Content available at: https://www.ipinnovative.com/open-access-journals

IP Indian Journal of Orthodontics and Dentofacial Research

Journal homepage: https://www.ijodr.com/

Original Research Article

Perception of orthodontic care for medically compromised patients

Mithil Nimesh Shah[1]*, Tushar Gambhirrao Patil[1], Avinash Ramkrushna Mahamuni[1], Rajlaxmi Rajajram Rai[1], Supriya Shankar Vyavahare[2]

[1]*Dept. of Orthodontics and Dentofacial Orthopedics, Y.C.M.M and R.D.F'S Dental College and Hospital, Ahmednagar, Maharashtra, India*
[2]*Dept. of Public Health Dentistry, Yogita Dental College, Khed, Maharashtra*

ARTICLE INFO

Article history:
Received 25-08-2024
Accepted 26-09-2024
Available online 21-11-2024

Keywords:
Thalassemia
Hemophilia
Bronchial asthma
Infective Endocarditis
Hepatitis B

ABSTRACT

Background: Orthodontic therapy is known to enhance the general well-being and self-esteem of patients but people with Systemic illnesses necessitate taking specific precautions before, during, and/or after orthodontic treatment. With the advent of social media and increased awareness of facial appearance, all people including patients with compromised health are eager to seek orthodontic therapy.
Aims & Objective: In this study aims to understand the perception of orthodontic care towards medically compromised patients in senior orthodontic students, postgraduate orthodontic students, and general dental practitioners.
Materials & Methods: 352 dental professionals—senior orthodontic practitioners, post-graduate orthodontic practitioners, general practitioners, and PG students of other specialties in India—were randomly chosen for this cross-sectional study to evaluate their perception of orthodontic care for patients with SHCN. Both online survey links and offline forms were distributed and collected over a period of six months throughout the network. The significance level for each test used in the data entry, collection, and analysis is P<0.005.
Result: The overall knowledge of general practitioners and other specialty PG students was low. Although postgraduates from other branches were aware of a few scenarios, the senior orthodontics practitioners were aware of most situations due to their experience. There was no significant difference in the knowledge between senior orthodontic practitioners and postgraduate orthodontic students.
Conclusion: The orthodontic supervision for medically compromised patients' awareness has to be raised. There should be a lot more seminars and lectures, especially for dental graduates and postgraduates.
(Abbreviations- SHCN-Special health care needs, GDPs- general dental practitioners, NSAIDs- Non-steroidal anti-inflammatory drugs, X^2- Pearson's Chi-Square test).

1. Introduction

The general well-being and self-esteem of patients can be enhanced by orthodontic therapy. Because of their systemic diseases, certain patients need to take specific precautions before, during, and/or after treatment Orthodontic therapy, it has become more and more popular among these medically compromised patients, and their medical conditions shouldn't prevent them from receiving it.[1] In recent years due to developments in health sciences, a decline in mortality rates has been observed, It has caused both the population's average age and the percentage of people with long-term medical issues to rise.[2] The main objectives of orthodontic therapy are to enhance

* *Corresponding author*.
E-mail address: mithilnimeshshah@gmail.com (M. N. Shah).

https://doi.org/10.18231/j.ijodr.2024.048

quality of life, boost confidence, and maintain functional harmony in the oral environment. Hence, in addition to encouraging their patients to lead healthy lifestyles, orthodontists must ascertain the level of understanding that each patient possesses.[3] The area of dentistry known as orthodontics treats jaw and tooth abnormalities that result from developmental malformations.[4] To enhance dental and jaw function as well as dentofacial looks, orthodontic therapy is crucial for everyone with dentofacial anomalies or malocclusion.[5] It also has a significant impact on social, psychological, and self-esteem changes. Becker et al in their survey concluded that increasing their child's facial appearance was the main reason for parents with SHCNs to go for orthodontic therapy.[6]

This study set out to evaluate the expertise of Indian postgraduate orthodontic students general practitioners' senior orthodontic practitioners, and other specialty post-graduate professionals in orthodontic therapy for medically impaired patients.

