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Challenges to achieve adequate oral health for older adults in low- and middle-income countries

Desafios para alcançar uma adequada saúde bucal nas pessoas idosas em países de baixo e médio rendimento

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For decades, investment in research and public policies related to oral health and geriatric dentistry were neglected, and billions of people currently lack access to prevention and treatment of oral diseases.¹⁻³ According to the World Health Organization (WHO), almost half of the world's population (3.5 billion people) suffers from oral disease, and its burden globally is about 1 billion higher than those from mental disorders, cardiovascular disease, diabetes mellitus, chronic respiratory diseases, and cancers combined.²

Given that most oral diseases are preventable and can be treated in their early stages,⁴ and that oral health affects essential abilities (such as speaking, smiling, tasting, swallowing, as well as conveying a range of emotions through facial expressions), its implications for health, well-being, and quality of life are clear, particularly in the oldest old living in low- and middle-income countries (LMIC) and those living in long-term care facilities (LTCF).^{3,5,6}

The impact of poor oral health in older adults reflects profound imbalances among countries, mainly attributable to differences in socioeconomic conditions and the availability of and access to oral health services.^{2,7} Utilization of dental care is low, especially among those from low-income populations.^{2,6} Barriers may include the inability to perceive a need to visit the dentist, fear, anxiety, past negative experiences, and lack of awareness of dental problems. Sometimes, the need for dental care is perceived only in persons with natural teeth, while edentulous individuals believe they no longer need such care.

To foster and promote access to health services that include comprehensive oral health care, it is essential to understand that oral care incurs high out-of-pocket costs for individuals and their families, notably in LMIC, which are not usually reimbursed or co-financed by the government. The impetus to prevent oral health disorders has only recently prompted educational efforts (e.g., in schools) seeking to modify practices rooted in decades of neglect of oral self-care,⁸ as a result, most older adults did not have access to prevention and education practices for oral health care.⁹

The delivery of oral health care largely depends on highly specialized services and providers, expensive equipment, and technologies which may not be well integrated into primary health care models.⁴ In addition, most LMIC have deficient information and surveillance systems and low priority for developing research and policies that add to public health and oral health.⁴ For this reason,



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planning for oral health services as part of the push toward universal health coverage should consider integrating oral health services into primary health care, including for persons deprived of liberty and older adults living in LTCFs.

People with chronic diseases and those living in LTCFs may be more likely to develop periodontal disease, which may be an independent risk factor for several other conditions, including diabetes, cardiovascular disease, dementia, pulmonary infections, cancer, and kidney disease.^{3,7,8}

In this special call, the journal *Geriatrics, Gerontology and Aging* considered that, although designing, implementing, and maintaining oral health practices for the older population could be challenging (particularly in LMIC), the preservation and restoration of oral function are particularly important for healthy aging. Readers will find an interesting case report on a simplified technique for the fabrication of complete dentures for patients with Parkinson's disease that enabled its fabrication in four clinical sessions of approximately 40 minutes each and led to a pleasing aesthetic and functional outcome, including improvements in self-esteem and well-being.¹⁰

Oral conditions are frequently neglected or, sometimes, neither investigated nor well-managed in older patients with cancer. In a special article, Navarrete-Reyes et al.¹¹ provide a narrative overview of frequent oral conditions in older patients with cancer, including management recommendations.

In one cross-sectional descriptive study,¹² authors assessed the oral health of geriatric patients hospitalized in an intensive care unit. They found that 64.1% did not receive oral care or received it only once (29.5%) during their hospitalization. In another cross-sectional study,¹³ authors evaluated the association of oral health-related quality of life (OHRQoL) with prosthetic rehabilitation status and dental prosthesis condition in LTCF residents, highlighting that their perception

of OHRQoL was negatively impacted by edentulism, including use only of one-piece dentures and of dental prosthetics with poor stability.

Using estimates from the Global Burden of Diseases Study (GBD) 2019, León et al.¹⁴ reported trends of prevalence, incidence, and years lived with disability due to untreated dental caries, periodontitis, and edentulism in Chilean older adults between 1990 and 2019. In their trend analysis, the authors found a shift from a high prevalence of edentulism in the 1990s to increased tooth retention, accompanied by a higher prevalence of caries and periodontal disease in the 2010s, concluding that a different approach (i.e., one that transforms how dental care is delivered) should be considered to address the increasing dental caries and periodontitis burden among this population.

Finally, an exciting paper addressed the dimensions of oral health care of homebound older adults.¹⁵ Applying a mixed-methods design to 37 older participants from a primary health care unit, the authors found that strategies for providing oral health care for homebound older adults should integrate the characteristics of who, why, when, how, and where oral health care is provided to promote better access to dental services and oral health care.

Conflict of interests

The author declare no conflicts of interest.

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Author's contribution

PAW: conceptualization, writing – original draft, writing – review & editing.

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