

**WHO DISCUSSION PAPER**  
(Version dated 9 August 2021)

**DRAFT GLOBAL STRATEGY ON ORAL HEALTH**

**BACKGROUND**

1. Recognizing the global public health importance of major oral diseases and conditions, the World Health Assembly adopted resolution WHA74.5 (2021) on oral health and requested the Director-General to develop, in consultation with Member States, a draft global strategy on tackling oral diseases.<sup>1</sup> The strategy will inform the development of a global action plan on oral health, including a framework for tracking progress with clear measurable targets to be achieved by 2030.

2. The resolution on oral health and the resulting draft global strategy are grounded in the 2030 Agenda for Sustainable Development, in particular Sustainable Development Goal 3 (Ensure healthy lives and promote well-being for all at all ages) and its target 3.8 to achieve universal health coverage. They are aligned with the WHO's Thirteenth General Programme of Work (2019); the Political Declaration of the High-level Meeting on Universal Health Coverage (2019); the Operational framework for primary health care (2020); the Global strategy on human resources for health: Workforce 2030 (2016); the Global action plan for the prevention and control of noncommunicable diseases 2013–2030 (2013); the WHO Framework Convention on Tobacco Control (2003); WHA73(12) (2020) on the Decade of Healthy Ageing 2020–2030; and WHA67.11 (2014) on public health impacts of exposure to mercury and mercury compounds: the role of WHO and ministries of public health in the implementation of the Minamata Convention.

**GLOBAL OVERVIEW OF ORAL HEALTH**

3. Oral health is the well-being of the mouth, encompassing many essential functions, including breathing, eating, speaking, smiling and socializing. Experiencing good oral health, comfortably and confidently, enables an individual to achieve their full capacity and participation in society. Oral health is integral to overall health, well-being and quality of life, from birth to old age.

**Oral Disease Burden**

4. Globally, there are estimated to be more than 3.5 billion cases of oral diseases and other oral conditions, most of which are preventable.<sup>2</sup> For the last three decades, the combined global prevalence of dental caries (tooth decay), periodontal (gum) disease and tooth loss has remained unchanged at 45%, which is higher than the prevalence of any other noncommunicable disease.<sup>2</sup>

5. Cancers of the lip and oral cavity together represent the sixteenth most common cancer worldwide, with over 375 000 new cases and nearly 180 000 deaths in 2020.<sup>3</sup> Noma is a necrotizing disease that is a marker of extreme poverty; it starts in the mouth and is fatal for as much as 90% of affected children.<sup>4,5</sup> Cleft lip and

<sup>1</sup> [https://apps.who.int/gb/ebwha/pdf\\_files/WHA74/A74\\_R5-en.pdf](https://apps.who.int/gb/ebwha/pdf_files/WHA74/A74_R5-en.pdf)

<sup>2</sup> <http://dx.doi.org/10.1177/0022034520908533>

<sup>3</sup> <https://gco.iarc.fr/today/data/factsheets/cancers/1-Lip-oral-cavity-fact-sheet.pdf>

<sup>4</sup> <https://daccess-ods.un.org/TMP/1058816.4627552.html>

<sup>5</sup> <http://www.who.int/iris/handle/10665/254579>

palate, the most common craniofacial birth defects, have a prevalence of approximately 1 in 1500 births.<sup>67</sup> Traumatic dental injury is estimated to have a global prevalence of 23% for primary teeth and 15% for permanent teeth, affecting over one billion people.<sup>8</sup>

### **Social and Economic Costs of Poor Oral Health**

6. The personal consequences of untreated oral diseases and conditions - including physical symptoms, functional limitations, and detrimental impacts on emotional and social well-being - are severe. For those who obtain treatment for oral diseases and conditions, the costs can be high and can lead to significant economic burdens. Worldwide, in 2015 oral diseases and conditions accounted for US\$357 billion in direct costs and US\$188 billion in indirect costs, with large differences between high-, middle- and low-income countries.<sup>9</sup>

7. There is a very strong and consistent association between socioeconomic status (income, occupation and educational level) and the prevalence and severity of oral diseases and conditions. Across the life course, oral diseases and conditions disproportionately affect the poor and vulnerable members of societies, often including those who are on low incomes, people living with disability, refugees, prisoners and/or socially marginalized groups.

