

# Oral Health within General Health

## Roundtable proceedings

8 November 2023, Geneva, Switzerland



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# Executive summary

The high-level non-governmental organization (NGO) roundtable convened diverse stakeholders to address critical issues related to oral health, the impact of sugar consumption, and their integration into broader strategies for preventing non-communicable diseases (NCDs). The roundtable's discussions were framed within the context of global health challenges, focusing on evidence-based approaches, policy development, and collaborative action.

## Roundtable overview

Oral diseases continue to pose a significant public health challenge, affecting some 3.5 billion people. Evidence is growing about the relationship between oral health and general health conditions (such as coronary heart disease, diabetes, Alzheimer's Disease, and chronic lung conditions). FDI World Dental Federation (FDI) has been developing awareness among patients, health professionals and policy makers of the associations between oral disease, general health and well-being.

Oral health teams collaborating with primary care teams have the potential to be important advocates, enablers and mediators for oral and general health. Working in collaboration to tackle common risk factors, in particular sugar, to meet the World Health Organization Global target 2.1 that by 2030, 50% of countries implement policy measures aiming to reduce free sugar intake will have a significant impact on multiple NCDs.

On 8 November 2023, FDI hosted a roundtable on oral and general health, which was supported by Colgate. The purpose of the roundtable was to raise awareness of the importance of oral health in overall health outcomes, identify challenges and opportunities for integrating oral health and general health in global health policies and practice, share knowledge and best practices, identify future areas for collaboration and seek support for "No Sugar November".

These proceedings summarize the presentations and discussions that took place during the roundtable and describe how they will inform the future work of the Oral Health within General Health project. The views expressed within are those of the participants and do not necessarily reflect those of FDI or Colgate.



# Welcome remarks

**Professor Chris Vernazza, Alliance for a Cavity Free Future trustee, Head of School, Professor of Oral Health Services, School of Dental Sciences, Newcastle University.**

Professor Vernazza welcomed the participants to the Oral Health within General Health roundtable. He acknowledged the global burden of oral diseases and how they share common risk factors with other NCDs. He highlighted that to achieve oral health for all it will be essential to work collaboratively and ensure that oral health is embedded in the overall health agenda.

## Presentation 1

### Oral health within general health: What is the current evidence?

**Dr Zehra Yonel, Clinical Lecturer and Honorary Specialist Registrar in Restorative Dentistry, School of Dentistry, University of Birmingham.**

Dr Yonel presented the current research base of oral and systemic health.

The World Health Assembly (WHA) has recognized the importance of integrating oral health into the NCD agenda, highlighting the significant burden of oral diseases. Oral diseases include periodontal diseases, gingivitis and periodontitis, that are chronic inflammatory conditions that affect the tissues which support the teeth. Gingivitis is a reversible, inflammatory reaction to dental biofilms that remain in the mouth due to inadequate oral hygiene. In susceptible individuals, this inflammatory response progressively destroys the periodontal tissues including the alveolar bone leading to tooth loss.

The impact of periodontitis extends beyond oral health, encompassing psychosocial and functional aspects, financial implications, and contributing to systemic inflammatory burden.

Periodontitis has been associated with fifty-seven conditions<sup>1</sup> however, the most significant associations exist with diabetes, cardiovascular diseases (CVD), and kidney disease.

There is a bi-directional relationship between periodontitis and diabetes. Studies have demonstrated that in patients with and without diabetes, periodontitis is associated with elevated HbA1c. Furthermore, severe periodontitis is associated with an increase in diabetes complications and when periodontitis is treated effectively there is a positive impact on diabetes outcomes. Additionally, poor periodontal health has been linked with the development of CVD through the systemic inflammation caused by oral bacteria. Patients with chronic kidney disease (CKD) and transplant recipients often develop oral lesions. Mortality rates increase by 16% in patients with both CKD and periodontitis, and by 23% in those with CKD, periodontitis, and diabetes.

Collaborative efforts by the World Heart Federation (WHF), International Diabetes Federation (IDF), and European Federation of Periodontology have led to the development of guidelines and consensus documents emphasizing the seriousness of periodontitis.

“Making Every Contact Count” emphasizes the need for holistic health approaches. Moreover, guidance published by a joint workshop of the European Federation of Periodontology (EFP) and the European arm of the World Organisation of Colleges and Associations of Family Doctors (WONCA), recommend that, where feasible dentists and dental teams should undertake a two-step protocol whereby patients at high risk according to a validated questionnaire undertake a point-of-care HbA1c test and refer to the family doctor for formal diagnosis if HbA1c values exceed cut-offs defined by national guidelines. Given the shared risk factors with other NCDs the dental team has a key role to play in providing preventive advice not just for oral health, but also for common health conditions.