In general, the following procedure should be followed to manage orthodontic patients with SHCN:-

Identifying an issue(clinical assessment or medical history), then consultation(Viewing the patient's medical report with the patient's doctor.) followed by a modified orthodontic treatment plan based upon the patient's review of medical history, and lastly orthodontic therapy specialized precautionary.[7]

2. Materials and Methods

This Cross-sectional study was carried out at Y.C.M.M and RDF's dental college, Ahmednagar. It included dental professionals in India, including general practitioners, orthodontists, and senior dental students. Dental professionals throughout the Indian demographics will be included in the sample, which will be conveniently sampled using a basic random sampling technique. Techniques for gathering data were online surveys using Google Surveys link and forms which had 18 multiple-choice questions(Figures 1 and 2). Based on a review of the literature, we attempted to assess senior orthodontic practitioners, PG orthodontic students, GDPs, and Practitioners from another dental specialty for their awareness and self-knowledge of orthodontic therapy for patients with special healthcare needs, considering preventive care before receiving orthodontic treatment, and common disorders including rheumatoid arthritis, renal failure, bacterial endocarditis, diabetes, hematological malignancies, and bleeding disorders. Y.C.M.M and RDF'S Dental College officially communicated with orthodontic students, and older practitioners by sending Google survey links inviting them to participate. In the meantime, additionally, we used WhatsApp to randomly invite other dentists throughout India to participate in this study; the forms were also distributed in the form of physical hard copies(Figure 2) to collect the data. The questionnaire takes two to three minutes to complete on average, and the data was gathered over a period of 180 days from approximately 350 respondents.

2.1. Questionnaires asked

1. Designation?
2. Do you include care for medically compromised patients seeking orthodontic treatment?
3. How many times have you encountered medically compromised patients seeking orthodontic care during practice?
4. Do you think it is important for us as a clinician to include care towards medically compromised patients seeking orthodontic care?
5. Which SHCN patient have you encountered during your practice?
6. Your orthodontic recommendations for diabetes Mellitus patients?
7. What is a more preferable molar attachment technique in patients with Infective Endocarditis, HIV, and Hepatitis B?
8. What is the DOC for Antibiotic Prophylaxis in patients with infective endocarditis or Hepatitis B?
9. Which medications do you recommend to be avoided in patients with Bronchial Asthma?
10. What kind of Impression material do you prefer in patients with Bronchial Asthma?
11. Do you recommend giving extra light intra and extra oral forces to patients with Thalassemia or Diabetes Mellitus?
12. Do you recommend screening every patient for HIV and Hepatitis B in your clinic?
13. What do you think is the main cause of Bacteremia in patients with Infective Endocarditis?
14. Your orthodontic recommendation for autistic patients?
15. Do you think orthodontic treatment is contraindicated in patients with Hemophilia?
16. Your orthodontic recommendations to follow in your operatory for patients with Down's syndrome?
17. What should be avoided in patients with osteoporosis?
18. Your orthodontic recommendations for Epileptic patients seeking orthodontic care?

2.2. Ethical consideration(YCDC/IES-IRC/41/2024-25)

1. The participant's right to stop participating at any moment without having to notify the study team was clearly stated in the informed consent, which also clearly stated the purpose of the research. We also promise the privacy of any data collected and the anonymity of participants.

2. We did not administer any interventional techniques to the individuals during the data collection process.
3. No prizes or incentives were given to the participants.

2.3. Statistical analysis

The data was collected with Google form spreadsheets and physical copy of forms, the complete data was analyzed. With IBM SPSS static for Windows, version 21.0, the statistical package for social science(SPSS) was analyzed. IBM Corp., Armonk, NY, at a 95% confidence interval and 80% power for the research. For statistical analysis, the Chi-square test by Pearson was employed, and descriptive statistics were carried out in terms of mean, standard deviation, and frequency. P<0.005 was used to calculate statistical significance.

3. Results

Out of a total response of 400, 352 were completed, the response rate was 88.00%.

The respondents consisted of 40.9% orthodontic practitioners(Designation-1), 34.3% postgraduate students in orthodontics(Designation-2), and 24.7% other dental professionals which included general practitioners, and postgraduates in other dental specialties(Designation-3). Pearson's chi-square test showed that except for question 11 and question 12; P value for all the other questions were significant(P value<0.005)(Table 1).

Respondents consist of 59% females and 41% males. We found that the overall knowledge of orthodontic practice management for medically compromised patients was comparatively lower in GDPs, and postgraduate from other dental specialties when compared to orthodontic postgraduate students and senior orthodontic practitioners. Senior orthodontists have comparatively more knowledge when compared to postgraduate orthodontic students. However, we found no significant difference in the amount of knowledge in the prophylactic treatment of patients with infective endocarditis between senior orthodontic practitioners and postgraduate orthodontic students. The statistical analysis reflected that the knowledge was higher among senior orthodontic practitioners than orthodontic PG students, post-graduates from other dental specialties, and general practitioners.