### **Commercial Determinants and Risk Factors of Oral Health**

8. Oral diseases and conditions and oral health inequalities are directly influenced by commercial determinants, which are strategies and approaches used by the private sector to promote products and choices that are detrimental to health.

9. Oral diseases and conditions share modifiable risk factors common to the leading noncommunicable diseases, that is, cardiovascular disease, cancer, chronic respiratory disease and diabetes. These risk factors include all forms of tobacco use, betel quid and areca nut use, harmful alcohol use, high sugars intake and lack of breastfeeding, as well as the human papilloma virus for oropharyngeal cancers. Some of these risk factors are also associated with cleft lip and palate and traumatic dental injury. The risk factors for noma include malnutrition, coinfections, poor oral hygiene and poor living conditions.

### **Oral Health Promotion and Oral Disease Prevention**

10. Only rarely have oral health promotion and oral disease prevention efforts targeted the social and commercial determinants of oral health at the population level. However, initiatives that tackle upstream determinants (such as policy and regulation) can be cost-effective and have a high population reach and impact. Moreover, oral health promotion and oral disease prevention typically are not integrated into other noncommunicable disease programmes that share major common risk factors and social determinants.

11. In 2015, the WHO guideline on sugars intake for adults and children made the strong recommendation to reduce intake of free sugars throughout the life course based on the evidence of positive associations between intake of free sugars and body weight and dental caries. Nonetheless, dental public health initiatives to reduce sugar consumption are rare.

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<sup>6</sup> <https://apps.who.int/iris/rest/bitstreams/1320658/retrieve>

<sup>7</sup> <http://dx.doi.org/10.1016/j.jormas.2021.05.008>

<sup>8</sup> <http://dx.doi.org/10.1111/edt.12389>

<sup>9</sup> <http://dx.doi.org/10.1177/0022034517750572>.

12. Millions of people do not have access to oral health promotion and oral disease prevention programmes. The use of fluorides for prevention of dental caries is limited, and essential prevention methods, such as community-based methods, topical fluoride applications or the use of fluoridated toothpaste, frequently are not available or affordable for people.

### **Oral Health Care Systems**

13. Political commitment and resources for oral health care systems often are limited at the ministry of health level. Typically, the oral health care system is inadequately funded, highly specialized and isolated from the broader health care system. In most countries, universal health coverage benefit packages and noncommunicable disease interventions do not include essential oral health care. Oral health care usually is not covered in primary care facilities, and private and/or public insurance scheme coverage of oral health is highly variable between countries.

14. In many countries, insufficient attention is given to planning the oral health workforce to address the population's oral health needs. Dental training rarely is integrated within general health training systems and focuses on educating highly specialized dentists rather than community oral health workers and mid-level providers, such as dental assistants, dental nurses, dental therapists and dental hygienists.

15. The COVID-19 pandemic has had a negative impact on the provision of essential oral health services in most countries, leading to delays in oral health care treatment, increased antibiotic prescriptions and greater oral health inequalities. The pandemic should be seen as an opportunity to strengthen integration of oral health care into general health care systems as part of universal health coverage efforts.

## **VISION, GOAL, AND GUIDING PRINCIPLES**

### **Vision**

16. The vision of this strategy is universal oral health coverage for all people by 2030.

17. Universal oral health coverage means that every individual has access to essential, quality health services that respond to their needs and which they can use without suffering financial hardship. These include oral health promotion and prevention, treatment and rehabilitation interventions related to oral diseases and conditions across the life course. Universal oral health coverage will enable all people to enjoy the highest attainable state of oral health, contributing to them living healthy and productive lives. Achieving the highest attainable standard of oral health is a fundamental right of every human being.

### **Goal**

18. The goal of the strategy is to guide Member States to develop ambitious national responses to promote oral health, reduce oral diseases, other oral conditions and oral health inequalities, make progress on the path to universal oral health coverage for their populations, and consider the development of targets and indicators, based on national situations, building on the guidance to be provided by the WHO global action plan on oral health, to prioritize efforts and assess the progress made by 2030.

