

Edentulism and Oral Health in Elderly in India

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We have read the excellent article by Dr Zubair and Kumar in your journal about edentulism and **Dantha** Bhagya Scheme launched by Government of Karnataka to provide dentures to people below poverty line (BPL).¹ These services are made available in public and private dental colleges of Karnataka. Due to the lack of awareness among people about oral hygiene and oral health, loss of teeth is common in people due to poor socio-economic conditions and increase in cost of dental treatment. Population of aged people is increasing all over the world.

Malnutrition is common in people below BPL. This will also cause dental caries and periodontal disease in poor elderly people. Poor oral health is associated with malnutrition.² Vitamin D deficiency is associated with higher prevalence of dental caries, periodontitis and gingival inflammation.³ Vitamin D deficiency is more prevalent in India and other developing countries⁴. Dehydration is common in the elderly people and reduced daily intake of water can cause dental caries and periodontitis as observed in a recent large Korean study.⁵ Dehydrated teeth enamel are more prone to damage and greater wear.⁶ Dehydration damages the roots of teeth and causes cracking.⁷ Dehydration often causes spontaneous cracks in dentin.⁷ Olive oil can be of help in reducing water evaporation and also to form a protective barrier over the oral tissues.⁸ Dehydration is common in elderly people due to decrease in thirst sensation. Daily intake of adequate water helps to promote oral health.⁵

REFERENCES

1. Zubair SM, Kumar S. Dantha Bhagya Scheme-A Way Forward for People with Edentulism in India. *Natl J Community Med* 2022;13(5):346-348. DOI: 10.55489/njcm.13052022686
2. Azzolino, D.; Passarelli, P.C.; De Angelis, P.; Piccirillo, G.B.; D'Addona, A.; Cesari, M. Poor Oral Health as a Determinant of Malnutrition and Sarcopenia. *Nutrients* 2019, 11, 2898. <https://doi.org/10.3390/nu11122898>
3. Botelho J, Machado V, Proença L, Delgado AS, Mendes JJ. Vitamin D Deficiency and Oral Health: A Comprehensive Review. *Nutrients*. 2020 May 19;12(5):1471. doi: 10.3390/nu12051471. PMID: 32438644; PMCID: PMC7285165.
4. Aparna P, Muthathal S, Nongkynrih B, Gupta SK. Vitamin D deficiency in India. *J Family Med Prim Care*. 2018 Mar-Apr;7(2):324-330. doi: 10.4103/jfmpc.jfmpc_78_18. PMID: 30090772; PMCID: PMC6060930
5. Kim YR. Analysis of the Effect of Daily Water Intake on Oral Health: Result from Seven Waves of a Population-Based Panel Study
6. Hua LC, Wang WY, Swain MV, Zhu CL, Huang HB, Du JK, Zhou ZR. The dehydration effect on mechanical properties of tooth enamel. *J Mech Behav Biomed Mater*. 2019 Jul;95:210-214. doi: 10.1016/j.jmbbm.2019.04.013. Epub 2019 Apr 17. PMID: 31015139.
7. Shemesh H, Lindtner T, Portoles CA, Zaslansky P. Dehydration Induces Cracking in Root Dentin Irrespective of Instrumentation: A Two-dimensional and Three-dimensional Study. *J Endod*. 2018 Jan;44(1):120-125. doi: 10.1016/j.joen.2017.07.025. Epub 2017 Nov 2. PMID: 29079053.
8. Math M.V. Olive Oil and Water - Role in Oral Care. *International Journal of Medical and Clinical Research*, 2013. ISSN: 0976-5530 & E-ISSN: 0976-5549, Volume 4, Issue 1, pp.-258-260.

How to cite this article: Math MV, Math SM. Edentulism and Oral Health in Elderly in India. *Natl J Community Med* 2022;13(8):581. DOI: 10.55489/njcm.13082022245

Financial Support: None declared

Conflict of Interest: None declared

Date of Submission: 07-07-2022

Date of Acceptance: 18-07-2022

Date of Publication: 31-08-2022

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