

# The Economic Rationale for a Global Commitment to Invest in Oral Health

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# First Release from the Oral Health Affinity Group

In collaboration with the American Dental Association,  
Colgate-Palmolive Company and Henry Schein



## The Economic Rationale for a Global Commitment to Invest in Oral Health

WHITE PAPER

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# Oral Health and Overall Health

Oral health has long been neglected in the global health agenda. Our biggest challenge now is ensuring that all people, wherever they live and whatever their income, have the knowledge and tools needed to look after their teeth and mouths, and access prevention and care when they need it.<sup>6</sup>

Tedros Adhanom Ghebreyesus, Director-General, World Health Organization

# Oral Health and Overall Health



## High blood pressure

- Putting off dental care during early adulthood is linked to an increased risk of high blood pressure.
- Patients with gum disease are less likely to keep their blood pressure under control with medication than are those with good oral health.



## Diabetes

- Untreated gum disease makes it harder for people with diabetes to manage their blood glucose levels.
- Diabetes raises the risk of developing gum disease by 86%.



## Obesity

- Brushing teeth no more than once per day was linked with the development of obesity.
- Frequent consumption of sugar-sweetened drinks raises the risk of both obesity and tooth decay among children and adults.



## Dementia

- Having 10 years of chronic gum disease (periodontitis) is associated with a higher risk of developing Alzheimer's disease.
- Researchers report that uncontrolled periodontal disease "could trigger or exacerbate" the neuroinflammatory phenomenon seen in Alzheimer's disease.



## Respiratory health

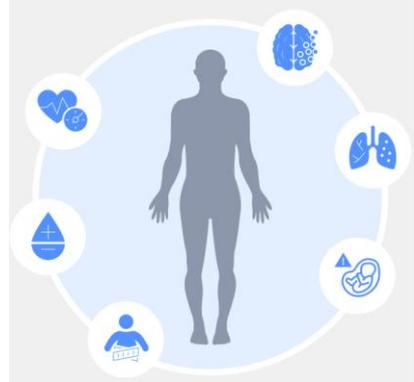
- Research shows that improving oral hygiene among medically fragile seniors can reduce the death rate from aspiration pneumonia.
- Patients with ventilator-associated pneumonia (VAP) who engage in regular toothbrushing spend significantly less time on mechanical ventilation than other VAP patients.
- Improving veterans' oral hygiene is shown to have reduced the incidence of hospital-acquired pneumonia (HAP) by 92%, preventing about 136 HAP cases and saving 24 lives.



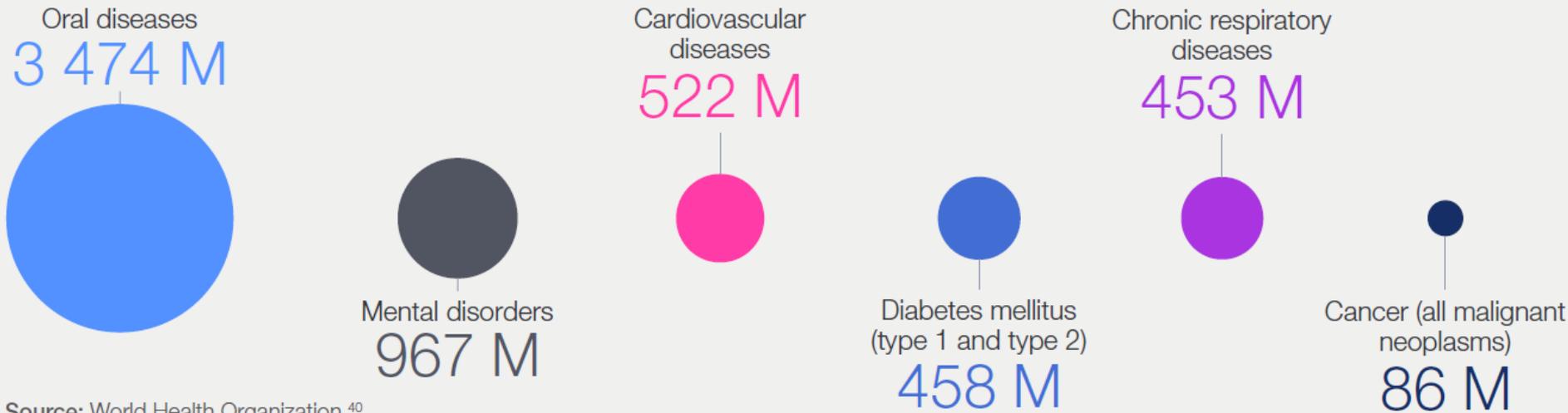
## Adverse birth outcomes

- Gum disease among pregnant women is associated with preterm births, low birth weight babies and pre-eclampsia, a pregnancy complication that can cause organ damage and can be fatal.

