Professional Women Orthodontists: A Reality Profiling
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ABSTRACT
Introduction: Practitioners in the field of dental sciences are still overwhelmingly male. The limited amount of available data compounds the difficulty of assessing the impact of the ongoing sex shift in orthodontics. Women are redefining dental practice options to better integrate a professional career with parenting responsibilities. Nevertheless, the relationships among family roles, professional work ethic, and productivity have not been well-studied.

Aim and objectives: This study was aimed to identify the current perspectives of the urban Indian professional women orthodontists toward the speciality, their practice patterns and its determinants, disadvantages of this career and difficulties encountered during training period, and thereafter.

Materials and methods: Questionnaires were prepared for group of respondents, that is, the practitioners. Responses were collected using Monkey 7, (Austin, TX) on a secure web site. Groups were analyzed using SPSS software (Statistical Product and Service Solutions) version 14 provided by IBM Corporation.

Conclusion: It was concluded that there are around 139 female orthodontists practicing in the metropolis. A total of 40% of the practicing orthodontists, out of 86 who returned their surveys, worked 6 days a week and 20% worked 5 days and 4 days each. The most important determinant to opt for orthodontics was financial security 42%, followed by challenging speciality 36%, prestige and lifestyle 10%, family member in the same speciality 6%, did not like general dentistry 4%, and others 2%.

Keywords: Questionnaire, Women orthodontist, Gender bias.


INTRODUCTION
The number of women in dentistry and dental specialties, including orthodontics, has increased dramatically over the recent years. Dental specialization has rewards, one such being monetary benefits, as specialist dental surgeons may have the potential to earn substantially higher income than general dentists. However, much like in the general dentistry, aggressive practitioners in dental specialty fields are still overwhelmingly male. A few studies’ have indicated that even at an early age of a dental students career, gender plays a significant role in the level of interest.1-5

Over the past 20 years, several studies have emphasized on education and attempted to identify trends and evaluate new developments in orthodontic education6-9 However, the limited amount of available data compounds the difficulty of assessing the impact of the ongoing sex shift in orthodontics. It is sometimes assumed that a professional woman’s commitment to work is less reliable than a man’s, because she is more likely to take time off or subordinate her career when she has children or when combined family income is high. However, current evidence suggests that women are redefining dental practice options to better integrate a professional career with parenting responsibilities. Nevertheless, the relationships among family roles, professional work ethic, and productivity have not been well-documented. Considering the presence of lacunae of insight in this area, it was decided to conduct the study to assess the situation at ground and do a reality profiling of the practicing women orthodontists and residents in the urban Indian society.

AIMS AND OBJECTIVES
The aims of this study are as follows:
1. To identify current women orthodontic practitioner demographic spread in the metropolis of India.
2. To evaluate the practice patterns of female orthodontists in Urban India.
3. To determine the factors which influence women to opt for orthodontics as a choice for specialization.
4. To analyze the perception of practitioners toward the disadvantages of the career option, and
5. To critically analyze the bias against women, that is, the sexual harassment encountered.

MATERIALS AND METHODS
A current list of e-mail addresses of all female members (life members) of the Indian Orthodontic Society in the metropolis (Mumbai, Delhi NCR, Chennai, Kolkata, and Bengaluru) were obtained. There were 139 female practitioners working...
Please answer the following practice-related questions

What was your motivation in selecting orthodontics and dentofacial orthopedics as your specialty? (Rate 1-5 with 1 as the best)

Prestige and lifestyle, financial security, challenging specialty, family member in the same specialty, do not like general dentistry, and others

Number of years in practice?

0-5, 5-10, 10-20, 20-30, >30

How would you describe your practice?

Part time, full time, general dentistry + Ortho, exclusively ortho

Does your practice incorporate a colleague?

Yes, No, Do not know

If Yes, kindly comment

How would you describe yourself?

Male, Female, Both

How would you describe your practice?

Full-time academician, full-time clinician, part-time clinics and academics, others

No. of work days/week of practice

4, 5, 6, 7, and others

Your location of practice is guided by

Upmarker, closer to home, vacancy availability, and others

Are you satisfied with your specialty/nature of your work?

Strongly agree, agree, disagree, strongly disagree, no comments

Would you recommend this specialty to young dental surgeons?

Yes, No, Do not know If Yes/No, Kindly give a reason?

B. Which is the most significant employee treatment issue where you work? (Tick whichever applicable)

Job security, age discrimination, gender discrimination, sexual Harassment, getting discriminated against for taking family or pregnancy leave, lack of family flexible solutions, not getting a pay raise, working too many hours

Please answer the following personal questions

Have you encountered any bias during your residency? If yes, kindly comment?

Have you come across any kind of sexual harassment during your career throughout?

