

## Comparison of oral & dental Health's Indices in 3-12 Years old asthmatic and healthy children in Kurdistan-Iran

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### Abstract

**Aim:** Asthma is one of the most common respiratory disorders in children and adolescents. The aim of this study was to evaluate the oral health status of children with asthma compared to healthy children in Kurdistan, Iran.

**Materials and Methods:** In this case-control study, 96 healthy children and 96 children with asthma aged 3-12 years were referred to the Asthma and Allergy Clinic with a history of at least one year of spray use in 2020-2021; based on easy sampling; were chosen. After obtaining parental consent, clinical examination was done to evaluate dental caries with DMFT and dmft indices. The OHI-S index was used to assess oral health status and the CPITN index was used to assess periodontal treatment needs in both groups. The demographic information of the samples was recorded in a checklist. Data were collected using SPSS software (version 22) using Mann-Whitney, Kruskal-Wallis and Chi-square statistical analyzes.

**Results:** Children with asthma had a higher DMFT index than healthy children ( $P < 0.005$ ). While in dmft index with control of all variables, no significant difference was observed between the two groups ( $P < 0.005$ ). The results show that asthmatic children have higher plaque index (OHI-S) and periodontal tissue treatment needs (CPITN) compared to healthy children, which were statistically significant with the control of most variables ( $P < 0.005$ ).

**Conclusion:** The effects of asthma on oral health, along with other side effects, can be effective in increasing tooth decay and gingivitis. This can be concluded that the oral health of these patients are not among the treatment priorities of these patients; therefore, programs are recommended to increase patients awareness and encourage them to take care of their oral health.

**Key words :** Asthma, Dental Caries, DMF Index, Dental plaque

Index, Periodontal Index, Community Periodontal Index of Treatment Needs

### References:

1. Global Initiative for Asthma (GINA). Global strategy for asthma management and prevention . [www.ginasthma.org](http://www.ginasthma.org) ;2016.
2. Dougherty RH, Fahy JV. Acute exacerbations of asthma: Epidemiology, biology and the exacerbation-prone phenotype. *Clin Exp Allergy*. 2009;39:193–202
3. Singh, Charu. 2020. "ACTA SCIENTIFIC DENTAL SCIENCES (ISSN: 2581-4893) Effect of Inhaled Anti-Asthmatic Medication on Teeth." <https://doi.org/10.31080/ASDS.2020.04.effect-of-inhaled-anti-asthmatic-medication-on-teeth>.
4. Sudhir K, Namita K, Rishi T, M M A F, Amit Kh, V N V S. Evaluation of oral health of 6 to 10-year-old asthmatic children receiving bronchodilator through inhaler. *Indian Journal of Dental Research*. 2019 Sep; 30(5): 670-677
5. Hassanpour K, Tehrani H, Goudarzi M, Beihagi S, Ebrahimi M, Amiri P. Comparison of the frequency of dental caries in asthmatic children under treatment with inhaled corticosteroids and healthy children in Sabzevar in 2017-2018. *Electron J Gen Med* 2019;16(2):119-24

### Biography

Avin batmani has studied dentistry in Kurdistan University of medical sciences- Faculty of dentistry . she got her degree in Doctor of Dental Surgery (DDS) in Oct 2021 and her thesis subject was Comparison of oral & dental Health's Indices in 3-12 Years old asthmatic and healthy children in Kurdistan-Iran. The abstract above is a short brief about her thesis during 2020-2021 in Kurdistan-Iran.

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