Source: CareQuest Institute for Oral Health<sup>18</sup>



# Global Burden of Oral Diseases



Estimated number of cases globally for select non-communicable diseases

# The Economic Cost of Poor Oral Health

Productivity losses due to poor oral health cost the global economy

**\$323 billion**

each year. This is close to the productivity losses from the top 10 diseases accounting for all deaths worldwide.

	Treatment costs		Productivity losses	
	Total (billion dollars)	Per capita	Total (billion dollars)	Per capita
African region	3.10	2.84	4.58	4.19
Eastern Mediterranean region	6.97	9.78	9.59	13.47
European region	112.51	120.96	104.48	112.32
Region of the Americas	156.76	155.21	105.57	104.53
South-east Asian region	0.76	0.38	13.35	6.67
Western Pacific region	107.00	54.74	85.12	43.55
World Bank low-income countries	0.36	0.52	1.04	1.49
World Bank lower-middle-income countries	2.27	0.72	19.00	6.05
World Bank upper-middle-income countries	80.76	29.99	86.88	32.26
World Bank high-income countries	303.70	259.96	215.76	184.69

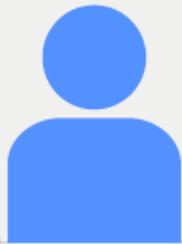
Source: Heidelberg Open Research Data (heiDATA), 2022.<sup>54</sup>

**Estimates of the global economic cost of dental diseases, 2019**

# The Economic Cost of Poor Oral Health



“The appearance of my mouth and teeth affects my ability to interview for a job.”



29%  
low-income  
adults



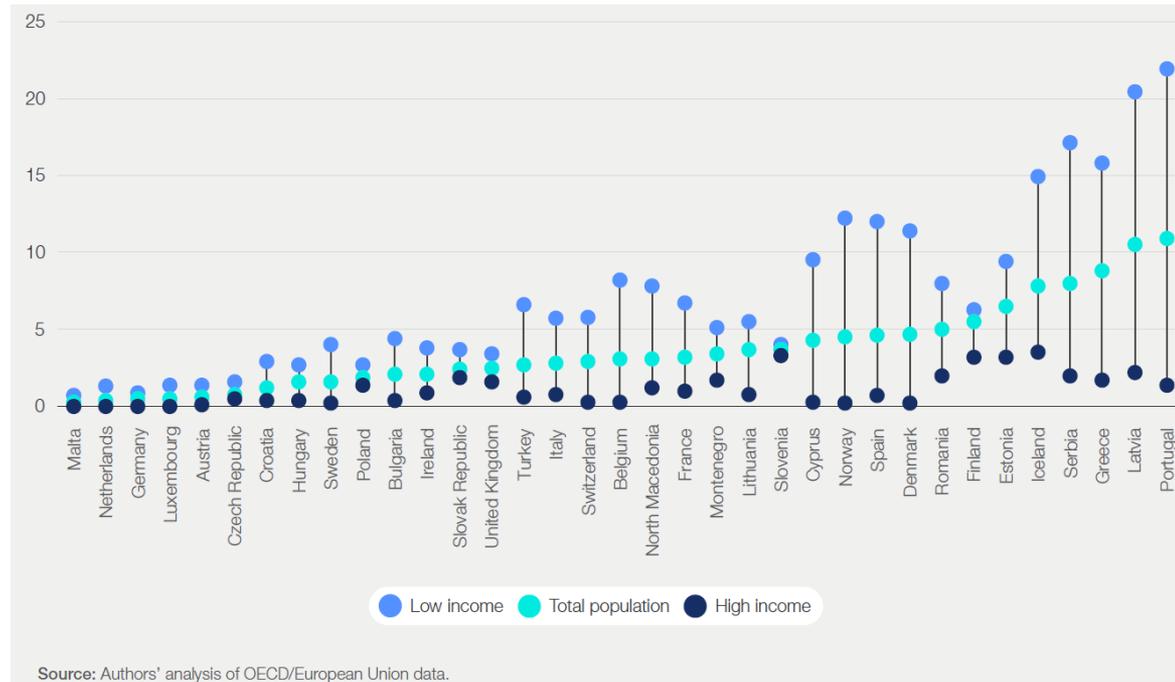
28%  
young  
adults

Oral health services are costly and beyond most people's means in low- and middle-income countries. Using World Health Survey data from households in 40 low- and middle-income countries (LMICs), researchers analysed the impact of out-of-pocket spending on oral health on household finances. Households with recent out-of-pocket spending were more likely to have used a large portion of their disposable household income and, as a result, fall below the poverty line.<sup>38</sup>

