Integrating oral health with public health systems under the framework of the Global charter for the Public’s Health

The Global Charter for the Public’s Health (the Charter), developed by the World Federation of Public Health Associations (WFPHA) in collaboration with the World Health Organization (WHO), is a framework that streamlines the functions and services of public health. These components encompass the multifaceted nature of public health and conceptualise the integration of oral health into public health systems. The Charter consists of: (i) services (protection, prevention and promotion, and their enabling); and (ii) functions (governance, advocacy, capacity and information) (Figure 1). The aim of the Charter is to create resilient, sustainable and secure health systems worldwide that are able to weather any present or future public health challenges. Instead of focussing on specific aspects of public health, these services and functions are expected to be used as a common language to unite all public health professionals to align their action plans under the same framework.

Oral diseases significantly impact overall health and well-being. However, oral health and oral health care have been historically separated from general health and medical care. The Oral Health Working Group (OHWG) of the WFPHA has worked with public health researchers, policymakers and advocates to streamline the integration of oral health into public health systems under the components of the Charter. This paper aims to provide guidelines on how oral and public health agendas can be aligned to overcome barriers that prevent effective and coordinated approaches. Communication and advocacy with policymakers through innovative approaches are ways in which this goal can be achieved.

Oral diseases affect individuals through pain, compromised nutrition and financial costs. The consequences of poor oral health are not merely a burden on the individual but also on society as a whole. In most industrialised nations, dental caries affects 60%–90% of schoolchildren and nearly 100% of adults¹. Oral diseases have an impact on health systems through the cost of admission and time spent in hospitals as a result of complications arising from these diseases. The treatment of oral diseases is also costly; a report estimated that the burden of oral diseases totalled US$442 billion in 2010². Despite significant improvements in oral health globally, the burden of disease is highest in disadvantaged populations. This could be attributed to barriers to accessing oral healthcare services or the lack of payment mechanisms.

Oral diseases share common risk factors with chronic diseases, such as unhealthy diet, tobacco and substance abuse, trauma, stress and socio-economic determinants. Sugar is the common factor that leads to dental caries, obesity and Type II diabetes. A systematic review reported that there was a relationship between childhood obesity and early childhood caries³. A separate study also demonstrated the association between diabetes and periodontitis and urged health-care professionals to integrate services between oral and general health⁴. Another common risk factor is tobacco use. The effects of smoking on lung cancer and respiratory diseases have been well documented⁵. Studies have shown the negative impact of chronic smoking on periodontitis as well as the strong association between smokeless tobacco and oral cancer⁶,⁷. With the fact that oral diseases and non-communicable diseases (NCDs) have common modifiable risk factors, the World Dental Federation (FDI) urged national dental associations to collaborate with NCD organisations to promote common solutions. FDI reiterated the importance of integrating oral health into health systems and health curricula, including amalgamating oral health and NCDs into Sustainable Development Goal (SDG) strategies and monitoring frameworks⁸. It is encouraging to note the establishment of dual degree programmes between clinical dental subjects and public health.

Although these recommendations are important, in reality the implementation process is far from simple. Fragmentation of health systems poses a risk to vulnerable populations. A report by the Alliance for a Cavity-Free Future (ACFF) and the Policy Institute at
King’s College London stated that some of the barriers to dental caries prevention include the lack of healthcare payment systems that support preventive care and the absence of reliable surveillance data to inform solutions, especially comprehensive economic analyses. The same can be said for all oral diseases globally as the dental public health community simply has not demonstrated to policymakers that oral diseases are of political importance. The advocacy is needed to bring changes and presents a unique challenge for all sectors, including labour and financial markets, housing, transport, social protection systems and, of course, public health systems.

Acknowledging that oral health is an essential component of general health and well-being, it is important that national public health and health professional organisations and national, as well as local, governments strengthen the move of oral health into primary care. A recent systematic review has shown that barriers to the integration of oral health into primary care include: the lack of political leadership and health-care policies; implementation challenges; discipline-oriented education; lack of continuity of care and services; and patients’ own perception of oral health-care needs. In order to facilitate global efforts in the integration of oral health into general public health systems, each of these barriers needs to be addressed.

To facilitate this process, the WFPHA’s oral health working group has developed a series of policies that improve access to preventive dentistry, provide affordable dental supplies and equipment, and propose effective infrastructure, and has provided potential solutions within the general public health system by adopting a common risk factor and life course approach. The different aspects of oral health supported in the policies have been subsequently joined in a call to action, released officially in 2017. The advocacy led by the group has its roots in the data collected through an extensive survey conducted in 2015 and 2016. This survey revealed that in 62% of countries, dental public health is only partially integrated in the public health system, while in 25% of the countries it has not been formally integrated at all. While 62% is not a negligible percentage, the integration is only partial and, in most countries, we observed a lack of specialists trained in dental public health leading their countries to better oral health and its integration with public health and health systems.

