Addressing Oral Health Challenges Around the Globe

Integrating Oral Health with Non-Communicable Diseases as an Essential Component of General Health: WHO's Strategic Orientation for the African Region

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Abstract: In the context of the emerging recognition of non-communicable diseases (NCDs), it has never been more timely to explore the World Health Organization (WHO) strategic orientations on oral health in the WHO African region and to raise awareness of a turning point in the search for better oral health for everyone. The global initiative against NCDs provides a unique opportunity for the oral health community to develop innovative policies for better recognition of oral health, as well as to directly contribute to the fight against NCDs and their risk factors. The WHO African region has led the way in developing the first regional oral health strategy for the prevention and control of oral diseases integrated with NCDs. The support of the international oral health community in this endeavor is urgently needed for making a success story of this initiative of integrating oral health into NCDs.

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Oral health is essential to general health and well-being of all people and is recognized as an important component of public health as well as a basic human right. Oral diseases are among the most common and preventable non-communicable diseases (NCDs) worldwide that can affect one throughout an entire lifetime. The socioeconomic impact on oral health and diseases is significant in most countries, especially in poorer ones. Oral diseases are of multifactorial origin and share modifiable risk factors with the leading NCDs, including tobacco use, harmful alcohol consumption, and unhealthy diets.

Over the past decades, despite recommendations for integrated strategies to tackle oral diseases from the World Health Organization (WHO) and conceptual models based on the common risk factor approach developed by dental public health researchers, oral health programs in the field have mainly taken a vertical approach, characterized by attention to isolated, specific diseases. However, the global initiative against NCDs provides a unique opportunity to develop and implement effective population-wide prevention interventions as well as comprehensive patient-centered care strategies. These approaches are cross-sectional, tackling common risk factors and determinants of ill health and oral diseases in an integrated way. In this context, this article aims 1) to provide an overview of the WHO strategic initiatives regarding oral health in the WHO African region beginning in 2011, the Year of NCDs, and 2) to raise awareness of the paradigm shift occurring in the search for better oral health for all, involving the collaboration of the entire international oral health community.

WHO’s Leadership Role in Public Health

WHO is the directing and coordinating authority for health in the United Nations. It is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, and articulating evidence-based policy options. Rather than being in charge of implementing activities in individual countries, WHO provides technical support and contributes to monitoring and assessing of health trends.

In addition to its headquarters in Geneva, WHO has six regional offices and 154 offices around the world. The WHO African region is the largest of
issues in the prevention and control of oral diseases. Fourth, WHO continues to support oral epidemiological surveys and other tools that integrate monitoring and surveillance, while maintaining Oral Health Data Banks, hosted in Sweden and Japan, and promoting health research.4

In terms of staff dedicated to oral health, WHO has three official positions: one based in the region of the Americas, one in charge of the African region, and one at WHO headquarters. Fifteen WHOCCs are concerned with oral health activities; these support WHO oral health programs and priorities in terms of time, expertise, and funding. Finally, WHO has a special collaboration with the International Association for Dental Research (IADR) and the FDI World Dental Federation (FDI), both of which are among the NGOs that have official relations with WHO.

UN High-Level Meeting on NCDs

The United Nations High-Level Meeting (UNHLM) on NCDs held in New York was a historic occasion for global action on the prevention and control of NCDs. Renewed attention to NCDs was
the result of a long-term process in which disease projections, scientific evidence, and political advocacy came together to support the momentum that led to tangible action. Many studies, consultations, conferences, declarations, and WHO strategy papers, including those on oral health, are landmarks in that process. These include Oral Health in the African Region: A Regional Strategy 1999-2008, the WHO/AFRO regional NCD strategy (2000), the WHO Framework Convention on Tobacco Control (2003), the WHO Global Strategy on Diet, Physical Activity, and Health (2004), the Strategy for Improving General Health in the Americas Through Critical Advancements in Oral Health: The Way Forward, 2005-15 PAHO (2006), the World Health Assembly Resolution Oral Health Action Plan (2007), the 2008-13 Action Plan for Global Strategy for the Prevention and Control of NCDs (2009), the first Global Status Report on NCDs (2010), the Brazzaville Declaration on Prevention and Control of NCDs in Africa (April 2011), and the Moscow Declaration on NCDs (May 2011), to mention but a few of the relevant milestones.

