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## Oral health problems are global and need to be addressed in the USA



The COVID-19 pandemic has shown unequivocally that science, innovation, collaboration, and leadership are important for the health and wellbeing of all people. In the USA, long-standing systemic health and social inequities have placed racial and minority ethnic groups, those living in poverty or with special health-care needs, and older people at increased risk of becoming infected, being hospitalised, and dying from COVID-19.<sup>1</sup> A new report from the US National Institutes of Health (NIH), *Oral Health in America: Advances and Challenges*,<sup>2</sup> to which we contributed, was published on Dec 21, 2021. This report makes strikingly clear that those vulnerable to COVID-19 are also more likely to struggle with poor oral health.

*Oral Health in America: Advances and Challenges* shows the progress made and the challenges that persist since the release of the 2000 report *Oral Health in America*.<sup>3</sup> Over the past 20 years, the USA has expanded dental coverage through its state-administered Medicaid programmes, the Children's Health Insurance Program (CHIP), and other market-place initiatives authorised under the Affordable Care Act that have resulted in near universal dental coverage for children today. In addition to these policy actions, the 2021 report<sup>2</sup> highlights how collaborations between oral health and medical professionals, along with the promotion of early visits and interventions, have contributed to a reduction of more than 40% in untreated caries among preschool children ( $\leq 5$  years), including

those from low-income families. This advancement shows how multilevel efforts in the implementation of health policy initiatives can make a difference in oral health outcomes for children, especially those living in poverty.

Other findings in *Oral Health in America: Advances and Challenges* are dismaying. Untreated dental caries in permanent teeth affect one of four Americans aged 6 years and older, with no improvement since the 2000 report. Furthermore, two in five adults aged 30 years and older have some form of gum disease, and prevalence is even higher for people aged 65 years and older. Although tooth retention has substantially improved in the USA with 65% of older adults ( $\geq 65$  years) now retaining a functional dentition of 21 or more teeth, the disparity between those living in poverty and those who are more affluent has nearly doubled in the past 20 years. Functional dentition status is thought to be directly linked to having a better quality of life and, as the report suggests, it is important that expanding dental coverage for older people be implemented to facilitate the reduction of oral health inequities in the USA. The number of older adults that have at least one dental implant has increased six-fold in the past two decades, but high out-of-pocket expenses and inadequate dental coverage make this procedure unaffordable for many.

One area of concern in the USA is how the prevalence of oropharyngeal cancers associated with



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human papillomavirus (HPV) has doubled in the past 25 years, with most of this increase occurring in adult men. Oropharyngeal cancers are now the most common HPV-related cancers in the USA with an incidence that exceeds HPV-positive cervical cancers. Vaccination against HPV substantially reduces oral HPV infections and along with efforts to reduce risk factors for HPV infection offer promise for the future.

The NIH's latest report contributes to increasing global calls for better prioritisation of oral health, including how care is accessed by millions of individuals, families, and communities. As chronic conditions that are strongly influenced by social determinants, dental caries and periodontal disease affect at least 3.5 billion people worldwide and are generally preventable and easily treatable when addressed early.<sup>4,5</sup> However, as *The Lancet's* 2019 Series on oral health underscored, there are gaps in prevention or early treatment due to various challenges affecting access to care, including affordability.<sup>4,6</sup> These challenges are by no means limited to low-income and middle-income countries. Oral health is not only influenced by access to care, but also by education, economic stability, and the neighbourhoods and environments in which people live.<sup>4,6</sup> Importantly, commercial factors, such as the ways in which companies market alcohol, tobacco, and sugary foods, can influence the oral health outcomes of individuals and communities and the underlying determinants of oral health.<sup>4,6</sup> As underlined by *Oral Health in America: Advances and Challenges*, these cornerstone social and commercial determinants have impacted oral health negatively.<sup>7</sup> The report suggests that coordinated efforts among policy makers and key stakeholders are needed to mitigate the influences of these upstream determinants so as to improve the overall health and the oral health for millions of Americans.

Two important initiatives have drawn attention to oral health as essential to overall health and wellbeing. In 2019, the Political Declaration of the first UN High-level Meeting of the General Assembly on Universal Health Coverage included pledges to accelerate efforts aimed at strengthening universal coverage, which included oral health. A year later, the *Lancet* Commission on Oral Health was formed with several goals, including "[to] explore best practices to raise the political and policy profile of oral health and integrate oral health within the wider health policy and development frameworks".<sup>8</sup> The connection between oral health and overall health has been further

underscored by the COVID-19 pandemic, given that the oral cavity serves as a locus of SARS-CoV-2 infection as well as a site where symptoms of viral infection are manifest.<sup>9</sup>

Identifying factors that cause oral health problems is perhaps easier than formulating the corrective actions and reforms that the USA must adopt to address inequitable access to oral health care, better use of technologies, workforce and training needs, and urgent research priorities. Renewed initiatives and new investments in research and oral health-care policies will improve oral health-care equity and quality in areas that have stagnated over the past two decades.<sup>8,10,11</sup> Just as oral health is connected to overall health, so too are all the members of our global community connected by the imperative of better oral health for all.

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