The policy papers developed by the WFPHA on oral health aspects have not only increased the awareness of public health professionals worldwide on the need to integrate oral health into general health at a national level; for example, implementation of WFPHA policy refers to ‘Oral Health for Children’. In 2015, this was formally adopted by the Mexico City government as part of the ‘Cada niño tiene derecho a una buena salud bucal’ (Every child has the right to good oral health) programme that incorporates healthy eating, hand hygiene and toothbrushing in schools. This programme is ongoing and preliminary evaluation will be held in the future; we believe that it is a very important example of integration and adoption of the common risk approach applied to a city with important inequities within its population. Based on this experience, WFPHA’s call to action, ‘Integrating Oral Health with Public Health Systems under the Framework of the Global Charter for the Public’s Health’ aims to move oral health discussion to a global scale with the Charter as a catalyst for the development of global consensus on oral and public health integration.

To illustrate the importance of global public health consensus, it is important to appreciate the success of The Ottawa Charter for Health Promotion. This was a catalyst for the establishment of health promotion as an important discipline in public health. It has been 31 years since the declaration of the Ottawa Charter, but it continues to be a backbone for other crucial health-promotion agendas such as The Bangkok Charter for Health Promotion in a Globalized World and the Shanghai Declaration on Promoting Health in the 2030 Agenda for Sustainable Development. All these movements were made possible because of the global consensus on health promotion. A similar momentum needs to be generated to push the cause of integration of oral health with general public health forward. Unifying bodies, such as WHO, FDI and national public health associations, should create a platform for heads of state, public health professionals and academic institutions to come together to develop a
global action plan. The Charter provides a solid, yet flexible, framework that allows for policy development and implementation.

National public health systems have made tremendous efforts in coordinating oral health services, but there is an urgent need for international coordination to promote equity across different nations and reduce inequalities. Global multisectoral dialogues, coordination and decision-making can identify the different population needs and formulate interventions that best suit the trend in oral health services. Public health has benefited from global coordination efforts in emergency preparedness, although oral diseases are not viewed as urgent, but the integration of oral health into public health systems can also benefit from international dialogues. Resilient and secure health systems at national levels can be established worldwide through coordinated global efforts. With the ever-growing demands for accountability of evidence-based programmes and policies, it is vital to ensure that all health inventions have comprehensive monitoring and evaluation processes.

Integrating oral health into public health has to be a multiple-pronged initiative in training, practice, health promotion and education. One of the barriers to public health integration is the single-disciplinary teaching of health professionals and the lack of training in competencies. Interprofessional education, including training of general medical practitioners, paediatric practitioners, family care physicians and community nurses in basic preventive dentistry, may lead to better inclusion of oral health in general public health services. At a community level, collaborative practices could also change both practitioners’ and patients’ perceptions towards the distinction between oral health and general health through health promotion and education. A systematic review has suggested that relationship-focused leadership contributes to improvement of outcomes in the health workforce and work environments, and in the productivity and effectiveness of health-care organisations. Extrapolating on that theory, leadership in global public health also needs to be strengthened to integrate oral health into cross-sector policies, health-system policies and governance mechanisms. Public health practices worldwide are facing many new challenges, and in response, integrated health-care delivery systems need to be adaptive and flexible with changing global trends and demographics.

The WFPHA calls for governments and multilateral organisations to develop international health regulations to facilitate coordination among partners. These include inter-governmental parties at international, national and local levels, civil societies, educational institutions and corporations. These partners need to reorient their systems and strengthen ties to provide better health outcomes. To have impactful policies that are meaningful and effective, a global

![Figure 2. Summary services and functions of the global call to action.](image-url)
coordination effort must be made. Figure 2 illustrates a summary of the services and functions in the global call to action. Note that although some services share common subcategories, each subcategory has been added under the most pertinent service.

Educational institutions should use their capacities to train and empower the next generation of public health professionals and leaders not to work in isolation in their own discipline. Public health teachings should be fully integrating. Global trends in health and demographics are rapidly changing, and, in practice, health policies involve multiple-sector governance mechanisms, and future leaders in health should be trained as such.

Lastly, leaders in public health and oral health need to develop concrete actions to tackle common risk factors. It has been demonstrated, through research, that oral diseases share common risk factors with major chronic diseases. It is time for public health professionals to see oral diseases as NCDs that deserve global attention and not segregate health-promotion interventions.

This should be the beginning of a long process that will not be limited to the integration of oral and public health but will lead to the establishment of strong, resilient and secure health systems in which oral health is embraced as part of the whole health-care system, based on meaningful government engagement and coordination with all appropriate actors within and outside dentistry.

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Conflict of Interests

None.

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REFERENCES