

## Future Prospectives and Career Intentions of Dental Students of AP State in South India

Krishna

---

### **Abstract:**

**Background:** As India strives to achieve Universal health coverage, improvement in Oral health care delivery with skilled and motivated dental health work force is necessary. A clear understanding of the dental work force situation is very critical to develop effective policies. The future of the dentistry lies in the hands of young dentists, their views and perceptions will definitely influence the upcoming dentistry. The aim of the present study is to investigate the career plans of prospective dental students.

**Material & Methods:** A cross sectional study was conducted on all the interneers of three dental colleges in coastal area of Andhra Pradesh and collected the primary data. The collected data was subjected to statistical analysis to discover the views and anticipated career routes of prospective dental students.

**Results:** The majority of the participants (87%) felt that gaining a post graduate qualification would advance their career prospects and would profoundly affect the general practice and a majority of them wished to enter private practice and even expressed that they are satisfied in choosing dentistry as a career.

**Conclusion:** It was clear that the respondents are aware of the commitment to post graduate education.

**Key Words:** Career, Post graduate qualification, Questionnaire, Interns, Professional satisfaction.

---

### I. Introduction

Given the changing nature of the dental workforce and the need to retain the services of the future members, it is important to understand what current dental students perceive regarding the various career pathways available after graduation.<sup>1</sup> Research into the motivation of individuals who choose dentistry as a professional career demonstrates a wide range of motivational factors.<sup>2-5</sup> Since the dominant motivational factors may vary over time and between countries, seeking an understanding of current motivations to enter the healthcare work force is critical to health care systems and may result in major change for policies in dental education. The future of the dentistry lies in the hands of young dentists, their view and perceptions will definitely influence the upcoming dentistry. This paper provides a fascinating description of the stated intention of interneers concerning their future career pathways, together with an insight into some of the attitude and values that underpin these intentions. The present study aimed to investigate the career plans of interns and to know their awareness regarding various career pathways available upon graduation along with anticipating future work patterns in order to assist in workforce planning.

### II. Materials & Methods

Andhra Pradesh (AP) is the eighth largest state in India, situated on the south eastern coast of the country. A cross sectional survey was conducted in Andhra Pradesh; South India. Out of eight colleges in the coastal area of Andhra Pradesh, three colleges namely SIBAR, GITAMS & GOVT, dental Colleges were selected based on convenient sampling method. A pilot study was conducted prior to the survey on interns of Sibar dental college in the Department of public health dentistry (n=25) to test the validity of the questionnaire. Modifications were made to remove areas of ambiguity in the final questionnaire. Test-retest was used to check the reliability and internal consistency of the questionnaire before conducting the actual study. The results thus obtained were subjected to stastical analysis. Institutional review board approved the research protocol for the study. A cross sectional survey was conducted in these three colleges, with the informed consent of the interns and prior permission of the principals of the respective colleges. A Pretested, Structured questionnaire with a format of closed and multiple choice questions was the research instrument employed to collect data.

### QUESTIONNAIRE

The following are some of main aspects which were asked in questionnaire;

- ⇒ About Career plans
- ⇒ About Postgraduate qualification
- ⇒ About Clinical practice
- ⇒ About Preferred choice of working
- ⇒ About Attributes of a professional dentist
- ⇒ About Working hours

- ⇒ About Earning
- ⇒ About Professional satisfaction

A 16- item self administered questionnaire was provided to all the interns present on the day of the survey. Out of 201 interns, a total of 151 interns were present on the day of survey. Students who were present on the day of the survey were included in the study. An exclusion criterion was the non inclusion of students who were present on the day of survey due to illness and other reasons. Data collected were analyzed using stastical package for social sciences (SPSS) Version 20.Both descriptive and inferential stastics were sought. The collected data was then analyzed using chi-square tests for the gender wise comparison of the questions pertaining to future plans. The level of significance was set as  $P < 0.05$ .