4. Discussion

We need to encourage the patients to establish healthy lifestyles and to ascertain the degree of comprehension that these patients possess. Our study included 352 responses out of which 198 responses were collected via Google survey and 154 responses were collected in the form of hard copy. The study's findings demonstrated that, in the majority of cases, there was a greater general knowledge of senior practicing orthodontists. Postgraduate orthodontic students came next because they had a better understanding of certain problems, whereas the other professionals had less expertise and understanding. When compared to GDPs, our research showed a significant difference in how senior practitioners and postgraduate orthodontic students perceived the importance of preventive care before orthodontic intervention, as well as the management of patients with infectious endocarditis, nonsteroidal anti-inflammatory drugs, asthma, hemophilia, Down syndrome, and autism.

S. Thompson and associates[8] investigated to assess the degree of expertise and educational requirements among dentists in Wales(general practitioners, community dental services & dentists affiliated with other specialties) concerning congenital/acquired cardiac disease and the prophylactic use of antibiotics for the same. They discovered that GDPs were less knowledgeable about the cardiac risk factors that affect both adults and children and that call for preventive measures. Additionally, dental specialists had far greater knowledge than GDPs about prescribing antibiotic prophylaxis for patients with infective endocarditis. There was a broad lack of clarity regarding which heart problems call for preventive care. In particular, two questions concerning orthodontic treatment with patients who are susceptible to endocarditis should receive antibiotic prophylaxis during the orthodontic tooth separation and orthodontic band/bracket placement. They discovered that more information is required for the use of antibiotic prophylaxis in congenital, acquired, and repaired cardiac conditions to prevent infective endocarditis.[8]

As per an alternative investigation conducted by Schwenk DM et al. Nine out of all the specialties combined, the least number of orthodontic plans are completed by clinics for this patient group. As the practitioners might not feel confident enough to treat these patients, we believe that this finding may be related to the study.[9]

According to a study by Parry J et al.(2010), general dentists have a high level of confidence when it comes to treating children who have congenital heart disease, diabetes, or epilepsy. On the other hand, they felt the least competent to care for children with hemophilia.[10] While our study revealed that other specialty post graduates' dental students had a moderate to good understanding of managing medically impaired patients(Questions 8 & 9- Highly significant P values-Table 2), a research project by Gill Y and colleaguesindicates that students in their final year had an acceptable understanding of managing patients with diabetes and bleeding disorders.[11] On the other hand, our findings showed that GDPS had a low degree of expertise(Questions- 7,11,15, 17- Highly significant P value- refer Table 2). An evaluation of dentists' expertise and methods for treating children with special needs was carried out in Nigeria.[12] In their survey, over half of the participants stated that their knowledge of how to manage

Table 1: Showing how pearson'schi-square test(X^2) was applied on question no. 2 – which shows the P value to be highly significant

			Designation			Total	X^2	P value
			1	2	3			
Do you include practice toward medically compromised patients seeking orthodontic treatment ?	**1**	Count	158	125	35	318	78.525	.000**
		% Within Designation	97.5%	95.4%	59.3%	90.3%		
	2	Count	4	6	24	34		
		% Within Designation	2.5%	4.6%	40.7%	9.7%		
Total		Count	162	131	59	352		
		% Within Designation	100.0%	100.0%	100.0%	100.0%		