## Future directions

Integrated Care Pathways (ICPs) are structured multidisciplinary care plans which detail essential steps in the care of patients and are particularly beneficial in managing chronic diseases. They are used to improve the quality and coordination of care across different disciplines and sectors.

Enhanced remuneration for healthcare professionals to provide preventive care and NCD monitoring. Improved regulation and indemnity guidance to protect patients and providers. Finally, information technology system upgrades are necessary to allow the integration of medical and dental records.

# Presentation 2

## What COVID-19 research tells us about oro-systemic links

**Dr Graham Lloyd-Jones, Consultant Radiologist, Salisbury Hospital**

Oro-Systemic Disease represents a class of conditions where the pathology in the mouth influences or mediates systemic diseases. The focus of this presentation encompasses the orovascular aspects, blood flow, and overall bodily impact.

COVID-19 provides a distinct case study, presenting unique radiographic images on X-rays and more detailed manifestations in CT scans, including dilated blood vessels. As a primarily vascular disease of the lungs, it demonstrates clotting and congestion differing from typical pneumonia. 'Nasal and oral epithelial cells are primary infection sites with SARS-CoV-2. In the early stages of COVID-19, the mouth serves as an important site of viral infection and replication. 'High viral load in saliva has been reported as an accurate predictor of severe outcomes and mortality. Additionally, COVID-19 shares common risk factors with periodontal diseases.

COVID-19's bilateral damage to the lower lungs and its association with poor outcomes in periodontitis patients are notable, hypothetically via translocation of SARS-CoV-2 to the lungs directly via the bloodstream. In those with clinical evidence of periodontitis, there's a markedly increased mortality ratio.<sup>2</sup>

Damaged oral mucosa differs anatomically from healthy tissue, potentially increasing bacteremia and distant body inflammation. Porphyromonas gingivalis, a significant bacterial agent, can spread systemically, impacting conditions like rheumatoid arthritis and Alzheimer's disease. 'Emerging evidence points to dental treatments being beneficial in clinical outcome in patients with type II diabetes, cardiovascular disease, rheumatoid arthritis and Alzheimer's disease.

The <https://whole-body-health.fdiworlddental.org/> project presents the latest, most robust research on oral and general health and underscores the importance of dental and wider medical professionals in systemic health management.

## Conclusion

A paradigm shift is needed in medical understanding, recognizing the mouth as a central component interconnected with various bodily systems. This recognition is crucial for the effective management and prevention of a range of systemic diseases.



# Presentation 3

## Periodontitis: the 6th complication of diabetes

**Dr. Dániel Végh Ph.D., Assistant Professor, Specialist in Prosthodontics Group Leader, Dentistry and Prosthodontics Diabetes Dental Research Group, Semmelweis University.**

The International Diabetes Federation (IDF) emphasizes the significant link between diabetes and oral health, particularly periodontitis. There is a pressing need to translate scientific evidence into understandable language for patients to effectively manage their health.

Approximately 10% of the global population lives with diabetes, and an additional 10% are in prediabetes stage, totaling 16-18% of the population living with glucose metabolic disorders (GMD). While most people with diabetes are aware of their condition, awareness of periodontitis is considerably lower. Currently, about 425 million people are estimated to live with diabetes. Diabetes significantly increases the risk of periodontitis, a significant contributor to tooth loss and diminished quality of life. Types of diabetes vary, including Type 1, Type 2, and diabetes induced by pregnancy.

Blood glucose monitoring is crucial in diabetes management. Continuous Glucose Monitoring (CGM) systems, which can measure glucose levels every five minutes, are becoming more prevalent. Hypoglycaemia is a common issue, particularly in Type 2 diabetes.

Educating patients with diabetes on oral hygiene is vital. Many patients rely on advice from non-professional sources, and not all are aware of the warning signs of oral diseases. Additionally, diabetes can cause oral complications including oral infections, burning mouth syndrome, xerostomia, dental caries and delayed wound healing. Worryingly, more recent research has highlighted a link between uncontrolled diabetes and medication-related osteonecrosis of the jaws.

### IDF initiatives and support

The IDF (in cooperation with EFP) has developed guidelines for patients with diabetes, which originated from a workshop and evolved into the Madrid Consensus. These guidelines are designed for various healthcare professionals, including diabetologists, dentists and pharmacists, and offer straightforward guidance for patients. IDF has been actively engaging in dental screening initiatives, collaborating research groups such as the Diabetes Dental Research Group at Semmelweis University to provide access to screenings at the hospital level, with referrals for those needing further care. NGOs are also involved, and on-site screenings are available at World Diabetes Day events and diabetes club meetings (Egy Csepp Figyelem Foundation).