# Unmet Needs for Oral Health Care

Access to dental care is an important factor in oral health. However, in healthcare systems across the world, dental care is often the healthcare service with the most limited access.<sup>42</sup> This is true in both high-income and low-income countries and is especially true among low-income populations within countries. For example, an analysis combining data for 18 countries from the Organisation for Economic Co-operation and Development (OECD) shows that the likelihood of having unmet dental care needs is, on average, three times higher than for other medical care services.<sup>43</sup>

A similar study across 31 European countries showed that dental care is often the most frequently reported unmet healthcare need.<sup>44</sup> Similarly, in the US, the population reports much more difficulty in affording dental care services compared to any other type of healthcare service, including medical care, hospital care and even prescription drugs. This is true for all age and income groups.<sup>45</sup>

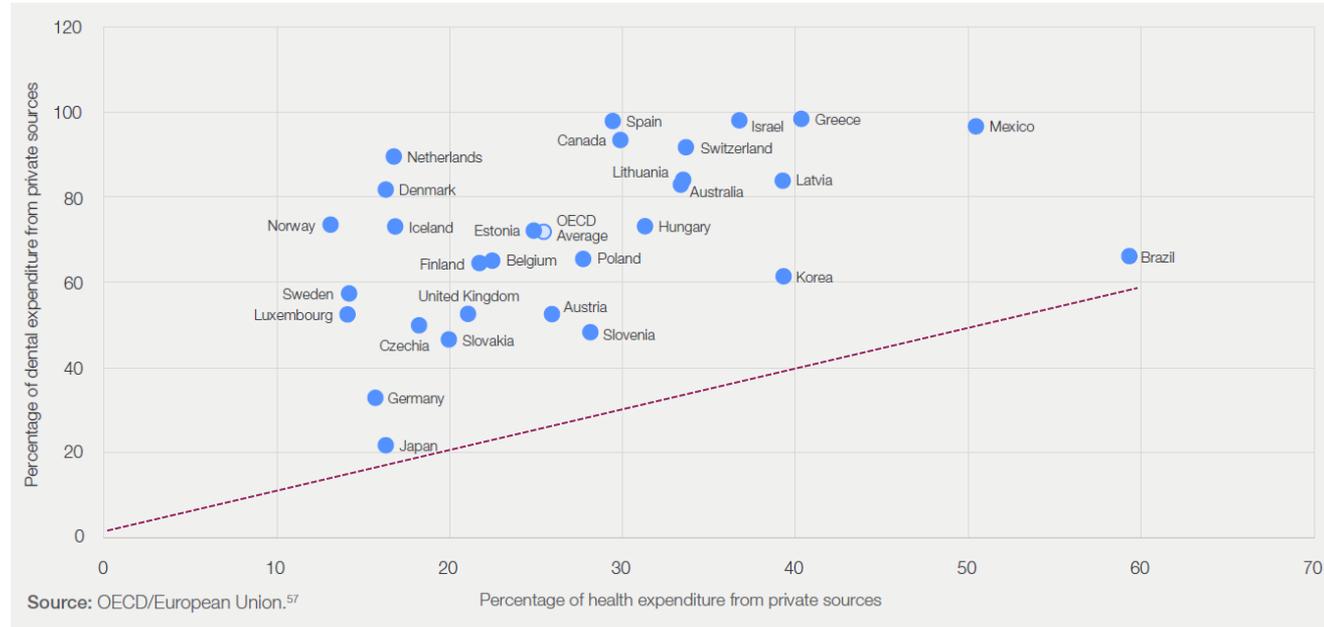


Source: Authors' analysis of OECD/European Union data.

Percent of population reporting unmet dental care needs by household income level

# Oral Health Care Financing

The mouth has largely been separated from the body when it comes to how people pay for healthcare services. This traditional policy approach is at the core of why financial barriers to dental care are much higher than for other types of healthcare services.