### III. Results

A sample of 151 interns had participated in the cross sectional survey; out of which there are a sample of 45 male interns and 106 female interns who were assessed to know their anticipate career routes after graduation. The majority of the participants were female interns in the participating colleges (n=106, 70%).

#### **Future prospective:**

Table I intended that when respondents were asked about their career plans, a total of 54.70% females & 64.44% males desired to do post graduation and 14.57% on whole intended to work or study in abroad. In spite of this, 10.37% females & 13.33% males would like to enter clinical practice. No significant variations in responses were found between sexes.

**Table I Shows The Distribution Of Interns By Career Plans**

Table 1	Boys	%	Girls	%	Total	%
Clinical practice	6	13.33	11	10.37	17	11.26
Post graduation	29	64.44	58	54.70	87	57.62
Academics	1	2.22	5	4.75	6	3.97
Abroad	4	8.9	18	16.98	22	14.57
Others	5	11.11	14	13.20	19	12.58
Total	45	100	106	100	151	100
Chi-square = 2.7890 $p > 0.05$ ; NS						

More than half of the respondents felt that post graduation qualification would profoundly help their career and the next preference was given to working and studying abroad. Table II demonstrated that majority felt that gaining of Post graduation qualification would advance their career prospects, of which 87.42% felt it would, 12.58 % felt it would not. A significant variation was seen when responses were compared by gender, with 90.57% females feeling an additional qualification would help, compared with 80% males.

**Table II Distribution Of Study Subjects According To Gender Regarding Post Graduation Qualification**

Table 2	Boys	%	Girls	%	Total	%
Yes	36	80	96	90.57	132	87.42
No	9	20	10	9.43	19	12.58
Total	45	100	106	100	151	100
Chi-square = 3.2060 $p > 0.05$ ; NS						

Majority i.e. 87% of the respondents are felt that post graduation qualification would better their career prospects.

Table III showed that a majority intended to go into private sector (72 out of 151).and desired to plan their clinic in urban area.

**Table III Distribution Of Study Subjects According To Gender Regarding Preferred Choice Of Working**

Table 3	Boys	%	Girls	%	Total	%
Central Government	16	35.59	39	36.79	55	36.42
State government	3	6.66	21	19.82	24	15.89
Private sector	26	57.75	46	43.39	72	47.68
Total	45	100	106	100	151	100.00
Chi-square= 5.3750 $p > 0.05$ , NS						

Most of the respondents wished to work in private sector than in Public sector.

Table IV intended that in general, most of the respondents felt that 30 to 50 hr per week would be spent for working. How ever 31.13% of females preferred to work 40-50hr per week when compared to males 22.22%.

**Table IV** Distribution of study subjects according to gender regarding working Hours

Hours/ Gender	Boys	%	Girls	%	Total	%
0 – 20 hr / week	3	6.67	9	8.49	12	7.95
21 -30 hr / week	7	15.56	15	14.15	22	14.57
<b>31- 40 hr / week</b>	<b>14</b>	<b>31.11</b>	<b>29</b>	<b>27.36</b>	<b>43</b>	<b>28.48</b>
<b>41-50 hr /Week</b>	<b>10</b>	<b>22.22</b>	<b>33</b>	<b>31.13</b>	<b>43</b>	<b>28.48</b>
51-60 hr / Week	7	15.56	12	11.32	19	12.58
Above 60 hr / Week	4	8.89	8	7.55	12	7.95
Total	45	100	106	100	151	100.00
Chi-square= 1.7340 p>0.05; NS						

Most of the respondents preferred to work 31-50 hr / week

Table V showed that most of the respondents anticipated an earning more than 3 lakhs per annum. (Appx-30 thosd per month)

