

# Family Physician - Oral Physician Interplay in Diagnosing Coronary Heart Disease among Adults with the Help of Tooth Loss: The Malaysian Perspective

RAMASAMY CHIDAMBARAM

Dear editor,

The changes in lifestyle have contributed to the growing burden of Coronary Heart Disease (CHD) in Malaysia. One of the hallmarks for primary prevention is interdisciplinary communication. Family Physician (FP) acts as the first line of contact for patients with Cardiovascular Disease (CVD). Oral Physician (OP) also encounters an ample array of CVD patients frequently, thus proving that these patients are not limited only to infective endocarditis, anti-coagulant therapy and CHD [1]. Meanwhile, the role of OP and FP in the diagnosis of CHD condition is debatable as they usually limit themselves to the presented health problems of the patients. But the established studies suggest a positive association between oral and systemic conditions. [1]. Current researchers strongly suggest a link between tooth loss and increased CHD risk in adults. A prospective study on the incidence of tooth loss in 45-69 years old individuals found that the risk of CHD increases by 16% in those who lost two or more teeth, as compared to those who did not lose any teeth, over a period of eight years [2].

In Malaysian perspective, CHD is the major cause of death since a decade and the latest WHO data suggest that the mortality rates have reached 29,363 or 23.10% of total deaths [3]. Meanwhile, the National Oral Health Survey reports (2000) suggest that tooth mortality is also a problem among adults of 35-44 age group having only 20 functional teeth [4]. Recent annual reports (2016) express that only 40.3% of the middle-aged adults had 20 or more teeth [5]. This is far from the targeted goal of 60% in the National Oral Health Plan 2011-2020. Though significant meta-analytical study interpreting the CHD-tooth loss is not available in Malaysian population, it does not dilute the relevance of the current discussion. Considering the proportionate increase of CHD mortality and tooth loss in adults, the authors believe new investigations pave the way to a potential strategy for the FPs and OPs physicians to combat CHD at primary level and reduce

the number of missed opportunities'. An integrated approach is essential in routine practice and any family history of CHD must be noted along with other risk factors for CHD like tobacco, unhealthy diet, obesity, physical inactivity and alcohol.

On a positive note, the Ministry of Health has interest in increasing public health efforts to address the risk factors and one such is revision of clinical practice guidelines with a title that is now evolved from stable angina (2010) to that of stable CAD (2018) [6]. New policy changes include implementation of anti-obesity law before 2020 and earlier screening for general population [6]. Irrespective of the honest efforts, the involved expenses proportionally decline nation's economy. Along with the new regulations in policy and good FP-OP relationship, high-risk CHD patients, particularly those requiring urgent attention, can be referred to medical specialists. The authors believe the pro-active role of both the FP and OP could reduce the prevalence and nation's economic burden by diagnosing a suspected CHD patient with the help of tooth loss.

## REFERENCES

- [1] Ramasamy C. Cardiologist-Dentist interaction in the dental management of immunocompromised cardiac patient. *J Coll Physicians Surg Pak*. 2017;27:261.
- [2] Yoriko H, Dianjanyi S, Eric BR, JoAnn EM, Kaumudi JJ, Lu Qi. Changes in dental health and coronary heart disease risk: two prospective cohort studies in men and women. *Circulation*. 2018;137:AP219.
- [3] Abdullah WMSW, Yusoff YS, Nurlida Basir, Yusuf MM. Mortality rates due to coronary heart disease by specific sex and age groups among Malaysians. *Proceedings of the World Congress on Engineering and Computer Science [Internet]; 2017 Oct 25-27; San Francisco, USA*. p. 1-6. Available from: [http://www.iaeng.org/publication/WCECS2017/WCECS2017\\_pp736-741.pdf](http://www.iaeng.org/publication/WCECS2017/WCECS2017_pp736-741.pdf).
- [4] National oral health plan for Malaysia 2011-2020. Oral health division, Ministry of Health (Malaysia); 2011 Feb. 39p. Report No. OH/K/GIG/7.2011(BK).
- [5] Annual report 2016. Oral health programme. Malaysia: Ministry of Health, (Malaysia); 2018 August. 128 p. Report No.: MOH/K/GIG/.
- [6] Clinical practice guidelines. Stable coronary heart disease. 2<sup>nd</sup> edition. Malaysia: National Heart Association, (Malaysia); 2018. 126p. MOH/P/PAK/392.18(GU).

### PARTICULARS OF CONTRIBUTORS:

1. Senior Lecturer, Department of Prosthodontics, AIMST University, Bedong, Kedah, Malaysia.

### NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Ramasamy Chidambaram,  
Senior Lecturer, Department of Prosthodontics, Faculty of Dentistry, AIMST University,  
Jalan Bedong-Semeling-08100, Kedah, Malaysia.  
E-mail: dr.ramasamyc@gmail.com

**FINANCIAL OR OTHER COMPETING INTERESTS:** None.

Date of Submission: **Nov 24, 2018**

Date of Peer Review: **Jan 09, 2019**

Date of Acceptance: **Jan 23, 2019**

Date of Publishing: **Apr 01, 2019**