

# Association Between Malocclusion and OHRQoL in the Mixed Dentition

Swathi Narayan<sup>1</sup>, Veerasathpurush Allareddy<sup>2</sup>, David Avenetti<sup>1</sup>, Brittaney Hill<sup>1</sup>, Bhakti Desai<sup>1</sup>

<sup>1</sup> Department of Pediatric Dentistry and <sup>2</sup> Department of Orthodontics, UIC College of Dentistry, Chicago, IL

## Objectives

Interceptive orthodontic treatment in the mixed dentition may be recommended to improve function and reduce the complexity of future comprehensive orthodontic treatment.

There is limited research assessing the impact of malocclusion from the patient perspective. Oral Health-Related Quality of Life (OHRQoL) is a validated means of measuring subjective perceptions of oral health, functional well-being, emotional well-being, satisfaction with care, and sense of self.

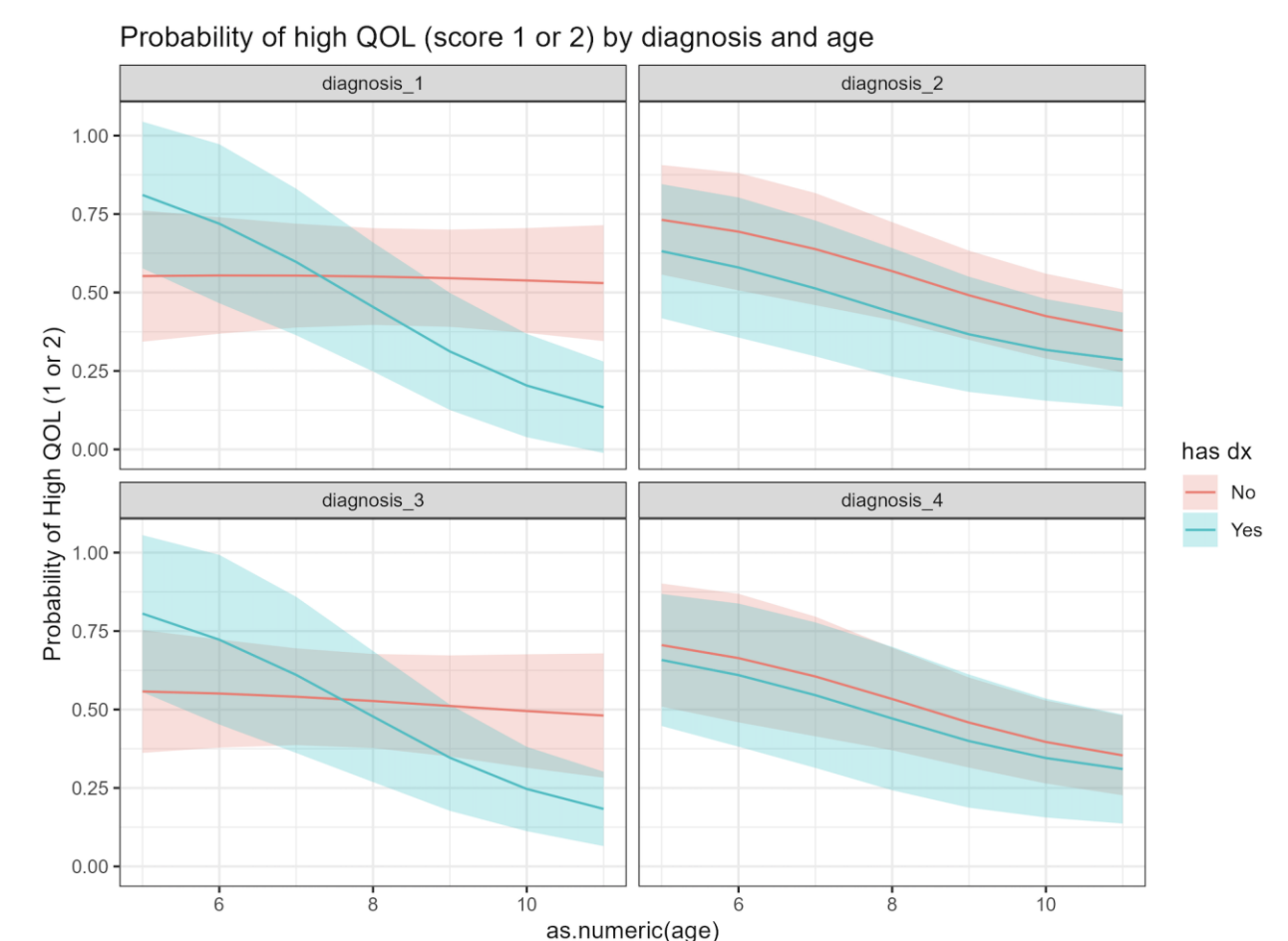
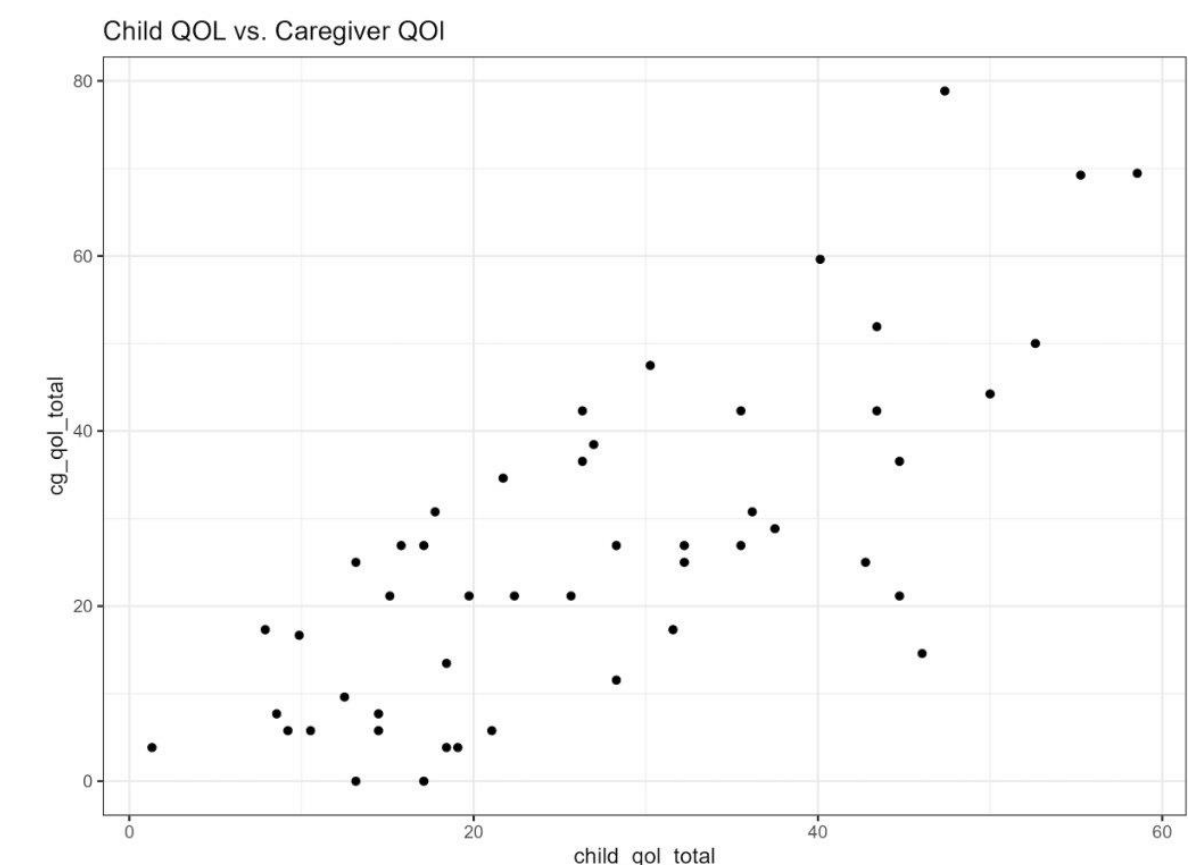
Most studies do not assess caregiver perceptions of malocclusion as it presents in their children. This prospective, descriptive **cross-sectional study** aims to (1) describe the OHRQoL as it relates to malocclusion in the mixed dentition and (2) compare malocclusion impact on children and their caregivers.

