

Oral health for healthy aging

Saúde bucal para um envelhecimento saudável

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ABSTRACT

During the 74th World Health Assembly, a resolution was passed aiming to achieve better oral health as part of universal health coverage, with plans to draft a global strategy and action plan. Oral diseases are a significant problem globally, with implications for older people's health and quality of life. Oral health is important for healthy aging. Integration of oral health into primary care settings and use of a life-course approach have been shown to be effective in the 8020 campaign in Japan. Accurate data on prevalence of oral disease is required to monitor effectiveness of public health approaches, which should be segregated based on setting, sociodemographic status, and comorbidities. These public health approaches should also be adapted and tailored for implementation during the current COVID-19 pandemic. These considerations are essential to progress the agenda of oral health for healthy aging.

KEYWORDS: aged; oral health; healthy aging; oral hygiene; public health.

RESUMO

Durante a 74ª Assembleia Mundial da Saúde, foi aprovada uma resolução com o objetivo de alcançar melhores resultados orais saúde como parte da cobertura universal de saúde, com planos para esboçar uma estratégia global e um plano de ação. As doenças bucais são um problema significativo em todo o mundo, com implicações na saúde dos idosos e qualidade de vida. A saúde bucal é importante para um envelhecimento saudável. Integração da saúde bucal no primário as configurações de atendimento e a utilização de uma abordagem ao longo da vida mostraram-se eficazes na década de 8020 campanha no Japão. Dados precisos sobre a prevalência de doenças bucais são necessários para monitorar eficácia das abordagens de saúde pública, segregadas com base na localização, status sociodemográfico e comorbidades. Essas abordagens de saúde pública também devem ser adaptadas e adaptadas para implementação durante a atual pandemia de COVID-19. Essas considerações são essenciais para progredir na agenda da saúde bucal para o envelhecimento saudável.

PALAVRAS-CHAVE: idoso; saúde bucal; envelhecimento saudável; higiene bucal; saúde pública.

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At the 74th World Health Assembly in 2021, member states adopted resolution EB148.R1, which aimed to achieve better oral health as part of universal health coverage and noncommunicable disease agendas towards 2030.¹ This includes plans to draft a global strategy to address oral diseases by 2022, and to translate this strategy into an action plan for public oral health by 2023. This marks the first step towards tackling the worldwide problem of poor dentition, which has implications for healthy aging.

The Global Burden of Disease study on oral conditions estimated that there were 2.3 billion cases of untreated caries in permanent teeth, 796 million cases of severe periodontitis, 532 million cases of untreated caries in deciduous teeth, 267 million cases of total tooth loss, and 139 million cases of other oral conditions worldwide in 2017.² Oral health has significant implications on health, well-being, and quality of life. For example, periodontitis is globally estimated to cause 3.5 million years lived with disability, US\$54 billion/year in lost productivity, and a major portion of the US\$442 billion/year of health care costs for oral diseases.³

Similar to other chronic diseases, oral diseases are preventable diseases and are more prevalent in those subject to social and economic inequalities, including older people.⁴ In older people, poor oral health is associated with complications and poor outcomes, including malnutrition, functional and cognitive decline, social withdrawal, and lower life expectancy. Thus, maintaining healthy dentition with age is important from a structural, functional, and psychosocial perspective.⁵

A joint consensus proposed by the European Federation of Periodontology (EFP) and the European Organisation for Caries Research (ORCA) summarized important points regarding oral health in older people. Firstly, the aging population and higher dental retention are likely to increase the incidence of caries and periodontal diseases in older people. Older people are at high risk of caries and periodontitis due to immune senescence and risk factors for these conditions. There is a need for oral health surveillance in older people, as these problems are preventable and treatable. Health care professionals should decide regarding tooth retention based on level of dependence, life expectancy, frailty, comfort, and quality of life rather than on age alone. Finally, there is an urgent need for health policies to remove barriers to accessing oral health care for older people.⁶

