

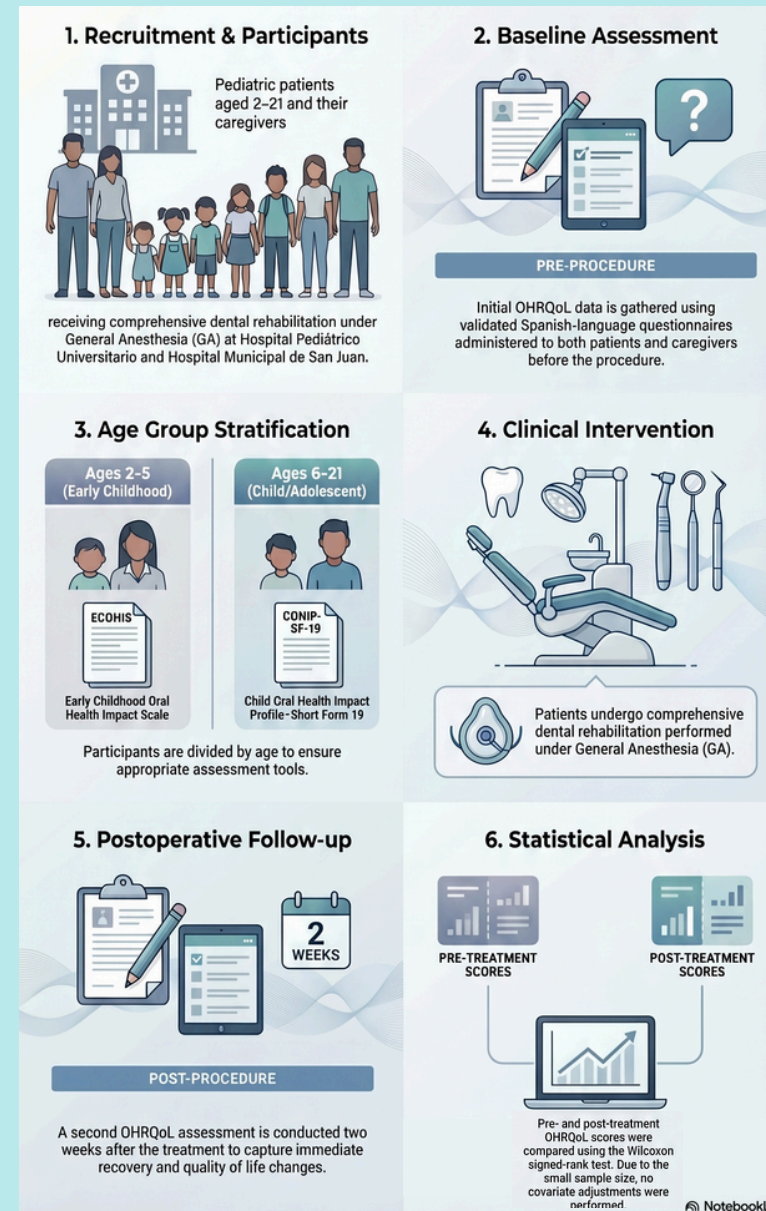
Background

Oral health is a key component of overall well-being in pediatric patients, as conditions such as Early Childhood Caries (ECC) and Severe ECC (S-ECC) can negatively impact children’s physical, psychological, and social development, causing pain, difficulty eating, and reduced daily functioning. These conditions also affect families by increasing emotional and financial burden. Oral health-related quality of life (OHRQoL) has therefore become an important outcome measure in pediatric dentistry. Validated instruments such as the Early Childhood Oral Health Impact Scale (ECOHIS) for younger children and the Child Oral Health Impact Profile–Short Form 19 (COHIP-SF 19) for older children allow for comprehensive assessment across multiple domains. Pediatric patients requiring dental treatment under general anesthesia (GA) often present with extensive disease or limited cooperation, and comprehensive oral rehabilitation has been shown to improve OHRQoL; however, further research is needed to evaluate these outcomes in specific populations. In Puerto Rico, pediatric patients requiring GA often present with severe dental disease affecting quality of life. However, data evaluating changes in OHRQoL among pediatric patients in Puerto Rico following treatment under GA are limited.

Study Aims

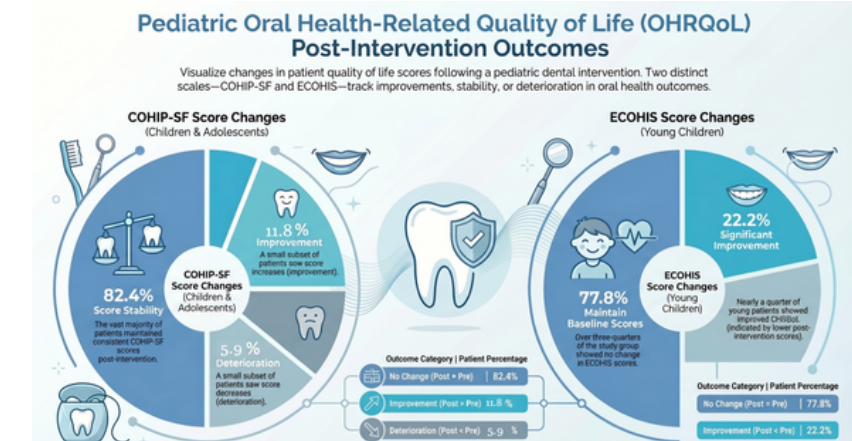
Assess changes in OHRQoL following comprehensive dental rehabilitation under GA.

Methods



Results

A total of 18 participants completed the ECOHIS assessment and 17 completed the COHIP-SF. For ECOHIS, the mean total score slightly decreased from 11.72 (SD = 14.15; IQR = 25 [Q1–Q3]) preoperatively to 11.11 (SD = 13.22; IQR = 25 [Q1–Q3]) postoperatively, while the median remained at 0 for both time points. Score distribution analysis showed that 22.2% of participants experienced improvement (post < pre), while 77.8% remained unchanged, with no cases of worsening. However, this change was not statistically significant ($p > .05$). For COHIP-SF, the mean score showed minimal change from 21.12 (SD = 21.37; IQR = 28 [Q1–Q3]) preoperatively to 21.00 (SD = 21.06; IQR = 28 [Q1–Q3]) postoperatively, with a stable median of 25 at both time points. Most participants (82.4%) demonstrated no change, while 11.8% showed improvement (post < pre) and 5.9% showed worsening. This difference was not statistically significant ($p = 1.00$), suggesting stability in OHRQoL scores, potentially influenced by the small sample size and short follow-up duration. Overall, results indicate that the majority of participants remained stable following treatment, with small proportions showing improvement, but without statistically significant changes in oral health-related quality of life.



Conclusion

Pediatric dental rehabilitation under general anesthesia demonstrates a positive trend toward improved oral health-related quality of life. Larger studies are needed to confirm statistical significance and further evaluate long-term impact.

Reference



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