



Background

- Children with **severe early childhood caries (S-ECC)** often require dental treatment under general anesthesia (GA) due to behavioral and developmental limitations.
- Access to hospital operating rooms for pediatric dental care has become increasingly limited**, especially since the COVID-19 pandemic, leading to longer wait times. These delays can negatively impact a child's oral health and daily functioning, while also placing emotional and financial strain on their family.
- The **Early Childhood Oral Health Impact Scale (ECOHIS)** is a validated questionnaire assessing the oral health-related quality of life of children under 6 and their families.
- While ECOHIS is widely used to evaluate treatment outcomes and guide public health priorities, its role in understanding the **impact of prolonged wait times for dental rehabilitation**, particularly post-pandemic, remains limited.

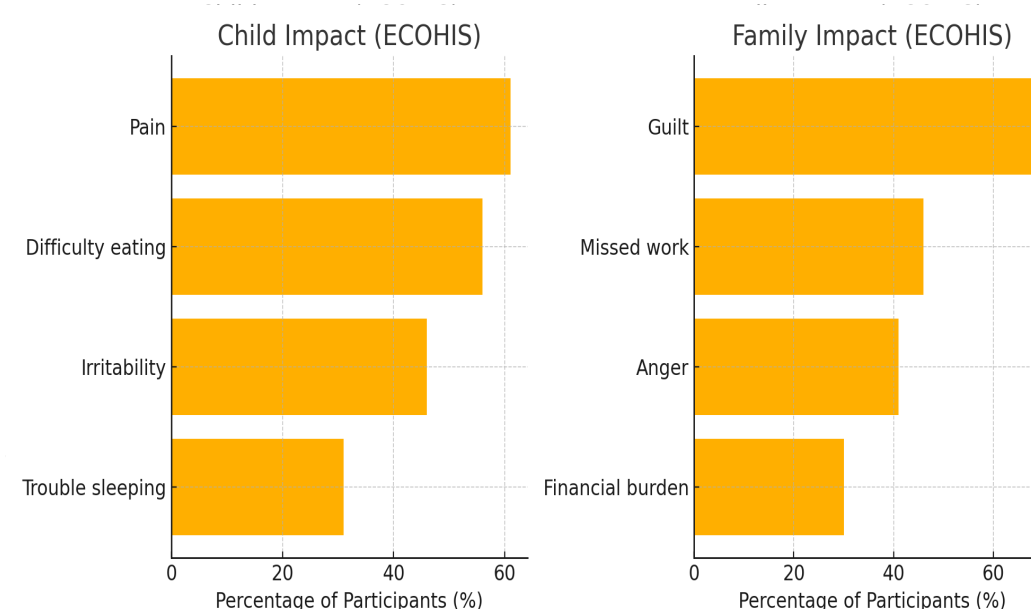
Purpose

- Assess the oral health-related quality of life (OHRQL) of families awaiting pediatric dental rehabilitation under general anesthesia using the ECOHIS questionnaire.
- Determine whether longer wait times are associated with higher ECOHIS scores, indicating a greater negative impact on both the child and their family.