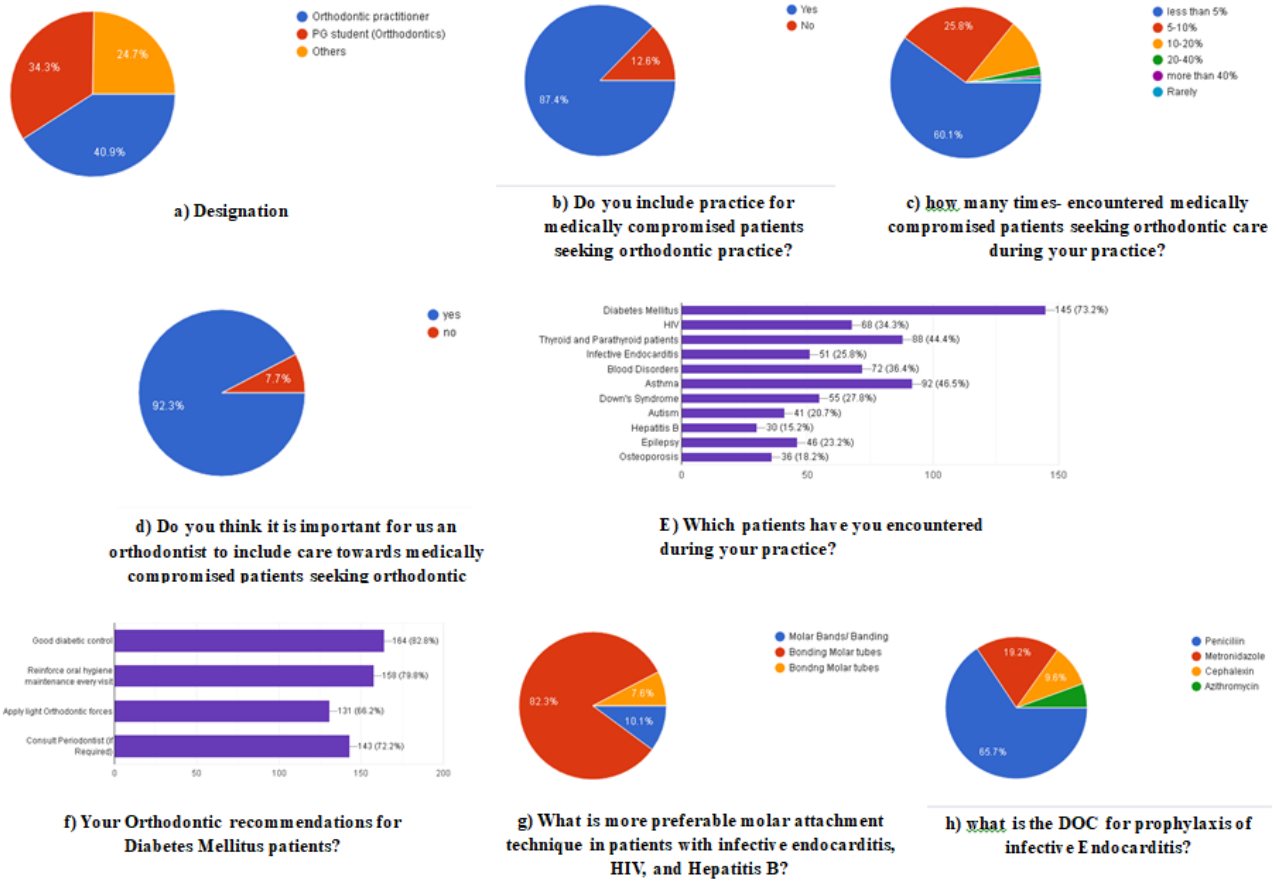
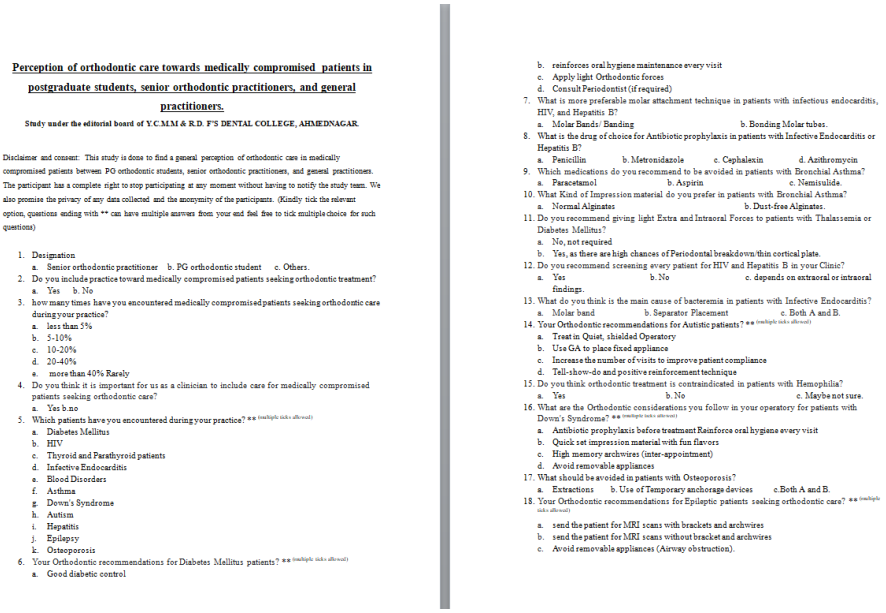