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## Guiding Principles

### *Principle 1: A public health approach to oral health*

19. A public health approach to oral health strives to provide the maximum oral health benefit for the largest number of people by targeting the most prevalent and/or severe oral diseases and conditions. To achieve this, oral health programmes should be integrated within broader and coordinated public health efforts. A public health approach to oral health requires intensified and expanded upstream actions involving a broad range of stakeholders, including those from social, economic, education, environment and other relevant sectors.

### *Principle 2: Integration of oral health in primary health care*

20. Primary health care is the cornerstone of strengthening health systems because it improves the performance of health systems, resulting in better health outcomes. Integration of basic oral health services with other noncommunicable disease services in primary health care is an essential component of universal health coverage. This integration has many potential benefits, including increased chance of prevention, early detection and control of related conditions, and more equitable access to comprehensive, quality health care.

### *Principle 3: A new oral health workforce model to respond to population needs*

21. Oral health resource and workforce planning models need to better align education and training of health workers with population oral health needs. Universal oral health coverage can only be achieved by reforming the health, education and resource planning systems to ensure the oral health workforce is of adequate size and skills mix to provide essential oral health care. This requires reassessing the roles and competencies of mid-level oral health care providers and community oral health workers based on the new WHO Global competency framework for universal health coverage.

### *Principle 4: People-centred oral health care*

22. People-centred oral health care consciously seeks and engages the perspectives of individuals, families and communities, including people affected by oral diseases and conditions. In this approach, people are seen as participants as well as beneficiaries of trusted oral health systems that respond to their needs and preferences in humane and holistic ways. People-centred oral health care actively fosters oral health literacy, shared decision-making and self-management. Through this process, people receive the opportunity, skills and resources to be articulate, engaged and empowered users of oral health services.

### *Principle 5: Tailored oral health across the life course*

23. People are affected by oral diseases and conditions and their risk factors across the entire life course. The effects may vary and accumulate over time and have complex consequences in later life, particularly in relation to other noncommunicable diseases. These patterns highlight why tailored, age-appropriate oral health strategies need to be integrated within relevant health programmes across the life course, including pre-natal, infant, child, adolescent, working adult and older adult programmes.

### *Principle 6: Optimizing digital technologies for oral health*

24. Digital technologies can be used strategically for oral health at different levels, including improving oral health literacy, implementing oral health e-training and provider-to-provider telehealth, and increasing early detection, surveillance and referral for oral diseases and conditions within primary care. In parallel, it is

critical to establish and/or reinforce governance for digital health and to define norms and standards for digital oral health based on best practice and scientific evidence.

## **STRATEGIC OBJECTIVES**

### **Strategic Objective 1: Oral Health Governance - Improve political and resource commitment to oral health, strengthen leadership and create win-win partnerships within and outside of the health sector**

25. Strategic objective 1 seeks recognition and integration of oral health in all relevant policies and public health programmes as part of the broader national noncommunicable disease and universal health coverage agendas. Increased political and resource commitment to oral health are vital at the national and subnational levels, as is reform of health and education systems.

26. Central to this process is establishing or strengthening the capacity of a national oral health unit. A dedicated, qualified, functional, well-resourced, and accountable oral health unit should be established or reinforced within noncommunicable disease structures and other relevant public health services. Sustainable partnerships within and outside of the health sector, and engagement with communities, civil society and the private sector, are essential to mobilize resources and address the social and commercial determinants of oral health.

### **Strategic Objective 2: Oral Health Promotion and Oral Disease Prevention - Enable all people to achieve the best possible oral health and target and reduce the social and commercial determinants and risk factors of oral diseases and conditions**

27. Strategic objective 2 calls for evidence-based, cost-effective and sustainable oral health promotion and interventions to prevent oral diseases and conditions. At the downstream level, oral health promotion supports the development of personal, social and political skills that enable all people to achieve their full potential for oral health self-care. At the upstream level, oral health promotion includes creating public policies and fostering community action to improve people's control over their oral health and to promote oral health equity.

