

Comprehensive Orthodontic Care for Children that are Born with Orofacial Clefts



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PURPOSE

To determine what level of cleft care orthodontists in the U.S. provide to orofacial cleft patients.

INTRODUCTION

Children born with orofacial clefts require specialized care that involves a team approach to provide patient care. The prevalence of cleft lip and cleft palate in the United States is about 1 in every 1,600 babies. The prevalence of individuals born with cleft lip without cleft palate is 1 in every 2,800 babies, while babies born with cleft palate is about 1 in every 1,700 babies in the United States. Associated issues involve feeding difficulties and speech issues.

One early treatment option used for babies born with clefts involves the nasoalveolar molding (NAM) device. The NAM is fabricated within the first month of life as presurgical therapy to reduce the oronasal deformity.

Access to care presents a burden for individuals in rural areas due to the multifactorial approach of specialized medical and dental personnel needed to treat individuals with orofacial clefts as they develop.

REFERENCES

- (1) Center for Disease Control. *Cleft Lip / Cleft Palate*. 2022 https://www.cdc.gov/ncbddd/birthdefects/cleftlip.html.
- (2) Nasoalveolar Molding. 2015 https://www.chop.edu/treatments/nasoalveolar-molding>.

MATERIALS AND METHODS

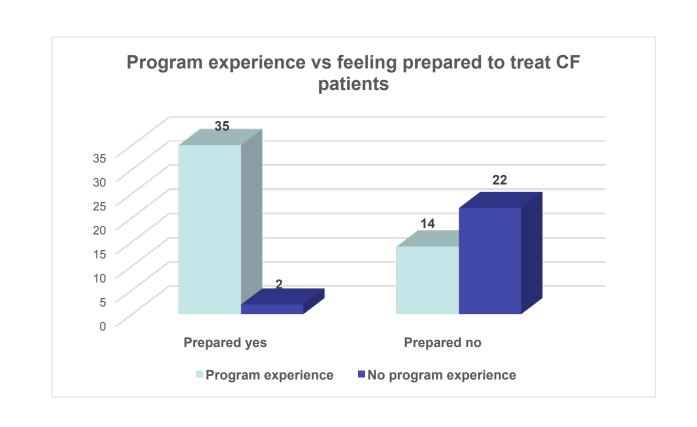
A 12-question survey was emailed to 2054 practicing orthodontists by the American Academy of Orthodontists Partners in Research. Two email blasts were sent. The survey included demographic information, including insurances accepted, practice location and questions regarding cleft care and referrals. This was exempt by TAMU IRB as "not human subjects research." The survey was submitted and approved by the American Academy of Orthodontics Partners in Research Program for distribution to its membership.

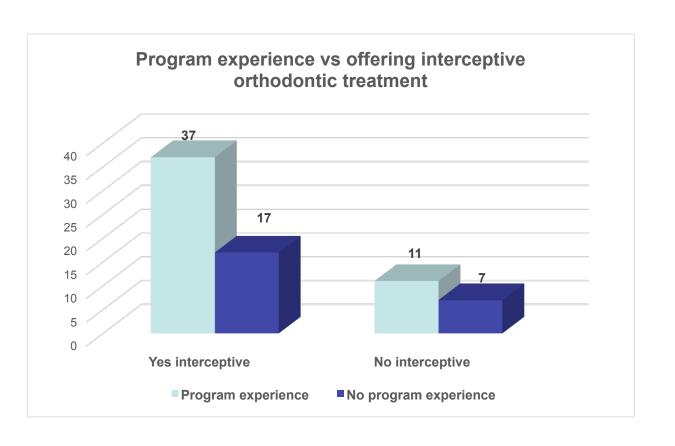
Data collection included:

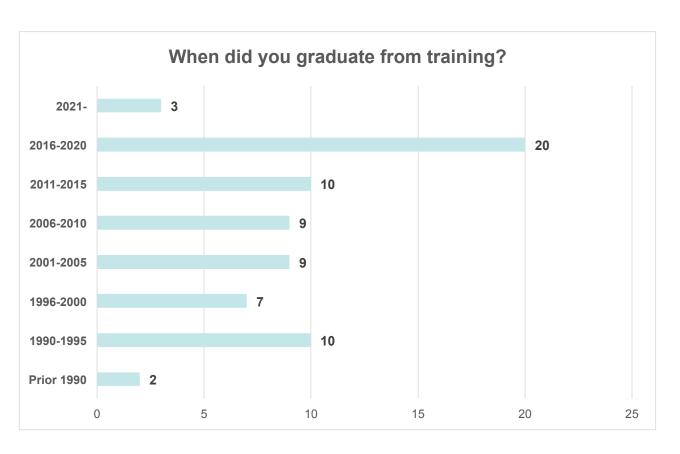
- 1. Location practicing
- 2. Graduation year
- 3. If the doctor's residency program has a craniofacial rotation
- 4. Cleft/craniofacial experience at residency program
- 5. Length of craniofacial rotation
- **6.Preparedness treating craniofacial patients**
- 7. If the doctor currently fabricates and treats patients with use of NAM
- 8. If the doctor participates in interceptive ortho
- 9. Treat craniofacial patients in office for phase II ortho
- 10. Accept Medicaid as a payor source
- 11. If doctor does not treat craniofacial patients, would they be willing to if they had a guide from a craniofacial team orthodontist
- 12. If doctor does not treat craniofacial patients, where do they recommend patients receive care

RESULTS

- Survey delivered to 2,054 members
- As of 8/25/22, 57 people completed the survey (2.7% response rate).
- An additional 16 surveys were received after AAO members posted the survey to their Facebook page.
- 49/73 had craniofacial experience in their residency program
- 40/73 had an official craniofacial rotation
- 34/47 orthodontists reported they are willing to treat craniofacial patients with help or advice of a CF team orthodontist







Results, cont'd.

Data analysis revealed that the majority of residency programs had some type of craniofacial experience (49 of 73 responses). However, only 54% of individuals mentioned that their program had an official craniofacial rotation (40 of 73 responses). The experiences ranged between 1 week rotation to treating several patients in clinic. Those in hospital-based orthodontic residency programs tended to treat more craniofacial patients and be more involved with the craniofacial team.

DISCUSSION

Approximately 72% (34 of 47 responses) reported they are willing to treat craniofacial patients with help or advice of a craniofacial team orthodontist. Of the 47 responses, 12 said maybe and only 1 said no. This could emphasize a lack of care access for individuals as there may not be a craniofacial team in certain areas; it does however, indicate that there are practitioners still willing to learn to provide this necessary and time-sensitive care. Even those respondents who had program experience indicated they did not feel prepared to treat these patients in private practice.

A majority (70%) of individuals reported they do not accept Medicaid as payor source. This also contributes to lack of care access as out of pocket costs for cleft care are substantial.

While this survey instrument was vetted by craniofacial orthodontists and the AAO Partners in Research, the response rate was very poor. An increased response rate might have yielded significance. Survey fatigue is a large drawback to this study. A possible way to increase responses from AAO is through surveying members at their meetings.

CONCLUSIONS

- 1. There are multiple opportunities for postgraduate training that AAO should consider.
- 2. There is a lack of care access for craniofacial orthodontics for individuals on Medicaid.