Figure 1: a) Graph for question 1; **b)** Graphfor question 2; **c)** Graph for question3; **d)** Graph for question 4; **e)** Graph for question 5; **f)** Graph for question 6; **g)** Graph for question 7; **h)** Graph for question .



Perception of orthodontic care towards medically compromised patients in postgraduate students, senior orthodontic practitioners, and general practitioners.

Study under the editorial board of Y.C.M.M & R.D. F'S DENTAL COLLEGE, AHMEDNAGAR.

Disclaimer and consent: This study is done to find a general perception of orthodontic care in medically compromised patients between PG orthodontic students, senior orthodontic practitioners, and general practitioners. The participant has a complete right to stop participating at any moment without having to notify the study team. We also promise the privacy of any data collected and the anonymity of the participants. (Kindly tick the relevant option, questions ending with ** can have multiple answers from your end feel free to tick multiple choice for such questions)

1. Designation
   a. Senior orthodontic practitioner b. PG orthodontic student c. Others.
2. Do you include practice toward medically compromised patients seeking orthodontic treatment?
   a. Yes b. No
3. how many times have you encountered medically compromised patients seeking orthodontic care during your practice?
   a. less than 5%
   b. 5-10%
   c. 10-20%
   d. 20-40%
   e. more than 40% Rarely
4. Do you think it is important for us as a clinician to include care for medically compromised patients seeking orthodontic care?
   a. Yes b.no
5. Which patients have you encountered during your practice? ** (multiple ticks allowed)
   a. Diabetes Mellitus
   b. HIV
   c. Thyroid and Parathyroid patients
   d. Infective Endocarditis
   e. Blood Disorders
   f. Asthma
   g. Down's Syndrome
   h. Autism
   i. Hepatitis
   j. Epilepsy
   k. Osteoporosis
6. Your Orthodontic recommendations for Diabetes Mellitus patients? ** (multiple ticks allowed)
   a. Good diabetic control
   b. reinforces oral hygiene maintenance every visit
   c. Apply light Orthodontic forces
   d. Consult Periodontist (if required)
7. What is more preferable molar attachment technique in patients with infectious endocarditis, HIV, and Hepatitis B?
   a. Molar Bands/ Banding b. Bonding Molar tubes.
8. What is the drug of choice for Antibiotic prophylaxis in patients with Infective Endocarditis or Hepatitis B?
   a. Penicillin b. Metronidazole c. Cephalexin d. Azithromycin
9. Which medications do you recommend to be avoided in patients with Bronchial Asthma?
   a. Paracetamol b. Aspirin c. Nemisulide.
10. What Kind of Impression material do you prefer in patients with Bronchial Asthma?
    a. Normal Alginates b. Dust-free Alginates.
11. Do you recommend giving light Extra and Intraoral Forces to patients with Thalassemia or Diabetes Mellitus?
    a. No, not required
    b. Yes, as there are high chances of Periodontal breakdown/thin cortical plate.
12. Do you recommend screening every patient for HIV and Hepatitis B in your Clinic?
    a. Yes b. No c. depends on extraoral or intraoral findings.
13. What do you think is the main cause of bacteremia in patients with Infective Endocarditis?
    a. Molar band b. Separator Placement c. Both A and B.
14. Your Orthodontic recommendations for Autistic patients? ** (multiple ticks allowed)
    a. Treat in Quiet, shielded Operatory
    b. Use GA to place fixed appliance
    c. Increase the number of visits to improve patient compliance
    d. Tell-show-do and positive reinforcement technique
15. Do you think orthodontic treatment is contraindicated in patients with Hemophilia?
    a. Yes b. No c. Maybe not sure.
16. What are the Orthodontic considerations you follow in your operatory for patients with Down's Syndrome? ** (multiple ticks allowed)
    a. Antibiotic prophylaxis before treatment Reinforce oral hygiene every visit
    b. Quick set impression material with fun flavors
    c. High memory archwires (inter-appointment)
    d. Avoid removable appliances
17. What should be avoided in patients with Osteoporosis?
    a. Extractions b. Use of Temporary anchorage devices c.Both A and B.
18. Your Orthodontic recommendations for Epileptic patients seeking orthodontic care? ** (multiple ticks allowed)
    a. send the patient for MRI scans with brackets and archwires
    b. send the patient for MRI scans without bracket and archwires
    c. Avoid removable appliances (Airway obstruction).

