

Progressive realisation of universal access to oral health services: what evidence is needed?

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In May 2021, the 74th World Health Assembly adopted a resolution on oral health,¹ 14 years after its last resolution on oral health (WHA60.17) in 2007,² with slow progress on access to oral health services. The lack of global-level indicators for oral health monitoring is one of the major deficiencies in driving national and global universal health coverage (UHC) agendas on oral health.

Prevalence of untreated oral diseases has increased over the last two decades,³ and the global prevalence rate of oral disorders was ranked first among all diseases since 1990. The rate increased from 43 634 cases per 100 000 population in 1990 to 45 035 cases per 100 000 population in 2019.⁴

Oral health services are expensive⁵ and usually not included in⁶ or are only partially covered by UHC benefit packages.⁷ This results in either high levels of out-of-pocket payments or high incidence of unmet needs, affecting vulnerable populations. For these reasons, private insurance shifts in to cover oral health costs in high-income countries.⁸ Only 35% of people with oral health problems in low-income countries were able to receive treatment within a year, whereas the rate was as high as 82% in high-income countries.⁹

Out-of-pocket expenditure for oral health services is a significant drain of the limited household budgets in the most vulnerable and can increase poverty. Even in high-income countries, oral health expenditure accounted for approximately 20% of out-of-pocket health expenditure.⁷ Furthermore, availability and access to oral health services at a primary care level are inadequate or lacking in low-income and middle-income countries.¹⁰ Unmet oral health needs are higher than unmet medical needs and there is a large rich–poor gap in unmet oral health

Summary box

- ▶ Oral disorder has the highest global prevalence rate of all diseases and has been increasing over the past two decades.
- ▶ In addition to inadequate service provisions and funding, existing monitoring systems are fragmented, irregular, and lacking indicators for monitoring progress, informing policy and holding policymakers accountable.
- ▶ Universal oral health services should be integrated into national universal health coverage agendas.
- ▶ To achieve this, countries need to develop and monitor essential indicators in the following domains: population coverage, service provision, access to care and financing.

needs reported by members of the Organization for Economic Co-operation and Development (OECD).¹¹

Even though the 2007 World Health Assembly urged countries to incorporate oral health indicators into their national information systems for monitoring progress,² key indicators on universal oral health services have yet to be developed.

We conducted an informal review of existing global oral health data by searching for global oral health surveys and reports on the World Health Organization (WHO) platforms, PubMed, Scopus and Google Scholar. The search terms included ‘oral health data’ and ‘global/world oral health’. We also tried to link the oral health data with the UHC, hence, the search terms related to the UHC dimensions, such as population coverage, service coverage and financial protection were added. Most resources we found were articles, policy documents and meeting notes, which are not global monitoring databases. Despite efforts contributed by all partners, we



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have found that the available data are fragmented, not covering most countries and lacking continuity. Available information and evidence cannot support the driving of the UHC agenda as called for by the 2021 World Health Assembly Resolution.¹

In 1996, the WHO established the Oral Health Country/Area Profile Programme (CAPP) to monitor oral health status,¹² supported by Malmö University, Sweden for dental status and information concerning oral health system and Niigata University, Japan for periodontal conditions.¹³ The most updated Decayed/Missing/Filled Teeth Index for 12-year-old children is from 2017 reported by Malaysia, Sweden and the UK,¹⁴ while the latest periodontal data reported from Thailand was in 2017, Japan in 2016 and Namibia in 2013.¹⁵ The Global Health Observatory (GHO), in the section for non-communicable diseases, covers oral health-related common risk factors, for example, diet, use of tobacco and alcohol,¹⁶ and oral health workforce.¹⁷

Most data platforms, such as CAPP,¹⁴ GHO data repository,¹⁷ Global Cancer Observatory,¹⁸ Global Health Expenditure Database¹⁹ and Health at a Glance,²⁰ are regularly published by OECD members but cover insufficient indicators to drive the UHC agenda. Other platforms, such as World Oral Health Report,²¹ World Health Survey 2002–2004,²² World Federation of Public Health Associations' Oral Health Working Group²³ and Oral Health Towards the Year 2030,²⁴ are ad hoc and not comprehensive.

Though UHC facilitates access to oral health services and provides financial risk protection,²⁵ the inclusion of oral health services into UHC benefit packages needs a courageous political decision. We suggest that all stakeholders, including the population, fully engaged in reaching the consensus. As a prerequisite, the government should expand its health budget to include oral health services. Under the oral health budget, it should prioritise urgent oral treatment, atraumatic restorative treatment, and prevention and promotion interventions for the neediest population who cannot afford to pay or target populations, such as children.⁶ These services are low cost²⁶ and should be affordable for the government. When resources are more favourable, the government may consider expanding the benefit package to more comprehensive services and to cover wider populations. Additionally, if there is a resource gap, co-payment can be considered for advanced and specialised curative services with an exemption for prevention and promotion services and low-income population.

To achieve universal oral health services, we propose four sets of national-level indicators.

First, population coverage by urgent oral treatment, atraumatic restorative treatment, prevention and promotion interventions, and affordable fluoride toothpaste as measured by the number of days of earnings needed to purchase an annual 182.5 g of the cheapest toothpaste.²⁷

Second, service provision as measured by the proportion of primary care which integrates and provides oral

health services, promotion and prevention, the number of oral health workforce (including dentists, dental auxiliaries, dental assistants and dental technicians) per 10 000 population, and the extent of oral health services in the UHC benefit packages.

Third, access to care as measured by percentages of people who had at least one visit to oral health services during last year, annual incidence of unmet oral health needs and reasons for unmet need.

Fourth, financing oral health services as measured by current health expenditure on oral health services per capita and financial sources such as out-of-pocket payments, governments and donors.

These sets of indicators should be prioritised, with engagement from relevant stakeholders, in line with the country's context and institutional capacity. With political and financial commitments by national health authorities, these indicators will support policy formulation to drive the universal oral health agenda in their countries. Standardising national oral health indicators not only contributes to national use, it also provides global monitoring of progress.

Regular publications of country oral health profiles, similar to the global tuberculosis report,²⁸ road safety report²⁹ and tobacco report,³⁰ have shown to be powerful in driving their respective agenda. At the global level, therefore, the WHO should include additional key oral health indicators in the GHO. This would only be feasible if WHO member states establish robust monitoring systems with synchronised national and global indicators.

Despite these relevant recommendations, challenges remain, especially in low-income and middle-income countries since they generally lack regular national surveys to monitor levels of out-of-pocket payment, service utilisation rates, unmet oral health needs³¹ and household's affordability for fluoride toothpaste. The governments must prioritise establishing a monitoring and evaluation system and indicators for oral healthcare with the engagement of the countries' stakeholders. The engagement builds ownership and commitment, which gradually strengthen the monitoring and evaluation system itself. Besides, the WHO and international development partners should support those countries in conducting surveys through funding or mentoring.

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