Methods

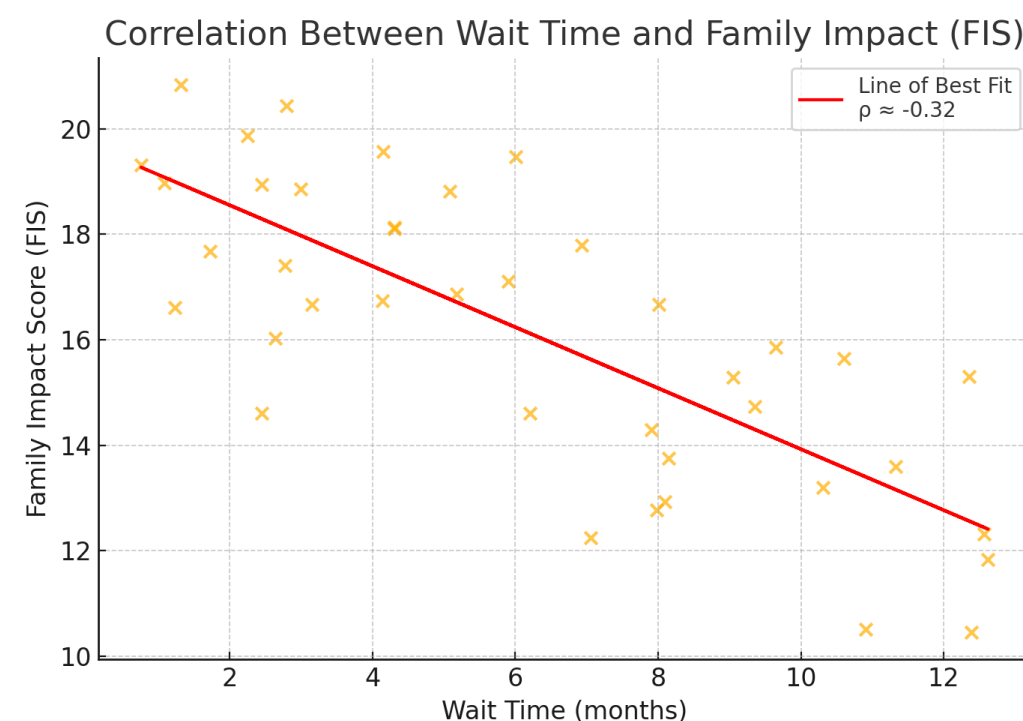
- Caregivers of children under 72 months of age undergoing dental rehabilitation under GA at Yale New Haven Hospital were invited to complete the ECOHIS questionnaire.
- ECOHIS assesses OHRQL through two domains:
 - Child Impact Section (CIS):** symptoms and functional limitations
 - Family Impact Section (FIS):** caregiver distress and family burdens
- Each item was scored from 0 (never) to 4 (very often), with total scores ranging from 0 to 52; higher scores indicate greater negative impact on OHRQL.
- Collected demographic data (age, sex, race, insurance) and wait time for surgery.
- Data analysis included descriptive statistics and bivariate analyses.

Results



- 40 children participated, mean age 4.0 ± 0.80 yrs; 57.5% male, 55% Hispanic/Latino. All had dental insurance; 77.5% government insurance type.
- Average wait time for dental surgery: 8.6 ± 3.74 months (range: 0.5 - 13 months).
- Child-level impacts occurring occasionally or more frequently: pain (61%), difficulty eating (56%), irritability/frustration (46%), trouble sleeping (31%)
- Family-level impacts occurring occasionally or more frequently: guilt (68%), time off work (46%), anger (41%), financial burden (30%)
- Statistically significant weak negative correlation** found between FIS scores and wait time ($p = -0.32$; 95% CI: -0.58 to -0.01 ; $p = 0.04$).
- No significant correlation found between CIS scores ($p = -0.23$; $p = 0.15$) or total ECOHIS scores ($p = -0.25$; $p = 0.11$) and wait time.

Discussion / Conclusion



- Most children experienced **pain and difficulty eating**, while caregivers reported **feelings of guilt**, highlighting the emotional and functional burden of delayed care.
- Significant weak negative correlation was found between Family Impact Section (FIS) scores and wait time, suggesting **families with higher stress may advocate for earlier treatment or be prioritized based on urgency**.
- No significant correlation found between wait time and Child Impact Section (CIS) scores or total ECOHIS scores, possibly due to children adjusting to discomfort or families perceiving their child's condition as manageable despite the delay.
- These findings highlight the potential value of using ECOHIS to understand the impact of surgical wait time on families. Incorporating family-reported burden into scheduling could support more equitable prioritization and timely care for those most impacted by delays.
- Further research is needed to explore how ECOHIS data could inform triage systems and policy development.