Figure 2: Hard copy form with declarations and consent(right-page 1, left-page 2)

Table 2: Showing X^2 and P value of data for respective question

Question. No.	Questions	X^2	P value
1.	Do you include practice toward medically compromised patients seeking orthodontic treatment?	78.525	.000**
2.	how many times have you encountered medically compromised patients seeking orthodontic care during your practice?	15.274	.049*
3.	Do you think it is important for us as clinicians to include care for medically compromised patients seeking orthodontic care?	51.531	.000**
4.	Your Orthodontic recommendations for Diabetes Mellitus patients?	68.104	.000**
5.	What is more preferable molar attachment technique in patients with Infective Endocarditis, HIV, and Hepatitis B?	33.917	.000**
6.	What is the drug of choice for Antibiotic prophylaxis in patients with Infective Endocarditis or Hepatitis B?	69.37	.000**
7.	Which medications do you recommend to be avoided in patients with Bronchial Asthma?	16.743	.002**
8.	What Kind of Impression material do you prefer in patients with Bronchial Asthma?	6.999	.030*
9.	Do you recommend giving light Extra and Intraoral Forces to patients with Thalassemia or Diabetes Mellitus?	4.331	.115#
10.	Do you recommend screening every patient for HIV and Hepatitis B in your Clinic?	6.572	.160#
11.	What do you think is the main cause of bacteremia in patients with Infective Endocarditis?	12.788	.012*
12.	Your Orthodontic recommendations for Autistic patients?	115.88	.000**
13.	Do you think orthodontic treatment is contraindicated in patients with Haemophilia?	29.956	.000**
14.	What are the Orthodontic considerations you follow in your operatory for patients with Down's Syndrome?	62.246	.000**
16.	What should be avoided in patients with Osteoporosis?	26.104	.000**
17.	Your Orthodontic recommendations for Epileptic patients seeking orthodontic care?	77.912	.000**

