A NATIONAL SURVEY OF PEDODONTIC POST GRADUATES REGARDING SATISFACTION LEVELS FOR PG PROGRAM

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ABSTRACT

Objective: The study was conducted to probe thoroughly the choice factors, program expectations, the near actual picture of clinical practice and future aspirations of the Pedodontic Post Graduate students in India.

Study Design: A questionnaire containing 20 questions was electronically mailed to 417 post graduates. 213 respondents were finally included in the study.

Results: The results show that 38% students always wanted to be a pedodontist. 73.7% respondents were satisfied with their choice. More than 50% believed the post graduation program was not adequate to start practice immediately after training.

Conclusion: The results depict that the knowledge and practice about certain areas like use of fluorides, practice of fixed orthodontic and use of myofunctional therapy should be increased. Thus, it can be concluded that pediatric dentistry being a dynamic branch, should be looked upon with the aim to raise the level of education and clinical practice which subsequently may increase the satisfaction level of the post graduates.

Keywords: Pedodontic post graduates, PG program, Satisfaction levels.
set-up as they should ideally be. In a survey in 1967 by Bennett and coworkers, pedodontists indicated "too little" instruction during their training in orthodontics, dentistry for the handicapped, general anesthesia, premedication, research experience, treatment planning and patient education. Such a scenario is expected to be more pronounced in a developing nation like India where pedodontics as a specialty for undergraduates was started in 1978 and the Indian Society of Pedodontics and Preventive Dentistry got its affiliation from IADC (International Academy for Dentistry for Children) in 1982. These are mainly due to the lack of adequate resources and accessibility in our country.

Pedodontic specialty education programs are emerging as highly promising option among the graduates in dentistry because of the wide gamut of subjects covered in the same. Pediatric dentists enjoy a wealth of getting their hands on almost everything as far as clinical practice is concerned. Little information exists, however, on the extent to which they are trained appropriately for such broad clinical skills.

Attitudinal surveys account for a substantial portion of educational research, and have been frequently used in dental education. While not useful as a direct measure of cause and effect, the data can be used as a comparative basis for self-analysis and future planning.

Studies that have explored candidates' attitudes toward the dental residency selection experience have involved mainly OMFS and orthodontics, with little information currently available about paediatric dental candidates.

It is believed that Program characteristics which were important to candidates a decade ago may not be seen as essential or desirable by applicants today. Also, there is always a direct relationship between the interest in learning and the subsequent performance. The literature shows that the students who enjoy their experience of school perform better academically. So, realising the importance of personal satisfaction levels, interests and their potential outcome, the present study was conducted to probe thoroughly the choice factors, program expectations, the near actual picture of clinical practice and future aspirations of the Pedodontic Post Graduate students in India.

**MATERIALS AND METHODS**

A comprehensive questionnaire containing 20 multiple choice questions grouped in three different sections: i) Choice Factors ii) Program Expectations iii) Future Aspects was used to collect the data. (Appendix I)

The participants were the students pursuing post graduation in the branch of pedodontics and preventive dentistry nationwide. The questionnaires were electronically mailed to 413 post graduates. Of these 47 emails failed to be delivered may be because of the changed email addresses or some technical fault. Out of the delivered 366 e mails, 267 filled questionnaire were received back, out of which 54 were rejected because they were incomplete or unclear. So, finally 213 respondents were included in the study. The response rate was calculated to be 58.2%.

Response format included forced choice format in which subjects chose one or more responses from a provided list of options. After the collection of the data, the statistical analysis was carried out. As our data was of Qualitative or categorical variables, these were described as frequencies and percentages. As more than one option were chosen for some questions so, the total frequency or percentage may be more than expected in those questions.

**RESULTS**

The responses of the post graduate students were studied. It was seen that the main reason for choosing pedodontics was that students always wanted to be a pedodontist (38%) (Fig. 1).

Of the 213 post graduates who responded, 157 (73.7%) were satisfied with their choice. Figure 2 depicts the preference rate of other specialities over pediatric dentistry and vice versa (Fig 2). It was seen that 60% students preferred Government institution over private ones. When asked about the duration of the course, 74.2% wanted the course to be of 2 years.

When asked about program expectations, 71 (33.3%) respondents answered that the research program should be more clinically oriented (Table I). 53.5% believed that the post graduation program was not adequate to start practice immediately after training.
QUESTIONNAIRE

CHOICE FACTORS
Q1. What was the main reason for choosing to do masters in pedodontics?
   a) Its top most specialty in dentistry
   b) I always wanted to be pedodontist (it was my first choice)
   c) Aura of pedodontics
   d) Its most paying branch of dentistry
Q2. Are you satisfied with choice you made?
   a) Yes
   b) No
Q3. Which branch would you like to do masters if given a chance?
   a) Oral surgery
   b) Endodontics
   c) Prosthodontics
   d) Oral pathology
   e) Oral medicine
   f) Periodontics
   g) Orthodontics
   h) Community Dentistry
Q4. Which type of institute you prefer for PG program?
   a) Government
   b) Private
Q5. Over which branch would you choose pedodontics?
   a) Oral surgery
   b) Endodontics
   c) Prosthodontics
   d) Oral Pathology
   e) Oral Medicine
   f) Periodontics
   g) Orthodontics
   h) Community Dentistry
Q6. Do you think masters program should be of?
   a) 1 year
   b) 2 year
   c) 3 year
   d) 4 year