28. Prevention efforts target key risk factors and social and commercial determinants of oral diseases and other oral conditions. These initiatives should be fully integrated and mutually reinforcing with other relevant noncommunicable disease prevention strategies and regulatory policies related to tobacco, harmful alcohol use and unhealthy food and beverage products, as well as the use of fluorides for prevention of dental caries.

### **Strategic Objective 3: Primary Oral Health Care - Build workforce capacity and ensure financial protection and essential supplies in integrated primary oral health care**

29. Strategic objective 3 seeks to increase access by the entire population to safe, effective, and affordable primary oral health care as part of the universal health coverage benefit package. Basic oral health care includes oral health promotion and prevention of oral diseases and conditions, as well as services which address oral pain, infection, trauma, dysfunction, malignant disease and referral, with agreed quality and patient-safety standards. Oral health care providers who suspect abuse or neglect should offer patients appropriate counseling, treatment, and effective means to report such cases to the relevant authority, according to the national context.

30. Oral health providers should be members of the primary health care team and work side-by-side with other health workers in tackling oral health conditions and other non-communicable diseases, with a focus on addressing common risk factors and supporting general health check-ups. Financial protection through expanded health insurance coverage - including coverage of oral health services - is one of the cornerstones of universal health coverage. Ensuring the reliable availability and distribution of essential medical consumables,

generic medicines and other dental supplies is also important for the management of oral diseases and conditions in primary health care and referral services.

**Strategic Objective 4: Oral Health Information Systems - Enhance oral health surveillance and information systems to provide timely and relevant feedback to decision-makers for evidence-based policy-making**

31. Strategic objective 4 involves developing more efficient and effective integrated information systems for oral health planning, management and policy-making. At the national level, strengthening oral health information systems should include systematic collection of oral health status, risk factors and resource spending data using existing health management information systems and promising digital technologies. Monitoring systems should also be established to track implementation and impact of existing policies and programmes related to oral health.

**Strategic Objective 5: Oral Health Research Agenda - Create and continuously update a new research agenda focused on public health aspects of oral health and innovation for better impact on oral health**

32. Strategic objective 5 strives to move beyond the historical oral health research agenda that has focused heavily on dental technology and problem description, rather than problem-solving. The new oral health research agenda should be oriented towards public health programmes, population-based interventions, learning health systems, workforce models, digital technologies, and the public health aspects of oral diseases and conditions, such as primary health care interventions, minimally invasive interventions, alternative dental restorative materials, environmentally sustainable practice, and economic analyses to identify cost-effective interventions.

**ROLE OF MEMBER STATES, PARTNERS AND SECRETARIAT**

**WHO**

33. WHO will provide a leadership and coordination role in promoting and monitoring global action on oral health, including in relation to the work of other relevant United Nations agencies, development banks and other regional and international organizations. The organization will: set the general direction and priorities for global oral health advocacy, partnerships and networking; articulate evidence-based policy options; and provide Member States with technical and strategic support.

34. WHO will continue its work with global public health partners to: establish networks for building capacity in oral health care, research and training; mobilize contributions from nongovernmental organizations and civil society; and facilitate collaborative implementation of the strategy, particularly as pertains to the needs of low- and middle-income countries.

35. By 2023, WHO will translate this strategy into an action plan for public oral health including a monitoring framework for tracking progress with clear measurable targets to be achieved by 2030. By 2024, WHO will recommend cost-effective oral health interventions as part of the updated Appendix 3 of the WHO Global action plan on the prevention and control of noncommunicable diseases and the WHO universal health coverage intervention compendium.

36. WHO will continue to update technical guidance to ensure safe and uninterrupted dental care, including during and after the COVID-19 pandemic and other health emergencies. WHO will, in collaboration with the United Nations Environment Programme, develop technical guidance on environmentally-friendly and less-invasive dentistry. WHO will also consider the classification of noma within the road map for neglected tropical diseases 2021–2030.

37. WHO will help scale and sustain innovations for oral health impact in accordance with the WHO innovation scaling framework, including social, service delivery, health product, business model, digital, and financial innovations.