**-highly significant;*-significant

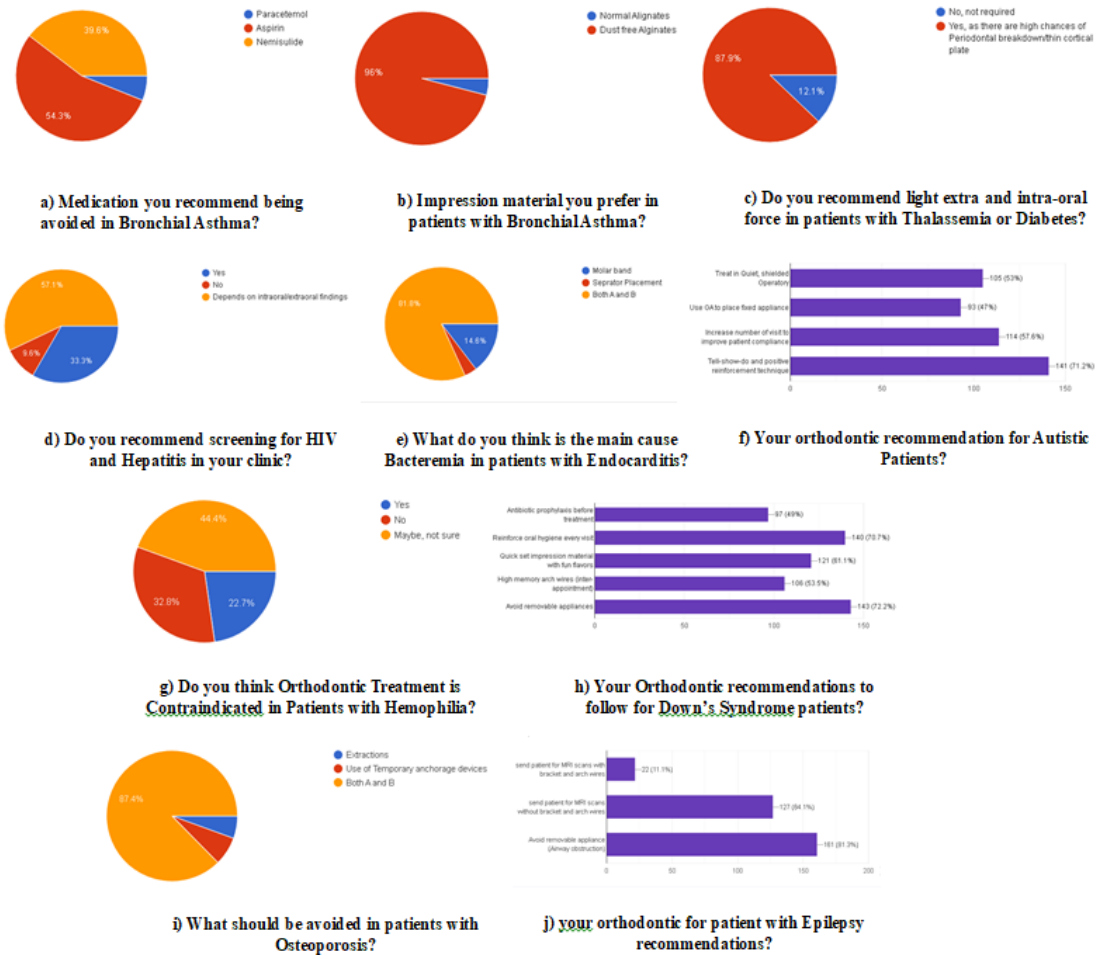


Figure 3: a) Graph for question 9; **b)** Graphfor question 10; **c)** Graph for question11; **d)** Graph for question 12; **e)** Graph for question 13; **f)** Graph for question 14; **g)** Graph for question 15; **h**) Graph for question 16; **i)** Graph for question 17; **j)** Graph for question 18.

special needs children was fairly adequate. However, our research demonstrates that dental professionals in the Indian demographics had appropriate levels of competence when it came to treating adults and children in general(Question 4,14,16-Highly significant P value(Table 2).

Another descriptive cross-sectional study measuring dentists' knowledge of prescribing antibiotics found that most of the people surveyed(84%) predetermined prophylactic antibiotics for patients undergoing dental intervention who also had diabetes(58.7%) and those at risk of infective endocarditis. Moreover, hardly one-fifth(21%) of oral surgeons administer prophylactic antibiotics to cardiac bypass patients undergoing dental procedures, whereas nearly half(47%) of GDPs do administer prophylactic antibiotics. Among participating dentists, more than half(53%) recommend preventative antibiotics for people on immunosuppressive drugs. [13]

In a Malaysian study, students noted that more emphasis needed to be placed on didactic instruction and practical preparation when it came to undergraduate student care for people with special health care requirements. [14] Senior orthodontic practitioner's extensive knowledge base may be explained by their daily work in the clinic, as well as by the quantity of cutting-edge material and seminars relevant to their area of expertise. There is no scientific basis for the PG orthodontic students on high level of understanding of the use of muscle relaxants, although it may be because of their updated, more thorough curriculum or newly acquired knowledge on NSAIDS.(Question 9 PG orthodontic students had a of correct response rate of 61.1% when compared to for senior orthodontic practitioners-55.6%.(Figure 3)

Improvements in healthcare have helped to lower death rates, which has improved the age of the population and increased the number of persons with long-term medical disorders. Throughout the world, general dentists have mostly provided preventative care and dental treatment to individuals with medically challenged situations. Given

their significant role in providing treatment for patients with medically impaired conditions, dentists must receive proper training and acquire a solid foundation in care delivery, with a focus on treating medically compromised patients. [15]

There were various shortcomings in our study. First off, the sample size is tiny and does not reflect Indian Orthodontic practices. Second, it was more difficult to create the questionnaire and compare the results because no comparable prior research had been particularly designed to assess dental professionals' understanding of orthodontic therapy for medically impaired patients. We managed to find articles and frame questions from literature articles and a chi-square test was completed for all the questions. It is recommended that future studies assess dental professionals' desire to treat this patient group and determine their level of expertise in each discipline.