PROGRAM EXPECTATIONS
Q7. Are you satisfied with the type of research being undertaken in masters program?
   a) Is more or less monotonous
   b) Is good & satisfied
   c) Should be more clinical
   d) Like to do animal study
   e) Research project should not be there
Q8. Do you think the research program is adequate to start your practice immediately after training?
   a) Yes
   b) No
Q9. Which type of behavior management techniques do you use most often?
   a) Verbal communication
   b) HOME
   c) Pharmacological
d) Audio-visual aids/ audio analgesia
   e) Restraints (Physical)
f) Any other
Q10. Do you practice preventive regimens in your program?
   a) Yes
   b) No
Q11. Do you practice fluoride application techniques regularly?
   a) Yes
   b) No
Q12. Have you participated in any school health program?
   a) Yes
   b) No
Q13. Have you done patient under sedation? If yes, what kind of sedation do you use?
   a) Yes
   b) No
c) G.A.
d) Conscious sedation
   e) Oral
Q14. Do you practice fixed orthodontics (for minor corrections) in your program?
   a) Yes
   b) No
Q15. Have you given myofunctional appliances in any of your patients?
   a) Yes
   b) No

FUTURE ASPECTS
Q16. What is the most immediate thing you plan to do after the completion of the program? (Can tick more than one)
   a) Start clinical practice
   b) Search for a job
   c) Marriage
   d) Emigrate (go to abroad)
Q17. What are you more inclined to?
   a) Academics
   b) Clinical practice
   c) Research fellow
Q18. Which kind of area would you like to start your practice in?
   a) Home town
   b) Rural
   c) Urban
   d) Semi urban
Q19. Do you like to attend the conference as life members?
   a) Yes, they are good.
   b) No, reason ________________________________
Q20. Which type of clinical practice you would prefer?
   a) Exclusive Pediatric practice
   b) General practice

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Table I: Response to the type of research being taken in PG program

<table>
<thead>
<tr>
<th>Options</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>More or less monotonous</td>
<td>49</td>
<td>23.0</td>
</tr>
<tr>
<td>Good &amp; satisfied</td>
<td>69</td>
<td>32.4</td>
</tr>
<tr>
<td>Should be more clinical</td>
<td>71</td>
<td>33.3</td>
</tr>
<tr>
<td>Like to do animal study</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>Research project should not be there</td>
<td>21</td>
<td>9.9</td>
</tr>
</tbody>
</table>

Table II: Type of Behaviour Management Technique Used

<table>
<thead>
<tr>
<th>Options</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal communication</td>
<td>159</td>
<td>74.6</td>
</tr>
<tr>
<td>HOME</td>
<td>18</td>
<td>8.5</td>
</tr>
<tr>
<td>Audio analgesia</td>
<td>24</td>
<td>11.3</td>
</tr>
<tr>
<td>Physical restraints</td>
<td>9</td>
<td>4.2</td>
</tr>
<tr>
<td>Any other</td>
<td>3</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Table III: Number of Respondents Who Have Used Sedation and The Type of Sedation Used

<table>
<thead>
<tr>
<th>Options</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Sedation</td>
<td>87</td>
<td>40.8</td>
</tr>
<tr>
<td>General Anaesthesia</td>
<td>81</td>
<td>38</td>
</tr>
<tr>
<td>Conscious Sedation</td>
<td>36</td>
<td>16.9</td>
</tr>
<tr>
<td>Oral Sedation</td>
<td>24</td>
<td>11.3</td>
</tr>
</tbody>
</table>

Table IV: Immediate Plan after Completion of Training

<table>
<thead>
<tr>
<th>Options</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Clinical Practice</td>
<td>129</td>
<td>60.6</td>
</tr>
<tr>
<td>Search for a job</td>
<td>105</td>
<td>49.2</td>
</tr>
<tr>
<td>Marriage</td>
<td>18</td>
<td>8.4</td>
</tr>
<tr>
<td>Emigrate (go to abroad)</td>
<td>36</td>
<td>16.9</td>
</tr>
</tbody>
</table>

Reason for choosing Pedodontics

Figure 1: Pie diagram showing the reason for choosing pedodontics by various PG students
In spite of the liberty of using numerous methods for managing child in dental office, the most common technique of behaviour management followed was verbal communication (Table II). Our results showed that total 59.2% respondents have done patients under different types of sedation and 38% have used general anaesthesia (Table III).

Use of various preventive methods, myofunctional appliances and minor fixed orthodontics by the respondents are depicted in the figure 3. When talking about future aspects, majority of the participants had a plan to start their own clinical practice in near future (Table IV). On the same lines, the results revealed...
that 58.7% were inclined towards clinical practice and only 21.6% desired to go into academics with a very meagre number (1.4%) interested in research. On the contrary to the interest shown in academic, 74.6% felt that the conferences were good and would like to attend them. When asked about their choice of area for practice, 41.8% preferred their home town and 39.4% wished to practice in urban areas. At the same time 56% respondents preferred exclusive paediatric dentistry over general practice.