**Table V** Distribution of study subjects according to gender regarding Earning

Hours/ Gender	Boys	%	Girls	%	Total	%
Below 1, 00,000	1	2.22	12	11.32	13	8.61
1, 00,001 – 2, 00,000	11	24.40	33	31.31	44	29.14
2, 00,001 - 3, 00,000	<b>14</b>	<b>28.80</b>	<b>30</b>	<b>28.30</b>	<b>43</b>	<b>28.48</b>
Above 3, 00,000	<b>10</b>	<b>44.44</b>	<b>31</b>	<b>29.24</b>	<b>51</b>	<b>33.77</b>
Total	45	100	106	100	151	100.00
Chi-square= 6.4210 p>0.05; NS						

Table VI demonstrated that 49.01% respondents felt as good , 38.41% felt fair and 12.58 % felt poor for choosing dentistry . A significant individual variation of respondents by gender was not found.

**Table VI** Distribution of study subjects according to gender regarding Professional satisfaction

Satisfaction	Boys	%	Girls	%	Total	%
Good	22	48.89	52	49.06	74	49.01
Fair	17	37.78	41	38.68	58	38.41
Poor	<b>6</b>	<b>13.33</b>	<b>13</b>	<b>12.26</b>	<b>19</b>	<b>12.58</b>
Total	45	100	106	100	151	100.00
Chi-square= 0.0360						

Majority of the respondents felt that dental career fulfilled their expectations, and they would study further in dentistry again.

#### IV. Discussion

Our results showed that more number of female interns participated in the study compared to the male interns. These findings have been observed in other countries including the United states,<sup>6</sup> Denmark,<sup>7</sup> France,<sup>8</sup> and the United Kingdom.<sup>9</sup> The dental profession is attractive to women as it allows them to balance their personal and professional lives. In addition, women see dentistry as a way to work with others, as well as to achieve financial gain and professional prestige.<sup>6</sup> The present study found that more number of female than male interns would like to do post graduation, contrary to Kathryn et al study where men were four times more likely to take time off for higher studies than were women.<sup>10</sup> The next preferred choice was given to working and studying abroad(n=22; 14%) in the present study which was comparatively less than that found in Karibe et al study<sup>11</sup> where 35.5 percent of students in Canada and 44.2 percent in Thailand preferred working abroad; reasons given were participation in a specific postgraduate program at an overseas university or hospital, working as a researcher in an overseas laboratory, working at a clinic or managing their own clinic after obtaining an overseas dental license, and international volunteer activity. It also showed that most of respondents would like to do private practice, very similar to study by Price where 49% are engaged in private practice.<sup>12</sup> This finding is consistent with that of similar studies in the United Kingdom.<sup>13,14</sup> The present study, found that most of the respondents preferred to work 30 – 50 hrs per week. According to Walton’s study, the average number of hours worked by dentists was about 40 hours per week.<sup>15</sup> These findings slightly differ from a study by Aguar et al.,<sup>16</sup> where they found that being one’s own boss was given the highest priority followed by determination of working hours. The present study also showed that more male than female interns anticipated an earning more than INR 3, 00,000 per annum, similar to study of Del Aguila.<sup>17</sup> In the present study, it is interesting to find that, female interns showed a slightly greater level of satisfaction in choosing dentistry as a career compared to male interns. Similar to the Orenuga and Decosta study<sup>18</sup> which reflects the fact that the number of women entering the dental profession has been growing in recent years. The higher

enrollment of women in dental profession implies that they pursued dentistry so they can determine their own hours of working, thus perfectly balancing both professional as well as personal life.

### **V. Conclusion**

The present study gives us clear idea about the students professional motivations and highlight future career intentions of dental students. It was clear that the respondents are aware of the different career pathways available upon graduation. Majority of them felt that an additional qualification would profoundly affect the general practice, with a number of applicants stating that a post graduation qualification would advance their career prospects. This may show that respondents are aware of the commitment to post graduation education and the requirements for continued professional development in dentistry as a career; strongly emphasizing on the fact that dental career provides 'professional status, 'financial benefits', 'job security, flexibility and independence' and more over a 'good quality of life'. This study also has implications for educators' responsibility to help students acquire and develop public service values and reinforce their altruistic motives to build the oral health care needed by the public. Future research should be encouraged to explore the factors that may be involved in dental students career decisions.