Yes, No

Are men losing confidence as women have begun to be equally competent?

Yes, No, Do not know

Have you ever had redressal of grievance?

Yes, No

How do you rate your association with peer groups?

Very good, good, fair, poor

How do you think a women can be empowered?

Are you an active member of any organization working for empowerment of women? If yes, kindly specify

Yes, No

What would you like to improve in your life?

Finances, work, family, relationships, health

What is most important to you when looking for a new job?

Competitive salary wage, benefits offered, work-life balance, feeling of making a difference

Does your spouse/other significant make more, less or same as you? Does the earning affect family relationship status?

More money than me, about he same, less money than me

Do you have a tough time separating work from personal life?

Yes, No, Do not know

Table 1: Questionnaire for the practicing orthodontist

A. Please answer the following demographic questions

- Marital status
  - Single, Married, Divorced/widowed
- Age
  - 20-30, 30-40, 40-50, 50-60, 60-70, >70
- No. of children
  - None 1, 2, 3, >3

B. Please answer the following practice-related questions

What was your motivation in selecting orthodontics and dentofacial orthopedics as your specialty? (Rate 1-5 with 1 as the best)

Prestige and lifestyle, financial security, challenging specialty, family member in the same specialty, do not like general dentistry, and others

Number of years in practice?

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How would you describe your practice?

Part time, full time, general dentistry + Ortho, exclusively ortho

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Full-time academician, full-time clinician, part-time clinics and academics, others

No. of work days/week of practice

4, 5, 6, 7, and others

Your location of practice is guided by

Upmarker, closer to home, vacancy availability, and others

Are you satisfied with your specialty/nature of your work?

Strongly agree, agree, disagree, strongly disagree, no comments

Would you recommend this specialty to young dental surgeons?

Yes, No, Do not know If Yes/No, Kindly give a reason?

B. Which is the most significant employee treatment issue where you work? (Tick whichever applicable)

Job security, age discrimination, gender discrimination, sexual Harassment, getting discriminated against for taking family or pregnancy leave, lack of family flexible solutions, not getting a pay raise, working too many hours

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More money than me, about he same, less money than me

Do you have a tough time separating work from personal life?

Yes, No, Do not know

in the metropolis, who were members of the Indian Orthodontic Society Questionnaires were prepared for participating group, that is, the practitioners (Table 1). All potential participants were sent an invitation with a letter of introduction requesting their participation. Responses were collected using Monkey 7, (Austin,TX) on a secure web site (Fig. 1). Data were analyzed using SPSS software (Statistical Product and Service Solutions) version 14.0 provided by IBM Corporation which was used to conduct post hoc, analysis of variance (ANOVA), and students t-test.

RESULTS

Around 86 of the 139 practicing orthodontists returned their surveys.

Practicing Orthodontist Survey

Out of the 86 respondents who returned their surveys, 40% of the practicing orthodontists worked full time, with an average of 6 working days per week (Fig. 2). The most common age group which responded to the survey was between 30 and 40 years (60%). The most significant employee-related issue was working too many hours and not getting a pay raise, 22.22% each, (Fig. 3) (p < 0.05). Of the respondents who answered questions about practice management, 36% owned their practice and 35% worked solo. The remainder held a variety of positions such as working with a partner (25%) or other type of practice management (4%). Of those in group practices, 64% had no other female colleagues, 24% had one other female in their practice, and 12% had two, three, or four other females in their practice. Around 47% were associated with academic teaching, out of which 66% were associated with continuing dental education programs and 44% teaching full time.

Location of practice was chosen for a variety of reasons, with family concerns accounting for 40% of the choices (p < 0.05). Other major factors were geographic location (20%), job availability (10%), and other factors (30%) (Fig. 4).

In terms of satisfaction with their career selection, 40% strongly agreed and 60% agreed (Fig. 5) (p < 0.05). Of those who would not recommend the speciality to other women, their reasons differed. The results regarding the question about what was the motivation to select orthodontics and dentofacial orthopedics are shown in Table 2. The most important determinant was financial security, followed by challenging specialty, prestige and lifestyle, family member in the same speciality, and did not like general dentistry in decreasing order.

A total of 20% of the respondents stated that they encountered bias against women in their residency program (Fig. 6). Whereas 77% had never had reprisal of grievance (Fig. 7) with (p < 0.005). And, 70% felt that men are losing confidence as women have begun to be equally competent.
Fig. 1: Survey monkey

Fig. 2: Number of work days/week of practice...

Fig. 3: Which is the most significant employee treatment issue where you work...

Fig. 4: Your location of practice is guided by...

Fig. 5: Are you satisfied with the specialty/nature of your work...
Fig. 6: Have you come across any kind of sexual harassment during your career throughout?

