

Guest Editorial

Oral Health for Healthy Ageing: A People-centred and Function-focused Approach



Background

Eating, talking, and smiling are essential life functions that are dependent on oral health. Thus, access to oral health care must be recognised as a fundamental and universal human right. Communities and governments have an obligation to maintain a health care system in which all persons can access the education, prevention, treatment, and care necessary to maintain oral health throughout the life course.

In 2016, the FDI approved a new, multifaceted definition of oral health: “the ability to speak, smile, smell, taste, touch, chew, swallow, and convey a range of emotions through facial expressions with confidence and without pain, discomfort, and disease of the craniofacial complex.” The definition noted that oral health is an essential aspect health and well-being that is influenced by individual and collective values. An individual’s perceptions, experiences, and ideas about oral health change throughout life.¹

The global burden of oral disease

Although oral diseases are largely preventable, their continued prevalence represents a major global disease burden: They directly and indirectly cause the deterioration of individual and public health and quality of life. The global burden of oral disease can be assessed (and compared to other diseases) based on its prevalence, its effect on QALYs (quality-adjusted life years) and DALYs (disability-adjusted life years), and the economic burden it poses. Oral diseases affect nearly 3.5 billion people.² The World Health Organization’s (WHO’s) resolution on oral health in 2021 noted that 2.3 billion people have untreated dental caries (tooth decay) in permanent teeth, whilst more than 530 million children have untreated dental caries and 796 million people live with periodontal diseases.² The report also noted that rates of childhood tooth decay are highest amongst vulnerable people and that these conditions are largely preventable. It also detailed the economic burden attributed to poor oral health, namely that oral diseases worldwide account for approximately US \$545 billion in direct and indirect costs, ranking poor oral health amongst the costliest health problems, along with diabetes and cardiovascular diseases.³ Despite these facts, prevention of oral disease is given far less attention and fewer resources than other global health priorities.

One reason for the continued prevalence of oral disease is the persistence of global inequities in oral health, which are perpetuated via barriers (economic, geographical, etc) that impede access to services. The number of oral health professionals and amount of public funding are limited. A multifaceted public health approach is necessary to position oral health as a fundamental element of primary health care and

universal health coverage (UHC). Efforts to promote such an approach have increased in recent years, such as *The Lancet’s* Oral Health Series in 2019 and a number of WHO initiatives: the Resolution of Oral Health in 2021, the Global Oral Health Strategy in 2022, and the Global Oral Health Action Plan scheduled for 2023.^{4–7} Unfortunately, however, throughout most of the world, even in most high-income countries, barriers to preventive dental and oral care for older persons persist.^{8,9}

Oral health for healthy ageing

A significant body of evidence has established a clear relationship amongst oral health, whole-body health, and healthy longevity.^{10,11} This evidence is strong enough to warrant application in public health policies and in dental institutions and local communities in order to promote healthy longevity. Implementation of oral health-friendly policies would represent an effective and efficient use of public financial resources.

Ageing is a major worldwide health issue for high-, middle-, and low-income countries. Whilst we celebrate the extension of life expectancy, it poses a monumental challenge. With age, an individual becomes more susceptible to disease, and this leads to declining intrinsic capacity and functional ability. The 2015 World Report on Ageing and Health defines the goal of healthy ageing as helping people to develop and maintain the functional ability that enables well-being, and functional ability is defined as the “health-related attributes that enable people to be and do what they value.”¹² In order to delay functional decline and support people’s health and well-being, it will be necessary not only to provide medical care and long-term care insurance for all but also to integrate these care systems into a larger social infrastructure that promotes healthy behaviour and removes barriers. However, as countries attempt to provide UHC systems that improve the quality and availability of medical insurance and long-term care insurance, the financial burden will increase and securing public funding will become a greater challenge.

Positioning dental care as an essential goal of health policy

Japan has confronted this challenge earlier than most, due to the confluence of ageing and its universal health insurance system. Though Japan has achieved the longest life expectancy of any country in the world, securing the financial resources to maintain its public health insurance system (established in 1961) and its public long-term care insurance system (established in 2000) has become a major challenge. Dental care is covered by public medical insurance in Japan,

and oral health programmes are included in the long-term care insurance services. Extending *healthy life expectancy* has become the top policy goal towards which financial resources are directed. Based on the relationships amongst oral health, systemic health, and healthy longevity, dental professionals, researchers, policymakers, and other stakeholders are advocating for policies that position oral health as *essential* for the prevention of noncommunicable diseases and frailty.

Growing evidence linking oral and systemic health strengthens the position of oral health in Japan’s health policy. Another factor is the success of the 8020 Campaign, a national public health initiative that began in 1989. The goal of the campaign was to increase the proportion of people with 20 or more teeth remaining at age 80. At that time, the life-span of Japanese people was nearing 80 years, but the percentage of persons aged 80 years and older with 20 or more teeth (a functional dentition) was 7%. Tooth loss is linked with increasing dental caries and periodontal disease, the prevention of which is an important element of the life course approach. Thus, Japan has shifted its approach towards oral disease prevention in dental care. At the same time, public awareness of this easy-to-understand goal (20 teeth at age 80) also increased, leading to heightened motivation towards engaging in the daily behaviours needed to maintain one’s teeth throughout life. Initial successes yielded additional public funding. Thirty years later, more than 50% of 80-year-olds have more than 20 natural teeth remaining.

