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Asthma and Oral Health (World Asthma Day Guest Comment)

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Respiratory diseases are one of the leading causes of mortality. Asthma is a known medical condition which is very commonly encountered by dental surgeon/physician in clinical settings. It is one of the growing public health concern that affects over 300 million people across the globe. Global, researchers estimate that an additional 100 million people may be diagnosed with asthma by 2025.¹ According to the Global burden of Disease Studies in 2015, Chronic Obstructive Pulmonary Diseases (COPD) and asthma ranked among the top 20 conditions causing disability globally and were ranked 8th and 23rd respectively, as causes of disease burden when measured by disability-adjusted life years.² It is believed to be prevalent in prepubertal age group affecting both the genders equally. About 18% of the world's population lives in India, and about 1/10th of the total asthmatics in the world live in India.³

Asthma is a chronic inflammatory disease characterized by airway hyper-responsiveness and reversible airflow obstruction leading to symptoms such as wheezing, coughing, chest tightness and dyspnoea.⁴ Genetic and environmental factors may also play a major role in etiology of asthma. Therefore, it is important to have proper knowledge about medications used and its effects on oral and dental health. However, a number of studies had been investigated and suggest the impact of the asthmatic medications on oral health.

The oral asthmatic medications contain short acting beta-2 agonists which is responsible to reduce salivary flow. This in turn have many adverse effects on oral health causing increased risk of dental caries⁵, periodontal disease⁶ and dental erosion.⁷ It can also aggravates oral candidiasis due to anti-inflammatory effects of steroids in immunosuppressive patients.

Treatment of such patients has two main objectives: first to control, as well as to reduce the airway inflammation and, the second being an aim to reopen the airways. Drugs achieving the first objective are

termed as “anti-inflammatory agents” and those achieving the second are termed as “bronchodilators”. Medication for asthma usually is categorized into two main categories: i) quick relief medication and ii) long-term control medication. It is to be noted that most asthma drugs are usually inhaled using various forms of inhalers/nebulizers. An important aspect is that patients should be carefully trained in the use of inhalers for these to be effective and should be instructed to use inhalers regularly as prescribed. Inhalers delivering these medicaments may be used up to four times a day. However, management of such medical conditions is of utmost importance. Proper medical history taking and having a sound knowledge of the drug usage and their complications may help the dental surgeon/physician to modify the treatment plan. While treating such patients one should be aware of the medication regime or the use of inhalers which can be given in case of any emergency.

India has a diverse health-care delivery system. Apart from allopathy, alternative forms of medicine treat a large number of asthmatics. It is to be noted that allergen immunotherapy is widely used even against the backdrop of its controversial role in the prevention and treatment of bronchial asthma.

Majority of Indians and especially the poor do not possess health insurance and the exorbitant out-of-pocket costs even for insured persons may act as a barrier in purchasing asthma medications along with language and health literacy barriers may also limit effectiveness of asthma self-management education. A wider penetration of the health insurance schemes with lower out-of-pocket payments may improve access to routine care and adherence to medications for persons with asthma. Introduction of Pradhan Mantri health scheme for poor which give a health cover of upto ₹ 5,00,000/- has also reduced the burden in such class.

The economic burden of asthma can be substantially



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decreased with a focus on preventive care and early treatment. Counselling patients for adherence to medications and avoidance of risk factors which would substantially reduce the burden of disease and its attendant costs.

REFERENCES

- 1) Innes JA, Reid PT. Respiratory diseases. In: Boon NA, Colledge NR, Walker BR, Hunter JA, eds. Davidson's Principles and Practice of Medicine. 20th edn. Churchill Livingstone: Elsevier, 2006:670-8.
- 2) GBD 2015 Mortality and Causes of Death Collaborators. Global, regional, and national life expectancy, all-cause mortality, and cause-specific mortality for 249 causes of death, 1980-2015: A systematic analysis for the global burden of disease study 2015. *Lancet* 2016;388:1459-544.
- 3) Eloit AK, Vanobbergen JN, De Baets F, Martens LC. Oral health and habits in children with asthma related to severity and duration of condition. *Eur J Paediatr Dent* 2004;5:210-5.
- 4) Ehsani S, Moin M, Meighani G, Pourhashemi SJ, Khayatpisheh H, Yarahmadi N. Oral health status in

preschool asthmatic children in Iran. *Iran J Allergy Asthma Immunol* 2013; 12: 254-61.

5) De Almeida Pdel V, Gre'gio AM, Machado MA, de Lima AA, Azevedo LR. Saliva composition and functions: a comprehensive review. *J Contemp Dent Pract* 2008;9:72-806.

6) Steinbacher DM, Glick M. The dental patient with asthma. An update and oral health considerations. *J Am Dent Assoc* 2001; 132:1229-1239.

7) McDerra EJ, Pollard MA, Curzon ME. The dental status of asthmatic British school children. *Pediatr Dent* 1998;20:281-7.

Cite this article as:

Bansal M. Asthma and Oral Health (World Asthma Day Guest Comment). *Int Healthc Res J*. 2019;3(2):48-49. doi: 10.26440/IHRJ/0302.05.521075

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