Fig. 7: Have you ever had reprisal of grievence?

Fig. 8: Are men losing confidence as women have begun to be equally competent?

Fig. 9: What is most important to you while looking for a new job?

Table 2: Percentage ranking of motivations for choosing the specialty

<table>
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<th>(%)</th>
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<tbody>
<tr>
<td>Prestige and lifestyle</td>
<td>10</td>
</tr>
<tr>
<td>Financial security</td>
<td>42</td>
</tr>
<tr>
<td>Challenging speciality</td>
<td>36</td>
</tr>
<tr>
<td>Family member in the same speciality</td>
<td>6</td>
</tr>
<tr>
<td>Did not like general dentistry</td>
<td>4</td>
</tr>
<tr>
<td>Others</td>
<td>2</td>
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Among the urban Indian women practitioners, it was seen that 40% of the women worked 6 days a week. This clearly indicated that women in the speciality appear to be integrating the demands of family and career. The women who responded to the survey were relatively younger (60% being 30-40 years). Therefore the daily, weekly, and monthly hours worked could change dramatically with time. On the contrary, because women orthodontists are more likely to be married to another working professional, their family income is likely to be greater, and, as the family becomes more financially secure, they might choose to work fewer hours or retire earlier. Considering that 66% were involved in continuing dental education programs and 44% teaching full time clearly shows the interest level and an urge to assimilate and disseminate knowledge by women. Location of practice was guided by family concerns and geographic location being the chief determinants. This is straight for majority of women as she is always in conjunction with her family that might be moving or static. Geographic location, the second

DISCUSSION

The study was conducted in the urban society and it was assumed that women in this section would be more assertive and liberated and would provide a pattern that would probably show higher levels of professional involvement and provide useful inputs relating to one end of the spectrum.
in the run, is the key factor for good income outputs as the high-class are the best payers.

In terms of satisfaction with their career selection, 40% strongly agreed. For the ones who would not recommend the speciality to other women, the reasons differed like

“Health care is a very challenging field. I wish I did not have to work so many hours to cover the overhead because costs continue to rise and reimbursement declines. I wish I could spend more time with my daughter.”

“Females, like it or not, are the primary care givers in a family. This job, unlike general dentistry, cannot be done part time. Arrangements for child care will be unusual, meaning no children; father is a stay-at-home or using nannies.”

Percentage ranking of motivations for choosing the speciality indicated that the most important determinant was financial security (42%), followed by challenging speciality (36%), prestige and lifestyle, family member in the same speciality, and did not like general dentistry following in decreasing order. This could be accounted for by the dire need to earn money by one and all the ever-increasing confidence level in girls in their urge to support their families.

Overall, it may be seen that women orthodontists in urban India are ready to encounter challenges in their practice and in association with their peer groups and still desire to be academicians.

From the residents’ survey, it was seen that in comparison to the previous study conducted by Bruner et al10 to determine the impact of female practitioners on the future of orthodontic health-care delivery, the orthodontic resident demographics, perceptions of training, and goals in the present scenario had changed significantly. Many of these changes could impact the future of orthodontics. The exceptional response rate of this survey indicates that orthodontic residents are interested in this topic.

A total of 20% of the respondents stated that there was bias against women in their residency. Although there has been an increase in the number of females pursuing a career in orthodontics and dentofacial orthopedics, the field is still male-dominated. There is a need for more role models to help correct this gender bias. The speciality will likely be more challenging for some women to establish balance between professional and family life. This is in consonance to the study conducted by Davidson et al11 in which a survey conducted on 13 Canadian female orthodontists identified specific challenges of achieving a work-family balance that are unique to orthodontic practice and strategies for adapting to their maternal and professional roles and it was concluded that achieving a work-family balance is of paramount importance to female orthodontists.

**CONCLUSION**

1. There are around 139 female orthodontists practicing in the metropolis.
2. A total of 40% of the practicing orthodontists, out of 86 who returned their surveys, worked 6 days a week and 20% worked 5 and 4 days each.
3. The most important determinant to opt for orthodontics was financial security 42%, followed by challenging speciality 36%, prestige and lifestyle 10%, family member in the same speciality 6%, did not like general dentistry 4%, and others 2%.
4. Working too many hours and not getting a pay raise serve as significant disadvantages of selecting this career option.
5. A total of 20% of respondents stated that there was some bias against women in their residency in terms of encountering sexual harassment.

**FUTURE RESEARCH**

As this study is the first of its kind in India and is narrowed to the urban zone, it could prove to be legitimate for both the Indian Orthodontic Society and the general population. Impact of sex disparities on the alteration of total supply in the speciality is a future research topic.

**REFERENCES**