5. Conclusion

We concluded that the perception of orthodontic care towards medically compromised patients was highest in senior orthodontic practitioners followed by the postgraduate orthodontic students. Lack of clinical experience with this patient's cohort may be the reason for GDPs low confidence in their ability to care for patients with special healthcare needs after graduation. The orthodontic supervision for medically compromised patients' awareness has to be raised. There should be a lot more seminars and lectures, especially for dental graduates and postgraduates.

Therefore, we would like to suggest the Dental Council of India provide early education with an updated curriculum that includes special chapters for such oral care not only in orthodontics but in general dentistry as well as special training programs during UG and PG with sufficient facilities to spark their interest and enhance the care given to patients with SHCN. For the UG and PG to provide care with diligence and confidence in their practice, they should also receive training regarding the differences in literature and deviations in practicality when treating patients with SHCN.

6. Source of Funding

None.

7. Conflict of Interest

None.

References

1. Khattri S, Bhardwaj M. Orthodontic management in medically compromised patients. *Int J Dent Clin*. 2012;4(3):26–9.
2. Perrott GS, Holland DF. Population trends and problems of public health. *Milbank Q*. 2005;83(4):569–608.
3. Dalal A, Singh A, Singh J. Orthodontics & Medically Compromised Patients. *Ind J Dent Sci*. 2012;3(3):129.
4. Alshammery D, Eid ALH, Ajaji ALN, Kazim S, Ayed ALL. Level of awareness towards orthodontic treatment for medically compromised patients among dental practitioners in Saudi Arabia. *J Dent Health Oral Disord Ther*. 2016;5(2):218–22.
5. Jena A, Duggal R, Mathur V, Parkash H. Orthodontic care for medically compromised patients. *J Indian Orthod Soc*. 2004;38(3):160–71.
6. Lubarsch MB, Hohoff A, Wiechmann D, Stamm T. Orthodontic treatment of children/adolescents with special health care needs: an analysis of treatment length and clinical outcome. *BMC Oral Health*. 2014;14:67.
7. Maheshwari S, Verma SK, Ansar J, Prabhat KC. Orthodontic care of medically compromised patients. *Ind J Oral Sci*. 2012;3(3):129.
8. Thompson S, Davies J, Allen M, Br Dent J 2007 Nov 24;203(10):E21; discussion 590-1 d. Cardiac risk factors for dental procedures: knowledge among dental practitioners in Wales. *Br Dent J* . 2007;203(10):21.
9. Schwenk DM, Stoeckel DC, Rieken SE. Survey of special patient care programs at US and Canadian dental schools. *J Dent Educ*. 2007;71(9):1153–9.
10. Parry JA, Khan FA. Provision of dental care for medically compromised children in the UK by general dental practitioners. *Int J Paediatr Dent*. 2000;10(4):322–7.
11. Gill Y, Scully C. Attitudes and awareness of final-year predoctoral dental and medical students to medical problems in dentistry. *J Dent Educ* . 2006;70(9):991–5.
12. Oredugba FA, Sanu OO. Knowledge and behavior of Nigerian dentists concerning the treatment of children with special needs. *BMC oral health*. 2006;6(9):1–8.
13. Gaballah K, Bahmani AA, Salami A, Hassan NAM. The Knowledge and Attitude of Practicing Dentists towards the Antibiotic Prescription: A Regional Study. *Br J Pharm Res*. 2014;4(16):2006–18.
14. Ahmad MS, Abuzar MA, Razak IA, Rahman SA, Borromeo GL. Oral health education for medical students: Malaysian and Australian students' perceptions of educational experience and needs. *J Dent Educ* . 2017;81(9):1068–76.
15. Muniya M, Bagga DK, Agrawal P, Nanda M, Singh A, Priya K. A Study On Orthodontics For Medically Compromised Patients. NVEO-NATURAL VOLATILES & ESSENTIAL OILS Journall NVEO. *(NVEO) Nat Volaties & Essent oils J* . 2021;8(4):5818–45.

Author's biography

Mithil Nimesh Shah, Post Graduate Student https://orcid.org/0009-0001-3550-3068

Tushar Gambhirrao Patil, HOD

Avinash Ramkrushna Mahamuni, Professor

Rajlaxmi Rajajram Rai, Reader

Supriya Shankar Vyavahare, HOD

Cite this article: Shah MN, Patil TG, Mahamuni AR, Rai RR, Vyavahare SS. Perception of orthodontic care for medically compromised patients. *IP Indian J Orthod Dentofacial Res* 2024;10(4):295-301.