As the relationship between the number of teeth and the prevention of noncommunicable diseases and frailty as well as reduced dependence on nursing care became clear, the goal of tooth loss prevention was officially set as a national policy goal. At present, the average life expectancy of Japanese people is older than 80 years, and social participation is now recognised as a factor in preventing or delaying frailty. Social participation and interacting with others depend on important oral health-related functions such as communication and eating well. Therefore, preventing the decline of oral function has also now been set as a national policy priority.

A preventive, community-based, multisectorial, person-centred approach

Central to confronting the challenges of healthy ageing is prevention of ageing-related functional decline. This means that the goal for healthy ageing is to maintain functional ability and prevent its decline as much as possible.¹² In both community settings and individual contexts, it is necessary to take a person-centred approach, which involves a new emphasis on assessing and screening older persons for decline in functional ability (motor ability, eating ability, cognitive ability, etc) in addition to the current focus on disease detection. Results of such screening programmes should be shared with medical institutions, thereby strengthening connections between and amongst community residents, local volunteers and public services, and health care professionals and allowing for multi-sectorial interventions to be developed and implemented.

An expanded role for oral health professionals

Oral health screening, prevention, and treatment services provided as part of an integrated community health care system are important not only to prevent oral diseases themselves but also to prevent the decline of oral functions such as eating and talking and connecting with others, which is in turn connected to the prevention and delay of frailty¹³ (Figure). Because the relationship between nutrition intake and oral health is particularly strong in older persons, early screening for oral function decline would enable professionals to intervene at an earlier stage of Freed’s frailty cycle (undernutrition leading to sarcopenia, resulting in social activity decline and frailty).¹⁴ Thus, oral health professionals and institutions need to expand their role beyond the prevention of oral diseases, engaging in cooperative efforts with their local communities that focus on person-centred assessment and screening of oral functions. For example, the Japanese Geriatric Dental Association has already proposed an

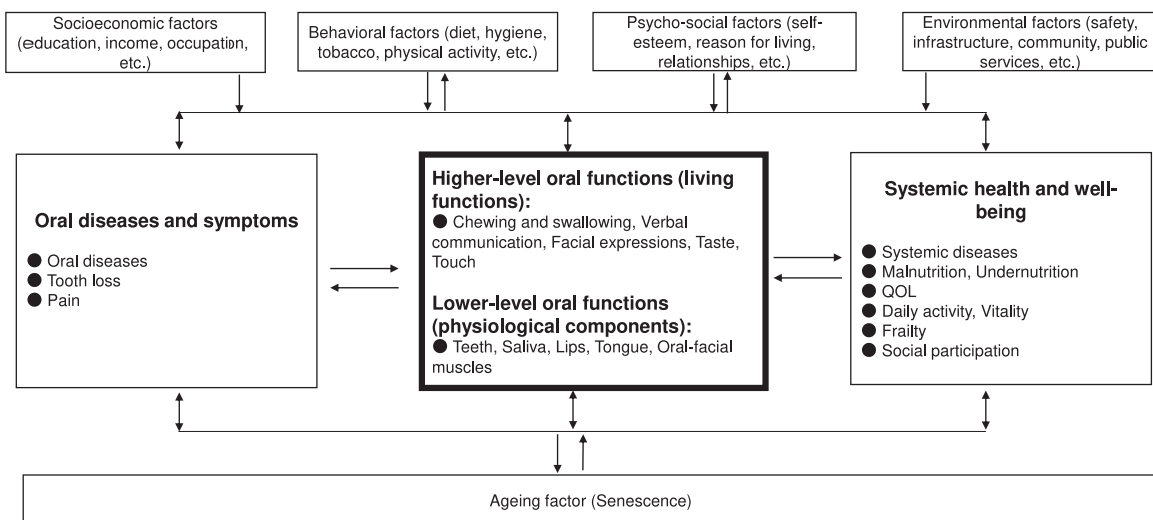


Figure – Conceptual pathway of oral function decline.¹³

oral function assessment (screening) programme that would expand traditional dental assessment, attempting to measure even slight decreases in components of oral function such as tongue function, lip function, saliva production, and eating and swallowing functions.^{15,16}

Conclusions

The prevention of oral diseases throughout the life course is important, especially since we now know that it is an important factor in the prevention of noncommunicable diseases and frailty. However, in order to achieve a healthy ageing society, policies focusing on the assessment and maintenance of oral functions are also needed. An approach centred on the assessment and screening of oral function of older individuals and the subsequent multisectorial response (referrals, preventive interventions, etc) would mark a shift towards a person-centred approach that is based on interprofessional cooperation.

Healthy longevity is an important goal. It has the potential to unite humanity in spite of our many differences. The factors contributing to healthy longevity are numerous, complex, and interrelated, requiring creative, interdisciplinary, intergenerational and global approaches. For example, *The Lancet* recently tied the health of our planet itself to healthy longevity in an editorial entitled, “No Healthy Longevity Without a Healthy Planet.”¹⁷ In that vein, we suggest that healthy longevity cannot be achieved without providing all people with access to the services and education required to maintain oral health and the functions it supports: eating, talking, and smiling.

Conflict of interest

None disclosed.

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