## Methods

- Inclusion Criteria: ASA 1 or 2 (medically healthy) children aged 6-11; no prior orthodontic treatment, and the ability to read and write English. Exclusion Criteria: Patients with craniofacial anomalies. IRB Protocol 2024-0524.
- Participants were recruited during their initial and periodic examinations based on the presence of malocclusion in the mixed dentition phase.
- The COHIP survey was administered to the child.
- The ECHOIS was given to the Caregiver.
- Analysis was limited to records with complete QOL information available.

## Results

- Most children felt **positive about their current health and self worth**, (average scores 1.4 (SD = 0.8) and 1.6 (SD = 0.8), respectively) **but did report feeling anxious** about dental treatment due fear of pain and discomfort (average score of 3.8, SD = 1.2).
- The **“other”** diagnosis category had the **highest reported impact on OHRQOL** score while **posterior crossbite** had the lowest impact on OHRQOL.
- Overall, this study shows **no significant difference** between malocclusion type and **OHRQOL scores for children and their caregivers**
- Among children with Posterior Crossbite and those with crowding, older children have a higher odds of lower QoL than younger children
- Black children have higher odds of lower OHRQOL than White children.



## Conclusions

- **OHRQoL is independent** of the different types of **malocclusions** found in the mixed dentition phase.
- The **QoL** of both child and caregiver are **not significantly** impacted by the different malocclusions presented prior to receiving interceptive intervention
- **Self- esteem** plays an important role in the development of a child and malocclusions may lower a child's confidence.

## Acknowledgements and References

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