38. WHO will create an oral health data platform as part of WHO's data repository for health-related statistics. The institution will strengthen integrated oral health information systems and surveillance activities through the development of new oral health indicators for population health surveys. WHO will promote and support research in priority areas to improve oral health programme implementation, monitoring and evaluation.

### **Member States**

39. Member States have the primary role in responding to the challenge of oral diseases and conditions. Governments have the responsibility to engage all sectors of society to generate effective responses for the prevention and control of oral diseases and conditions, the promotion of oral health and reduction in oral health inequalities. They should secure appropriate oral health budgets based on intervention costing and investment cases to achieve universal oral health coverage.

40. Member States should ensure that oral health is a solid, robust and integral part of national health policies and that national oral health units have sufficient capacity and resources to provide strong leadership, coordination and accountability on oral health.

41. Member States can strengthen oral health care system capacities by: integrating primary oral health care as part of universal health coverage benefit packages; ensuring the affordability of essential dental medicines and consumables, and other equipment or supplies for the management of oral diseases and conditions; and prioritizing environmentally-friendly and less-invasive dentistry. Member States should also assess and reorient the oral health workforce as required to meet population needs by enabling interprofessional education and a wider team approach that involves mid-level and community health providers.

42. Member States can address the determinants of oral health and risk factors of oral diseases and conditions by: advocating for health taxes or regulation of the sale and advertisement of unhealthy products, and counteracting the underlying commercial interests that drive risks; strengthening health-promoting conditions in key settings; supporting legislation to increase the affordability of quality, fluoride toothpaste; and advocating for its recognition as an essential health product within the national list of essential medicines.

43. Member States should improve oral health surveillance, data collection and monitoring to inform decision-making and advocacy. This includes strengthening integrated surveillance of oral diseases and conditions, as well as analysis of oral health system and policy data, evaluation of oral health programmes and operational research.

44. Member States should critically review and continuously update their oral health education and training curricula prioritizing a public health approach to oral health and reflective problem-solving and leadership skills among future oral health professionals.

### **International Partners**

45. International partners have a valuable role in achieving the goal and objectives of the strategy at global, regional and national levels, including playing a stronger part in advocacy, resource mobilization, exchange of information, sharing of lessons learned, capacity-building and collaborative research.

46. Coordination is needed among international partners, including the organizations of the United Nations system, intergovernmental bodies, non-state actors, nongovernmental organizations, professional associations, patients' groups, academia and research institutions. Establishing and working efficiently as an international coalition on oral health will be a more efficient way to support countries in their implementation of the strategy.

### **Civil Society**

47. Civil society has a role to encourage governments to develop ambitious national oral health responses and to contribute to their implementation. Civil society can forge multi-stakeholder partnerships and alliances that mobilize and share knowledge, assess progress, provide services and amplify the voices of people living with and affected by oral diseases and conditions.

48. Civil society can lead grass-roots mobilization and advocacy for increased focus within the public agenda on oral health promotion and the prevention and control of oral diseases and conditions. Civil society can also help consumers advocate with governments to request the food and beverage industry to provide healthy products; support governments in implementing their tobacco control programmes; and form networks and action groups to promote the availability of healthy food and beverages and fluoridated toothpaste, including through subsidization or reduced taxes.

### **Private Sector**

49. The private sector can strengthen its commitment and contribution to national oral health responses by implementing occupational oral health measures, including through good corporate practices, workplace wellness programmes and health insurance plans.

50. The private sector should take concrete steps towards eliminating the marketing, advertising and sale of products which cause oral diseases and conditions. The private sector should also strive to improve access to and affordability of safe, effective and quality dental equipment, devices, and oral hygiene product. It should also accelerate research on affordable, safe and environmentally sound equipment and materials for oral health care.

51. Dental professionals in the private sector can support national governments in implementation of the strategy through public-private partnerships for the provision of essential oral health care, by helping to plan and implement population-wide prevention measures and by participating in oral health data collection and surveillance.

### **ACTION BY THE EXECUTIVE BOARD**

52. The Executive Board is invited to note the report and to provide guidance on the draft global strategy on oral health.



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