Ratification of the UN political declaration on the prevention and control of NCDs concluded the UNHLM. This declaration commits governments of the world to significant and sustained action to address the rising burden of NCDs, such as cardiovascular diseases, cancer, chronic respiratory diseases, and diabetes and also includes oral diseases. In Article 19 of the declaration, member states recognized that oral diseases pose a major health burden in many countries, have common risk factors with the major NCDs, and can therefore benefit from common responses to NCDs. From an oral health perspective, the declaration recognized four main points: 1) oral diseases are part of the NCDs family, one of the emerging mainstreams in global health over the next few decades; 2) the common preventable risk factors approach is key to addressing the problems of oral diseases; 3) the primary role and responsibility of governments is to address the global burden and threat of NCDs; and 4) commitment of the international oral health community and partners is needed to support national efforts.

The WHO global NCD action plan 2013-20 follows on from commitments made by heads of state and government in the UN political declaration on the prevention and control of NCDs and was endorsed by the 66th World Health Assembly. The global action plan provides a clear roadmap and a set of practical policy options for member states, WHO, and partners. This document was developed with a global monitoring framework consisting of 25 indicators regarding morbidity and mortality, risk factors, and health system response. It affirmed a set of nine voluntary global targets to be reached by 2025. Even if oral diseases are not among the priorities and policy options, this key policy document offers a platform for integration of the prevention and control of oral disease into the management of other major chronic diseases.

This long-term journey to increase action on NCDs and to include oral diseases and related risk factors also shows how a paradigm shift operates from an individual disease/risk factor approach to integrated and cross-sectorial strategies. The global initiative against NCDs provides an opportunity for the oral health community to develop innovative policy options for better recognition of oral health, as well as directly contributing to the fight against NCDs and their risk factors.

WHO African Region Strategic Orientations and Priority Actions

In the context of the emerging recognition of NCDs, the Brazzaville Declaration on NCDs Prevention and Control in the WHO African Region (2011) was a milestone in the political commitment to the UNHLM. While much international attention has focused on the four main NCDs, African health leaders invited to Brazzaville in April 2011 also voiced concern about other non-communicable conditions. The Brazzaville declaration clearly recognizes “the burden of diseases attributable to cardiovascular diseases, diabetes, cancers, chronic respiratory diseases, hemoglobinopathies (particularly sickle-cell disease), mental health, violence and injuries, oral and eye diseases, in the WHO African Region.” It highlighted the fact that the region faces an increasing (double) burden of communicable diseases and NCDs, including those of oral diseases, which have associated (and significant) morbidity and mortality.

Similar to the major NCDs, oral health is currently undergoing a trend of deterioration driven by globalization, urbanization, and economic and demographic transitions, in addition to lifestyle changes. Due to the unequal distribution of oral health professionals and the lack of appropriate health care facilities in the African region, the majority of the population often have little or no access to oral health care. As a result, nearly all countries in the
region are burdened with high levels of untreated and preventable oral diseases, resulting in a consistently high patient demand for essential oral health care and posing challenges to any health care system.

With the intention of initiating and facilitating a change from vertical programming to integrating oral diseases into NCDs, in 2011 the WHO regional office for Africa carried out a “situation” analysis among member states to assess the current state of policy and program implementation related to oral health. Later the same year, a chief dental officer meeting with the participation of 17 Francophone member states was convened in Ouidah, Benin. The meeting discussed the challenges and opportunities of integrating oral health into NCD programs following the UNHLM on NCDs.10

The outcomes of the meeting were the starting point for developing a new set of four strategic orientations redefining the WHO’s technical assistance in the countries of the WHO African region: 1) making disease prevention and oral health promotion operational; 2) scaling up universal access to oral disease control in primary health care; 3) strengthening oral health information systems and integrating surveillance of common risk factors; and 4) building up intersectorial action and sustained political leadership. For these WHO strategic orientations, key interventions/priority actions were identified that have been, or can be, used to integrate oral health with NCDs policies and programs (Table 1).