Share of health and dental expenditure from private sources

# Oral Health Care Financing

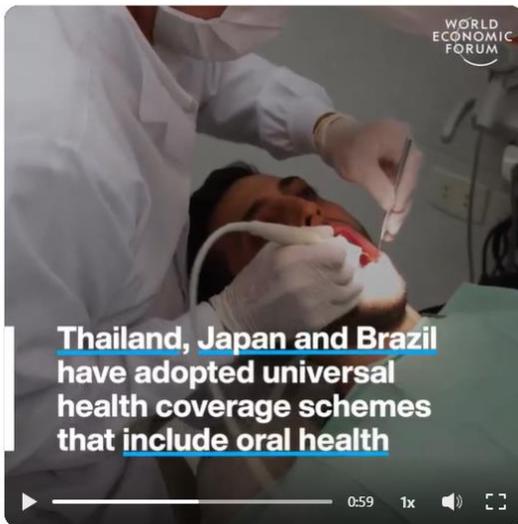


Oral diseases afflict 3.5 billion people - half the world's population.

The World Economic Forum's Oral Health Affinity Group comprises leaders from across sectors and industries who are raising the alarm about poor oral health. Read its latest report, *The Economic Rationale for a Global Commitment to Invest in Oral Health*: <https://ow.ly/E4P350SZIWN>

American Dental Association Colgate-Palmolive Henry Schein

#Oraldiseases #Health #Dental #Dentist #Healthcare



## BOX 5 Comprehensive coverage and integration improves oral health in Japan

Japan has a universal healthcare insurance programme that covers almost the entire population and offers a wide range of dental treatments, excluding certain restorative procedures. Working-age adults are responsible for 30% of their oral healthcare costs.<sup>60</sup>

countries', including rates of tooth loss, with relatively narrow disparities across income.

Dental care service delivery is also integrated into the broader healthcare delivery model in Japan. In hospitals and other facilities, dentists and other healthcare professionals work

## BOX 4 Thailand and Brazil make dental care an essential healthcare service

As part of Thailand's universal health coverage (UHC policy) implemented in 2002, a series of public health insurance schemes offer oral health benefits to everyone. While coverage may be more expansive under plans made specifically for civil servants and private sector employees, the general population is covered for preventive and restorative care. The success of Thailand's oral health interventions demonstrates that it is possible to make oral health essential in healthcare insurance programmes.

increased from \$30 million in 2002 to \$322 million in 2009, with nearly universal geographic coverage of oral healthcare services. An estimated 70% of Brazilians access healthcare services in a year, and evaluations of the programme show significant improvements in various oral health indicators, including dramatic reductions in tooth loss due to dental disease.

Brazil also has a universal healthcare system. It was established in 1988, and integrated oral health in 2000. Various policies supported this integration in primary care, reducing fragmentation and expanding access to care and affordability. Government spending on oral healthcare

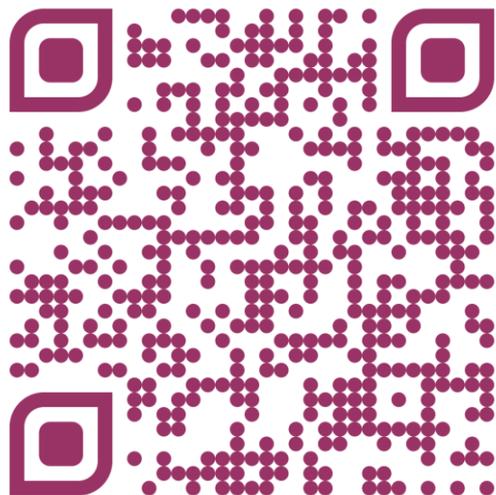
Still, inequalities persist, with higher dental disease burden in rural, poor and disadvantaged populations. These challenges stem from the complexity of financing healthcare in the context of decentralization, a growing private sector creating consumer demand that places excess pressures on public services, and the need to ensure quality of services.

patients with xample, dental and dementia tients with the riate care to dical-dental system can serve tries.<sup>61</sup>

# Moving Forward – Four Areas of Action

- Adopting health financing policies that improve coverage, access and affordability of oral healthcare services, particularly for deprived, disadvantaged and vulnerable groups.
- Promoting healthcare service delivery models that integrate oral healthcare services into primary, secondary and tertiary care.
- Developing innovative health and oral health workforce models, including training and remuneration, that allow for flexibility in addressing oral health needs.
- Implementing policies that promote upstream interventions focusing on prevention, health promotion and healthy behaviours, versus costly downstream treatment of oral disease.

# Thank You!



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