3. Yang MJ, Tsai JH . Specialty choice of students at a college of medicine and relevant factors . Med education 1999;2:15-22.
4. Kao MY, Lu PH,Li MP, Wang WD.Medical students' especially preferences and exploration of relevant factors .Med education 2000;4:23-37
5. Khader Y , AL-Zoubi D , Amarin Z, Alkafaji A, Khasawneh M, Burgan S, Salem KE, Omari M. Factors affecting medical students in formulating their speciality preferences in Jordan. BMC Med educ 2008 ; 8: 32
6. Kumar R , dhaliwal U . Career choices of Undergraduate medical students . Natl Med J India

2011; 24:3

7. Vatsul sharma , 2017. Speciality of oral surgery , followed by orthodontics and endodontics
8. Bader Aldebassi , 2016. PG Among UG associated influencing and motivating factors in south africa
9. Garla BK. Career aspirations and reason for choosing dentistry as a career - A Survey of dental students in Gandhi dental college and hospital , bhubaneshwar . Ann Essences Dent. 2011; 3 (2) ;108-110
10. Hallissey J , Hannigan A , Ray N .Reason for choosing dentistry as a career - A survey of dental students in Ireland during 1998-99 . Eur J Dent Educ 2000;4:77-81
11. Mathew MG, Samuel SR, Soni AJ, Roopa KB. Evaluation of adhesion of Streptococcus mutans, plaque accumulation on zirconia and stainless steel crowns, and surrounding gingival inflammation in primary molars: randomized controlled trial. Clin Oral Investig. 2020 Sep;24(9):3275–80.
12. Samuel SR. Can 5-year-olds sensibly self-report the impact of developmental enamel defects on their quality of life? Int J Paediatr Dent. 2021 Mar;31(2):285–6.
13. Samuel SR, Kuduruthullah S, Khair AMB, Al Shayeb M, Elkaseh A, Varma SR, et al. Impact of pain, psychological-distress, SARS-CoV2 fear on adults' OHRQOL during COVID-19 pandemic. Saudi J Biol Sci. 2021 Jan;28(1):492–4.
14. Samuel SR, Kuduruthullah S, Khair AMB, Shayeb MA, Elkaseh A, Varma SR. Dental pain, parental SARS-CoV-2 fear and distress on quality of life of 2 to 6 year-old children during COVID-19. Int J Paediatr Dent. 2021 May;31(3):436–41.
15. Samuel SR, Acharya S, Rao JC. School Interventions-based Prevention of Early-Childhood Caries among 3-5-year-old children from very low socioeconomic status: Two-year randomized trial. J Public Health Dent. 2020 Jan;80(1):51–60.
16. Vikneshan M, Saravanakumar R, Mangaiyarkarasi R, Rajeshkumar S, Samuel SR, Suganya M, et al. Algal biomass as a source for novel oral nano-antimicrobial agent. Saudi J Biol Sci. 2020 Dec;27(12):3753–8.
17. Chellapa LR, Rajeshkumar S, Arumugham MI, Samuel SR. Biogenic Nanoselenium Synthesis and Evaluation of its antimicrobial, Antioxidant Activity and Toxicity. Bioinspired Biomim Nanobiomaterials. 2020 Jul 23;1–6.
18. Samuel SR, Mathew MG, Suresh SG, Varma SR, Elsubeihi ES, Arshad F, et al. Pediatric dental emergency management and parental treatment preferences during COVID-19 pandemic as compared to 2019. Saudi J Biol Sci. 2021 Apr;28(4):2591–7.
19. Barma MD, Muthupandiyani I, Samuel SR, Amaechi BT. Inhibition of Streptococcus mutans, antioxidant property and cytotoxicity of novel nano-zinc oxide varnish. Arch Oral Biol. 2021 Jun;126:105132.
20. Muthukrishnan L. Nanotechnology for cleaner leather production: a review. Environ Chem Lett. 2021 Jun 1;19(3):2527–49.
21. Muthukrishnan L. Multidrug resistant tuberculosis - Diagnostic challenges and its conquering by nanotechnology approach - An overview. Chem Biol Interact. 2021 Mar 1;337:109397.
22. Sekar D, Auxzilia PK. Letter to the Editor: H19 Promotes HCC Bone Metastasis by Reducing Osteoprotegerin Expression in a PPP1CA/p38MAPK-Dependent Manner and Sponging miR-200b-3p [Internet]. Hepatology. 2021. Available from: <http://dx.doi.org/10.1002/hep.31719>
23. Gowhari Shabgah A, Amir A, Gardanova ZR, Olegovna Zekiy A, Thangavelu L, Ebrahimi Nik M, et al. Interleukin-25: New perspective and state-of-the-art in cancer prognosis and treatment approaches. Cancer Med. 2021 Aug;10(15):5191–202.
24. Kamala K, Sivaperumal P, Paray BA, Al-Sadoon MK. Author response for “Identification of haloarchaea during fermentation of Sardinella longiceps for being the starter culture to accelerate fish sauce production” [Internet]. Wiley; 2021. Available from: <https://publons.com/publon/47375106>
25. Ezhilarasan D, Lakshmi T, Subha M, Deepak Nallasamy V, Raghunandhakumar S. The ambiguous role of sirtuins in head and neck squamous cell carcinoma. Oral Dis [Internet]. 2021 Feb 11; Available from: <http://dx.doi.org/10.1111/odi.13798>
26. Sridharan G, Ramani P, Patankar S, Vijayaraghavan R. Evaluation of salivary metabolomics in oral leukoplakia and oral squamous cell carcinoma. J Oral Pathol Med. 2019 Apr;48(4):299–306.

27. R H, Hannah R, Ramani P, Ramanathan A, Jancy MR, Gheena S, et al. CYP2 C9 polymorphism among patients with oral squamous cell carcinoma and its role in altering the metabolism of benzo[a]pyrene [Internet]. Vol. 130, Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology. 2020. p. 306–12. Available from: <http://dx.doi.org/10.1016/j.oooo.2020.06.021>
28. J PC, Pradeep CJ, Marimuthu T, Krithika C, Devadoss P, Kumar SM. Prevalence and measurement of anterior loop of the mandibular canal using CBCT: A cross sectional study [Internet]. Vol. 20, Clinical Implant Dentistry and Related Research. 2018. p. 531–4. Available from: <http://dx.doi.org/10.1111/cid.12609>
29. Wahab PUA, Abdul Wahab PU, Madhulaxmi M, Senthilnathan P, Muthusekhar MR, Vohra Y, et al. Scalpel Versus Diathermy in Wound Healing After Mucosal Incisions: A Split-Mouth Study [Internet]. Vol. 76, Journal of Oral and Maxillofacial Surgery. 2018. p. 1160–4. Available from: <http://dx.doi.org/10.1016/j.joms.2017.12.020>
30. Mudigonda SK, Murugan S, Velavan K, Thulasiraman S, Krishna Kumar Raja VB. Non-suturing microvascular anastomosis in maxillofacial reconstruction- a comparative study. Journal of Cranio-Maxillofacial Surgery. 2020 Jun 1;48(6):599–606.