

Periodontal screening indices in pediatric population

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Objectives: Periodontal disease is a chronic inflammatory disease triggered by bacterial microorganisms that leads to destruction of the supporting structures around the teeth. Prevalence of gingivitis among children in the U.S. was reported to be 82.1% and prevalence of periodontitis among children in the U.S. has been reported to be 0.6 – 2.75%.

The best approach in managing periodontal diseases in children is prevention, followed by early disease detection and treatment. The British Society of Periodontology and the British Society of Pediatric Dentistry proposed the utilization of the Simplified Basic Periodontal Examination (BPE) in patients under the age of 18. The American Academy of Periodontology and the American Academy of Pediatric Dentistry have both advocated for periodontal assessment in routine dental exam of children.

A recent survey of dental schools in the U.S. indicated that majority of the respondents believed that an official periodontal assessment guideline for pediatric patients can improve student learning, teaching, and quality of patient care. This review aims to compile an inventory of periodontal indices and assess their applications in the pediatric population.

Methods: Search was conducted in PubMed database, utilizing keywords: "periodontal screening method," "periodontal index," and "periodontal indices". An inventory of periodontal screening indices was formulated. Application of each periodontal index in children was then searched in PubMed utilizing keywords such as "BPE in children" and "Periodontal Screening and Recording Index (PSRI) in children."

Results: Fifteen periodontal indices were identified and reviewed. The most reported periodontal indices utilized in children were PSRI, Community Periodontal Index for Treatment Needs (CPITN), BPE, and its simplified version.

Conclusion: Periodontal screening index can aid clinicians in the detection of periodontal disease in children. Suitable screening method need to be reliable while efficient for the practitioners and tolerable for children. PSRI, CPITN, BPE, are viable periodontal screening methods for children.

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