In light of the above, there are several aspects that should be emphasized to progress the agenda of oral health for healthy aging, namely integration of care, the need for accurate data for monitoring, and COVID-19 specific considerations. Firstly, dentistry seems to be viewed as a specialized high-technology treatment or intervention, which may be

unavailable, unaffordable, or inappropriate for the majority of the population.⁷ There needs to be a paradigm shift to ensure dental care focuses on preventive measures, including promoting and maintaining oral health and achieving oral health equity. Common determinants of oral disease and noncommunicable disease include sugar, alcohol, and tobacco consumption, which must be managed at a public health level. Dentistry should also be integrated into primary care and considered under universal health coverage. A systematic review found that integration of oral health into primary care is feasible and requires interprofessional education, collaborative practice, and public-private partnerships.⁸

An excellent example of an integrated, life-course approach for oral health is Japan's 8020 campaign, which encourages people to keep 20 or more of their own teeth until the age of 80.⁹ The campaign involved oral health promotion and the establishment of a community-based integrated dental care system. Public policy for this includes mandatory dental checkups at ages 1.5 and 3 years under the Maternal and Child Health Act, annually for school children under the School Health and Safety Act, periodontal disease assessment at ages 40, 50, 60, and 70 under the Health Promotion Act, and oral checkups for those over age 75 under the Act on Assurance of Medical Care for Older People. These led to an increase in 8020 achievers, from 10.90% in 1993 to 24.10% in 2005 and 51.20% in 2016.

In terms of data for evaluation and monitoring, there is significant variability in oral assessment and prevalence of oral health problems. The 4th National Oral Health Survey in China was a cross-sectional study of participants aged 65–74 years which identified a high prevalence of caries (98.00%), with a low rate of fillings (12.80%). There was a high prevalence of tooth decay requiring fillings, which indicated an urgent need for prevention and dental treatment.¹⁰

A cross-sectional survey in Mexico found that, in a sample of participants aged 60 years or older, 27.34% had multimorbidity, 89.93% did not have functional dentition, 38.85% had edentulism, 95.29% had dental caries, and 80.00% had severe periodontitis. Multimorbidity was associated with a higher prevalence of edentulism but not with other oral health problems.¹¹ A German study comparing oral health of older people living in nursing homes with home care recipients found that while oral health was poor in both settings, home care recipients were more likely to have poor oral health.¹² A survey of older inpatients admitted to a hospital in Brunei found a low prevalence of oral health problems despite poor oral hygiene practices, with approximately three-quarters not visiting a dentist regularly.¹³

These studies illustrate that older people are a heterogeneous group and further information regarding the prevalence of oral

diseases needs to be segregated based on setting (community-dwelling, residential care, or hospital), sociodemographic status, and comorbidities. The differences in prevalence may also be affected by accuracy of oral health assessment. This information is necessary to prioritize groups of older people for intervention and for evaluation of public health measures to improve oral care.

Finally, the COVID-19 pandemic has affected all health care services, including dental care, thus specific considerations are required for the current “new normal” situation. A scoping study found that there were concerns by dental and oral health workers during the pandemic involving economic, ethical, social, and professional factors.¹⁴ Dental procedures may also result in occupational risk from direct contact with respiratory aerosols of patients. These problems will also need to be addressed through enhancing infection control, strengthening coping strategies, and considering new technology for virtual contact with patients to minimize risk of infection.

It is also known that COVID-19 patients experience oral health problems, such as dry mouth, mucosal blistering, mouth rash, lip necrosis, and loss of taste and smell.

Inflammatory cytokines and oxidative stress with COVID-19 infections contribute to periodontitis. Periodontitis may also worsen symptoms associated with COVID-19, while routine dental and periodontal treatment may decrease symptoms of COVID-19.¹⁵ While oral health appears to be deprioritized during the pandemic, it remains an important consideration in management of patients.

In conclusion, oral health is a public health priority and an important consideration for healthy aging strategies. There is a need for integration of dental care into primary health care settings, accurate data for monitoring public health interventions, and tailored oral health interventions to the current COVID-19 pandemic situation.

CONFLICTS OF INTEREST

The authors declare they have no conflicts of interest.

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