<u>Title</u>: Comparative Efficacy of Evidence-Based Mouthwash Versus Chlorhexidine in Pediatric Oral Hygiene: A Systematic Review

Abstract:

<u>**Objective**</u>: This systematic review aims to evaluate the comparative efficacy of evidence-based mouthwash versus chlorhexidine in pediatric oral hygiene.

<u>Methods</u>: A comprehensive search was conducted across major databases for randomized controlled trials comparing evidence-based mouthwash with chlorhexidine in pediatric populations. Studies were assessed for methodological quality and outcomes including plaque and gingivitis reduction, adverse effects, and patient acceptability.

<u>Results</u>: A total of X studies met the inclusion criteria, comprising X pediatric participants. Findings suggest that evidence-based mouthwash demonstrates comparable efficacy to chlorhexidine in reducing plaque and gingivitis among pediatric patients. Moreover, evidence-based mouthwash shows potential advantages in terms of reduced adverse effects, such as staining of teeth and altered taste sensation, commonly associated with chlorhexidine use. Additionally, patient acceptability and compliance appear to be higher with evidence-based mouthwash, attributed to its milder taste and absence of adverse effects.

<u>Conclusion:</u> Evidence-based mouthwash emerges as a promising alternative to chlorhexidine for pediatric oral hygiene, demonstrating similar efficacy with potentially fewer adverse effects and improved patient acceptability. Further large-scale randomized controlled trials are warranted to confirm these findings and establish evidence-based mouthwash as a preferred option for pediatric oral care.