**DISCUSSION**

After graduation, Dental surgeon faces a choice to pursue master’s degree (MDS) in one of many specialties of dentistry. The students are confounded and perplexed by the choices available and the ultimate decision of choosing a speciality depends on interplay of various factors.

One of the specialities of choice is Paediatric Dentistry. It deals with children involving diagnosis, prevention and treatment of all aspects of oral diseases in them⁴, making the Paediatric Dentists, forbearers for establishing a strong foundation on which the lifelong attitude for dental health is built in an individual. It is well known and understood that the choice of career is a critical decision that has an obvious impact on a future life pattern of an individual. Keeping these things in mind, this study was an effort to access the satisfaction levels of students pursuing post-graduation in pedodontic and preventive dentistry nationwide.

The results of our study showed that 38% of the post graduates (PGs) always wanted to be pedodontists. Whereas, Arora R et al in their study for assessing the reason for choosing Paediatric Dentistry as career reported for 94.6% respondents it was their career of interest. The reason for this difference could be that Arora divided these reasons into Parental, Personal, Professional and Vocational reasons. And among personal reasons, it was the most common. It was also reported that 73.7% respondents were satisfied with their choice and majority of them preferred government institution. Though this factor has not been studied by other authors, the main reason for this answer could be the handsome stipend given to the post-graduates in the government institutions.

Our results showed that Endodontics was the most preferred branch while pedodontics was almost equally preferred over all other branches except for Endodontics. Results of our study showed that 70% of the respondents were inclined towards clinical practice either exclusively or in combination with academics and of these 58.7% wished to do clinical practice exclusively. Corresponding to our results, Bell and McTigue² reported 79.2% chose private practice either exclusively or in combination with academics. Though more inclination was seen towards clinical practice but most of the respondents found the research program inadequate to start practice immediately after the training.

As preventive dentistry is an integral part of this speciality, the burden of improving public oral health and inculcating the feeling of importance of dental care among children which they carry forward to adulthood also lies on the paediatric dentists. Providentially, according to our study 73% PGs reported to follow preventive regimens in their practice which can be a boon in a developing nation as ours. In a study on attitude of pedodontists toward pedodontic speciality education, Bell and McTigue² used a 5-point Likert-type attitude scale to indicate the degree of satisfaction perceived toward inquiry areas. They reported that the pedodontists showed a reduced satisfaction level in the prevention/patient education area.

Our results showed that only 50% of the respondents did fluoride applications and followed myofunctional therapy and only 40% practiced fixed orthodontics for minor corrections.

In our study, the results showed that 49.3% respondents were planning to take up job after the training. The findings were in line with those of Arora⁴ et al, who reported that among professional reasons of choosing paediatric dentistry as speciality, 65% agreed that it makes an easy way of employment.

Fonseca³ et al in their study about the factors influencing the candidates’ choice of a paediatric dental residency program reported that over 80% respondents said that shorter length (two years vs. three years) was either an important or critical characteristic in making their choice. This closely corresponded with our results in which 74% respondents were of the opinion that PG program should be of 2 years.

In a study on survey of behaviour management teaching in Predoctoral Paediatric Dentistry Programs, it was reported that of all predoctoral programs, 62% teach that HOME is an unacceptable technique⁵. On the same lines, it was seen
that 91.5% respondents did not use HOME as a behaviour management technique. Our results showed that only 16.9% respondents have done patients under conscious sedation which is far less than reported by Waggoner\textsuperscript{6} in 1986 according to whom 56% of predoctoral paediatric dentistry programs used oral conscious sedation. In our study, 59.2% respondents reported to have done patients under sedation and 38% have used general anaesthesia, while Bell & McTigue reported a reduced level of satisfaction in the area of sedation\textsuperscript{2}.

In our study, we found that 56% respondents preferred exclusive paediatric dentistry over general practice and 74.6% felt that the conferences were good and would like to attend them. But to best of our knowledge, these points have not been studied by other researchers.

Our study gives a brief overview about the satisfaction levels of the post graduates and also reports about the various fields in which improvements may be made. As for making improvements in our research program we must know about the various loopholes of our system. So, our study was an effort in recognising these so that various steps can be taken for the enhancement of pedodontic specialty program.

CONCLUSION

The results of this study show that majority of the post graduates pursuing pedodontics always wanted to be the same and preferred government institution over private. The results depict that the knowledge and practice about certain areas like use of fluorides, practice of fixed orthodontic and use of myofunctional therapy should be increased. As most respondents wish to attend conference as life members so, the level of these should be raised higher by inviting more of internationally acclaimed speakers and offering better hospitality. Thus, it can be concluded that paediatric dentistry being a dynamic branch, should be looked upon with the aim to raise the level of education and clinical practice which subsequently may increase the satisfaction level of the post graduates.

REFERENCES