### **Acknowledgement**

The author would like to sincerely thank all the interns who took the time to accurately and honestly complete the questionnaires.

### **References**

- [1]. Stewart FM, Drummond JR, Carson L and Hoad Reddick G. A Survey of dental school applicants' career intentions and the balance with family life. *Br Dent J* 2005;198: 713-717
- [2]. Gallagher J, Patel R, Donaldson N, Wilson N. Why dentistry? A quantitative study of final year dental students' views on their professional career. *BMC Oral health* 2007;7
- [3]. Brand A, Chikte U. Choosing dentistry as a career: part1- a comparison of student motives. *J Dent Assoc South Africa* 1992; 47(11): 469-73
- [4]. Brand A, Chikte U. Choosing dentistry as a career: part11- the meaning of motives. *J Dent Assoc South Africa* 1992; 47(12): 509-12
- [5]. Gallagher JE, Clarke W, Eaton KA, Wilson NHF. Dentistry professional contained career in health care: a qualitative study of vocational dental practitioners' professional expectations. *BMC Oral Health* 2007;7:16
- [6]. Scarbecz M, Ross JA. Gender differences in first year dental students' motivation to attend dental school. *J Dent Educ* 2002;66(8):952-61
- [7]. Vigild M, Schwarz E. Characteristics and study motivation of Danish dental students in a longitudinal perspective. *Eur J Dent Educ* 2001; 5(3): 127-33
- [8]. Hennequin M, Tubert S, Devillers A, Muller M, Michailesco P, Peli JF, et al. Socioeconomic and schooling status of dental undergraduates from six French universities. *Eur J Dent Educ* 2002;6(3):95-103
- [9]. Stewart FM, Drummond JR, Carson L and Hoad RG. The future of the profession: A Survey of dental school applicants. *Br Dent J* 2004;197(9): 569-73
- [10]. Kathryn M.S. Ayers, W. Murray Thomson, Alison M. Rich, J. Timothy Newton. Gender differences in dentists' working practices and job satisfaction. *Journal of Dentistry* 36(2008) 343-350
- [11]. Karibe H, Suzuki A, Sekimoto T, Srithavaj MLT, Lamaroon A, Warita S, et al. Cross cultural comparison of the attitudes of dental students in three countries. *J Dent Educ* 2007;71(11): 1457-66
- [12]. Shelia S. Price. The profile of women dentists. *J Am Dent Assoc* 1990; 120: 403-408
- [13]. Gallagher JE, Patel R, Wilson NH. The emerging dental work force : long term career expectations and influences- A quantitative study of final year dental students' views on their long term career from one London dental school . *BMC Oral health* 2009;9:35
- [14]. Stewart FM, Drummond JR, Carson L and Theaker ED. Senior dental students' career intentions, work- life balance and retirement plans with famil. *Br Dent J* 2007;203(5): 257-63
- [15]. Surrey M. Walton, Gayle R Byck, Judith A. Cooksey, Linda M. Kaste. Assessing differences in hours worked between male and female dentists, an analysis of cross-sectional national survey data from 1979 through 1999. *JADA*, vol. 135, May 2004:637-645
- [16]. Aguir CM, Pessoa MA, Camara AC, Perrier RA, Figueiredo JA. Factors involved in the choice of dentistry as an occupation by pernambuco dental students in Brazil. *J Dent Educ* 2009;73(12):1401-7
- [17]. Del Aguila MA, Leggott PJ, Robertson PB, et al: Practice patterns among male and female general dentists in a Washington state population. *J Am Dent Assoc* 2005; 136: 790-796
- [18]. Orenuga O, De costa O. Characteristics and study motivation of clinical dental students in Nigerian universities. *J Dent Educ* 2006;70(9):996-1003