

Oral health is crucial among people with dementia

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Dear Editor,

It is expected that the number of people with dementia will continue to rise as the number of older adults increases globally and in Malaysia. Dementia affected approximately 57 million people worldwide in 2019, and it is estimated that this will increase to 150 million people in 2050.¹ Malaysia has the same trend of population ageing, with a 0.5% increase of those aged 60 years and above from the year 2020 (3.5 million; 10.7%) to 2021 (3.6 million; 11.2%). The Department of Statistics Malaysia reported that 7.2% population were aged 65 years and over in 2020 and will increase to approximately 15% by 2040. The dental annual report 2019, reported a 1.3% increase in the number of people retaining natural teeth more than 20 among the older adults over 2 years period (2018–2019). Thus, it is likely that there is a potential for those who live with dementia will retain their natural teeth.

Many studies have reported poor oral hygiene among individuals with dementia compared to individuals without dementia. Good oral health is crucial to prevent pain and infections, as well as to ensure balanced diet among this vulnerable people. The oral health conditions deteriorate as the individual's clinical condition is associated with the progression of their dementia. As the dementia conditions progresses in severity, the dependency level increases, requiring more intensive oral hygiene care and support. Basic oral hygiene care such as toothbrushing twice daily may no longer be appropriate. The prevalence of tooth decay, missing and filled teeth, soft tissue lesions, and periodontal disease are higher in individuals with dementia than in individuals who do not have a diagnosis of dementia. Despite the poor oral health conditions reported among people diagnosed with dementia in many studies, there is still limited research on the importance of good oral health and oral health intervention studies aiming to improve their oral health conditions and quality of life. However, a few intervention studies, such as caregivers' education and oral health care, have shown improvement in the quality of life and oral health conditions among those diagnosed with dementia. Hence, more studies on insight of oral health awareness and knowledge for people diagnosed with dementia and their caregivers are warranted.

Poor oral health conditions, mainly periodontal disease, have been shown to be associated with the risk of developing or progressing of a systemic disease such as cardiovascular disease, cerebrovascular disease, and pulmonary disease.

Despite this existing relationship, recent evidence-based studies have shown that periodontal disease may significantly impact cognitive function and increase the risk of developing dementia.^{2,3} It has been suggested that the bacterial load and the inflammatory markers that link to periodontal disease can intensify inflammation in the central nervous system, resulting in increasing the risk of dementia. However, there is still lacking evidence in this area. Nevertheless, few studies have shown a reduction in periodontal prevalence may lower the number of people with dementia. A longitudinal study of ten years in Taiwan concluded that those who had periodontal treatment and dental prophylaxis were at a lower risk of developing dementia than those who had not received any periodontal treatment. The same finding was also reported in another 10 years follow-up study in Korea; there was an increased risk of developing dementia (aHR=1.06; 95% CI=1.01–1.11) and Alzheimer's disease (aHR=1.05; 95% CI=1.00–1.11) among those diagnosed with chronic periodontitis compared with subjects who did not have chronic periodontitis. Although high heterogeneity and different study types, periodontal diseases have been suggested as a potentially modifiable risk factor for dementia. Thus, reducing or preventing periodontal diseases related to dementia through timely intervention, enhanced screening services, and efficient dental treatment and care would help to reduce the impact and risk of developing dementia.

Despite the growing number of ageing population with dementia, there is still a lack of awareness and studies on dementia and oral health-related dementia in Malaysia, particularly identifying prevention and prognostic factors. A scoping review of published studies on the older adult population with dementia in Malaysia from 2010 to 2019 claimed that most studies focus on the identification and management of dementia, mainly on screening tools, methods, and prevalence of dementia in Malaysia. In contrast, as there is no cure for dementia, many studies in developed and other developing countries have embarked on prevention strategies, interventions, and identifying factors in reducing the impact of dementia, including those related to oral health and dementia.

In short, awareness of the importance of good oral health mainly to prevent periodontal disease and tooth loss among people diagnosed with dementia and their caregivers is still lacking. More evidence-based studies are required to determine the best approach for a different type of dementia to ensure they have a better quality of life.

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