Upcoming Steps in WHO African Region

To achieve this paradigm shift of placing oral health strategies under the NCDs umbrella, the WHO African region member states had to reach a regional consensus on major strategies in the area of oral health promotion and oral disease prevention and control. The actions proposed are intended to reduce the health and socioeconomic impact of oral diseases and NCDs, as well as health inequities, and to improve the quality of life of the population of the region. It proposes six voluntary and achievable oral health targets and focuses on four synergistic objectives aligned with the WHO Global Action Plan for Prevention and Control of NCDs 2013-20. These objectives are as follows: 1) strengthening national advocacy, leadership, multisectoral action, and partnerships for integrated prevention and control of oral diseases; 2) reducing common risk factors of oral diseases and NCDs, promoting oral and general health, and ensuring regular and general use of appropriate fluorides; 3) strengthening health system capacity for integrated prevention and control of oral diseases; and 4) improving integrated surveillance of oral diseases, monitoring and evaluation of programs, and operational research.

For each objective, a set of policy options were defined for addressing key risk factors and determinants of NCDs and oral diseases through a number of evidence-based, cost-effective, and sustainable interventions. The regional oral health strategy aims to facilitate the translation of innovative policy options into actions for effective control and management of oral diseases integrated with, and contributing to, the reduction of NCDs and their shared common risk factors, as well as health inequities and improving the quality of life of the population in the region.

Role of International Oral Health Community

The political declaration on NCDs, as well as the Global Action Plan for Prevention and Control of NCDs 2013-20, clearly recognized the primary role and responsibility of governments in responding to the threat of NCDs.7,8 These two documents defined a set of policy actions regarding the important role of WHO and the international community in assisting member states, particularly developing countries, in complementing national efforts to generate an effective and coordinated response that addresses the challenges of NCDs. The need for coordination and support of the countries by the international oral health community is probably even more necessary in the field of oral health. As key partners, academia, research centers, inter- and non-governmental orga-
organizations, and the private sector have a special role to play in such a process.

What are the specific and practical priority contributions expected by countries and programs of the WHO African region and beyond that will improve the efficiency of the fight against oral diseases and NCDs and boost implementation of these priority interventions? They are numerous, but Table 2 shows eight that are particularly crucial and should help to make a difference. Some of these proposals are complementary or linked with research priorities suggested by the IADR in the framework of the Global Oral Health Inequalities Research Agenda (IADR-GOHIRA) initiative, which sets out a research agenda to generate the evidence for a strategy to reduce inequalities in oral health within a generation.11

