

Oral health: Why bother?

Saima Asim¹, Syed Muhammad Zulfiqar Hyder Naqvi², Shikoh Naz³

Madam, proper oral care leads to a healthy mouth which positively impacts the overall health of an individual. In the past, systemic implications of oral conditions were thought to be limited to a few systemic illnesses, but recent evidence points out towards a broader role of dental illnesses in systemic diseases.¹ Oral conditions are estimated to affect 3.9 billion people and account for 15 million DALYs globally.² Oral diseases are very common among underprivileged people in both middle and high income countries,³ with our country being no exception. In Pakistan, the limited provision of oral health care and the high level of unmet oral health care needs are well documented. The reported prevalence of dental caries is 50 to 70% while that of oral cancer is among the highest worldwide. Moreover, the dentist to population ratio in Pakistan is 1:10 850 as compared to the WHO recommended level of 1:7500.⁴ Dental disease that are major public health problems globally include caries, periodontal disease, tooth loss, oral mucosal lesions, oropharyngeal cancers, human immunodeficiency virus related oral pathology and oro-dental trauma.³ Dental caries is a main oral health issue in many developed nations, extensively affecting schoolchildren and adults. Globally, most children suffer from gingivitis and adults from periodontal diseases whereas severe periodontitis has been reported in 5-15% population of many countries. Oral cancer is particularly prevalent among men in many countries and its incidence rates in men vary from 1-10 cases per 100,000 individuals. Pertinent literature on oro-dental trauma is very scarce, particularly in developing countries though 5-12% children of age 6-12 years have earlier been reported to be affected.⁵ The etiology of dental illnesses is often multifactorial with both socio-behavioral and environmental factors widely implicated.⁵ Apart from poor living conditions, unhealthy style of living as consuming an unbalanced diet, improper nutrition and inadequate care of oral health, along with lack of oral health services are among the major risk factors of dental

.....
^{1,3}Department of Community Dentistry, Hamdard College of Medicine and Dentistry, Karachi, Pakistan; ²Department of Community Medicine, Baqai Medical University, Karachi, Pakistan.

Correspondence: Saima Asim. e-mail: saimaasim966@gmail.com

diseases.³ Recently, use of electronic cigarettes has also emerged as a threat to oral health. Electronic cigarettes, also known as ENDS (Electronic nicotine delivery system), are available as e-pens, e-cigars, e-hookah and e-pipes. They contain nicotine, propylene glycol, glycerin and a variety of sweet flavours, classified as saccharides, that increases microbial adhesion to enamel. Literature shows that inhaling their aerosols might increase the risk of inflammation and DNA change; moreover, their use may also lead to tooth decay, bad breath, periodontal diseases, bone loss and tooth loss.⁶ The use of e-cigarettes has increased remarkably from 1.5% to 13.4% during 2011 to 2014 among high school students.⁷ As the treatment modalities of oral illnesses are mostly expensive,⁴ focus should be on low cost preventive measures that can be applied to a mass level such as provision of awareness about the importance of maintaining good oral hygiene, promotion of regular and proper brushing and mass fluoridation of water. Moreover, curbing the use of electronic cigarettes in teenagers can be achieved by making any needed legislation and/or implementing existing laws at government level, including targeted awareness material in their curricula at institute level while by promoting more vigilant parent child interactions at household level. The utilization of available knowledge and local experience in oral disease prevention and health promotion to develop implementation strategies remains a prime challenge for policy makers that is worthy of our immediate attention.⁸

Disclaimer: None to declare

Conflict of Interest: None to declare

Funding Sources: None to declare

References

1. Slavkin HC, Baum BJ. Relationship of dental and oral pathology to systemic illness. *J Am Med Assoc* 2000; 284: 1215-7.
2. Marcenes W, Kassebaum NJ, Bernabé E, Flaxman A, Naghavi M, Lopez A, et al. Global Burden of Oral Conditions in 1990-2010: A Systematic Analysis. *J Dent Res* 2013; 92: 592-7.
3. Petersen PE, Bourgeois D, Ogawa H, Estupinan-Day S, Ndiaye C. The global burden of oral diseases and risks to oral health. *Bull World Health Org* 2005; 83: 661-9.

4. Basharat S, Shaikh BT. Primary oral health care: a missing link in public health in Pakistan. *East Mediterr Health J* 2016; 22: 703-6.
5. What is the burden of oral disease? : World Health Organization. [Online] [Cited 2019 February 26]. Available from: URL: https://www.who.int/oral_health/disease_burden/global/en/.
6. National Academies of Sciences, Engineering, and Medicine. Public health consequences of e-cigarettes. *Natl Acad Press*; 2018.
7. Tomar SL, Fox CH, Connolly GN. Electronic cigarettes: The tobacco industry's latest threat to oral health? *J Am Dent Assoc* 2015; 146: 651-3.
8. Petersen PE. Global policy for improvement of oral health in the 21st century--implications to oral health research of World Health Assembly 2007, World Health Organization. *Community Dent Oral Epidemiol* 2009; 37: 1-8.

<https://doi.org/10.5455/JPMA.34415>