### Table 1. Strategic orientations and priority actions in the WHO African region

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<tr>
<th>Strategic Orientation</th>
<th>Key Interventions/Priority Actions</th>
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<tr>
<td>1. Making disease prevention and oral health promotion</td>
<td>Participation in tobacco control and actions against harmful use of alcohol to prevent oral diseases, cancers, and other health consequences.</td>
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<td>operational.</td>
<td>Promotion of a healthy diet throughout a lifecourse, including decrease in consumption of foods and drinks containing high amounts of free sugars, salt, and saturated and trans fats, along with increase in consumption of fruits, raw vegetables, and dietary fiber such as whole grains.</td>
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<td>Promotion of optimal exposure to fluoride, with a special focus on support measures that encourage legislation favorable to the production, distribution, and accessibility of quality fluoride toothpaste.</td>
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<td>Promotion of healthy living and working environments conducive to healthy lifestyles, e.g., access to safe water and improved sanitation for proper oral hygiene in schools, workplaces, cities, and community-based establishments.</td>
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<td>Advocacy to raise taxes and duties on tobacco products, alcohol products, and unhealthy foods and beverages and to encourage the regulation of labelling and advertising of unhealthy products.</td>
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<td>Countering commercial and economic interests that continue to drive key risk factors in safeguarding public health from any form of potential conflicts of interest.</td>
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<td>Ensuring participation and empowerment of the community and civil society groups in planning, implementation, and evaluation of oral health promotion programs.</td>
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<td>2. Scaling up universal access to oral disease control</td>
<td>Early detection, diagnosis, and essential quality care of oral diseases at PHC centers, based on the WHO Package for Essential NCDs approach.</td>
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<td>in primary health care (PHC).</td>
<td>Building capacity of health personnel and community leaders in the prevention and control of oral diseases as part of training in integrated NCD at PHC centers.</td>
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<td>Ensuring availability and distribution of affordable essential medical consumables, generic drugs, and other adequate supplies for the management of NCDs, including oral diseases, with required infection control procedures</td>
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<td>Supporting innovative financing systems for oral health care including existing or emerging universal health coverage programs.</td>
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<td>3. Strengthening oral health information systems and</td>
<td>Generating quality data on oral health conditions to support advocacy, planning, and monitoring.</td>
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<td>integrating surveillance of common risk factors.</td>
<td>Compilation of oral health indicators as markers for health status, system performance, and process.</td>
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<td></td>
<td>Strengthening of national health information systems on NCDs, with systematic collection of oral diseases data.</td>
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<td>Integration of existing oral health modules into ongoing NCD survey tools, e.g., STEPS, NCD Country Capacity Surveys, GSHS.</td>
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<td>Establishing monitoring systems to track implementation and the impact of existing programs and interventions.</td>
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<td>4. Building up intersectorial action and sustained political</td>
<td>Encouraging sustainable partnerships inside and outside the health sector, as well as engaging communities, civil society, and the private sector.</td>
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<td>leadership.</td>
<td>Promoting a healthy lifestyle in supporting cross-cutting public policies involving transport, education, sports, and urban design to encourage physical activity and comprehensive diet, alcohol, and tobacco control measures.</td>
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<td>Advocacy for higher prioritization of oral health in the context of NCDs and general health by raising awareness and targeted communication with top-level political commitment, decision makers, media, and the public.</td>
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Table 2. Key priority contributions of the international oral health community expected by countries and programs

1. Hasten the generation of scientific evidence on the relationship between oral diseases and other non-communicable conditions, as well as their related risk factors.
2. Contribute to the production and distribution of affordable quality oral hygiene products for all children.
3. Contribute to research and development of a quality dental filling material that is affordable, safe, and environmentally friendly.
4. Support operational research for development of preventive oral disease interventions integrated with NCDs (“Best Buys”) having significant public health impact that are highly cost-effective, inexpensive, and feasible to implement, especially in primary health care.
5. Make use of information and communications technology to improve the capacity for surveillance and monitoring of oral health data, as well as awareness and education campaigns against oral diseases and common NCD risk factors.
6. Increase emphasis on integrated prevention and treatment of oral diseases with NCDs into health professions training curricula at all levels.
7. Advocate an increase in political commitment at the highest levels in favor of NCDs and related risk factors, as well as reinforcing public/private partnerships to support multisectorial actions.
8. Mobilize resources and promote investment in all integrated programs of prevention and control of oral diseases with NCDs.

Conclusion

The global initiative for the prevention and control of NCDs can be seen as a historic opportunity to put oral health high on the global health agenda of policymakers worldwide. The WHO African region has shown the way in developing the first regional oral health policy document for the prevention and control of oral diseases integrated with NCDs. The initiative of integrating oral health into NCDs can be made into a success story if it receives the commitment and contributions of the international oral health community under the leadership of oral health policymakers in individual countries. Academic bodies, research institutions, and oral health professionals have to make a joint and lasting contribution to the benefit of people living in all countries for generations to come. NCDs are one of the top health priorities for coming decades, and oral diseases have to be one of the priority targets in that framework.

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REFERENCES