Special efforts are made to educate young patients about oral care and to assess the oral health (OH) status of children with Type 1 Diabetes (T1D), many of whom also live with celiac disease. IDF provides advice on maintaining oral health, especially at night, to mitigate risks associated with hypoglycaemia.

Oral health training is available for the participants of the Young Leaders in Diabetes Program, which is IDF's global training program for young international advocates living with diabetes.

### Conclusion

There is a critical need for guidelines catering to various stakeholders, including patients and healthcare professionals, to effectively manage the interplay between diabetes and oral health. These guidelines should address both the medical aspects of diabetes and the practical aspects of oral healthcare to ensure comprehensive patient management. The research group at Semmelweis University is a model program on advocacy, prevention and oral care for patients with diabetes mellitus. Educational and prevention programs together with other associations (such as FDI, NGOs) are crucial. Interdisciplinary cooperations and model programs can help to develop our initiative to a higher level, increasing the cost-benefit and the quality-adjusted life years (QALY) of our patients and our healthcare systems.



# Presentation 4

## Common risk factor approach to noncommunicable diseases

**Ms Liz Arnanz Daugan, Policy and Advocacy Manager – NCD Prevention, NCD Alliance**

NCDs are the leading causes of mortality and morbidity worldwide. Oral diseases, the most prevalent in terms of morbidity, play a significant role in diminishing quality of life. Hence, discussing oral health is crucial for improving overall well-being.

Many NCDs share common risk factors, suggesting that unified solutions could effectively address them. Overarching health system challenges must be overcome, and to mitigate NCD risk factors, it is essential to also extend efforts beyond health systems, focusing on the social determinants of health (SDoH) and commercial determinants of health (CDoH).

Globally, there are approximately 1.3 billion tobacco users, predominantly in low and middle-income countries (LMICs). The WHO Framework Convention on Tobacco Control (FCTC) is a landmark treaty addressing tobacco use, including smokeless and chewed tobacco highly prevalent in South-East Asia and linked to oral cancers. The upcoming Conference of the Parties (COP 10) in Panama will include discussion on tobacco marketing and media depiction. NCDA collaborates with the Global Alliance for Tobacco Control, who leads the tobacco control civil society response.

Alcohol use results in over 3 million deaths annually and is directly linked to at least seven types of cancers, including oral cancers. It also contributes to dental injuries. Of WHO's various technical packages and strategies, WHO's SAFER and the global alcohol strategy and action plan, aim to address alcohol use. NCDA collaborates with Movendi International and GAPA, who lead the global civil society response to alcohol use.

Poor diets are the deadliest risk factor for NCDs, causing 12 million deaths annually. Cost-effective dietary interventions now expand to other critical nutrients beyond salt, and assess impacts on oral health. WHO's upcoming guidelines on nutrition policies are key global policy areas to explore to advance oral health. However, food systems policies are complex, often influenced by large industries that seek to interfere with policymaking. The WHO FCTC prohibits industry engagement in tobacco control policymaking, but engagement approaches with alcohol and unhealthy food and drink industries differ enormously. This gap must be addressed to effectively combat oral diseases and other NCDs.

## NCD response and universal health coverage

NCDA is actively preparing for the UN High-Level Meeting (HLM) on NCDs, advocating for oral health integration across the policy cycle. Prioritizing technical policy development for NCD prevention, NCDA emphasizes its cost-effectiveness and investment potential. NCDA is also advocating for increased financing and integration of NCDs into broader global health agendas like wellbeing, UHC, pandemic preparedness, and climate change.

Moving forward, the focus for NCD prevention work at NCDA will be on getting commitment from countries on common policy areas across NCD risk factors. NCDA has launched documents addressing marketing and labelling policy across unhealthy products. NCDA is advocating for regulating harmful marketing practices to protect both physical and mental health, particularly in children. Both documents recommend comprehensive policy approaches across unhealthy commodities and aim to engage governments in these policy areas ahead of the UN HLM.

On labelling, the implementation of compulsory front-of-pack labeling on food products stands as a pivotal public health intervention. This approach aims to provide consumers with clear, accessible nutritional information, enabling more informed choices regarding their dietary intake. Such transparency in food labeling is crucial in combating the rising prevalence of diet-related NCDs and improving overall public health.





Alcohol labeling presents a significant opportunity to educate the public on the risks associated with alcohol consumption, particularly its links to various types of cancers. Robust labeling policies can play a critical role in raising awareness of these health risks, potentially leading to a reduction in alcohol-related harm, but implementation so far has been low.

Ireland has emerged as a leader in this realm, exemplifying strong and effective policy implementation in alcohol labeling to be implemented from 2026. Their robust approach should serve as a model for other nations, highlighting the potential impact of well-designed public health policies in reducing the incidence of alcohol-related diseases and promoting healthier habits among the populace.

## Open discussion

### **Integrating oral health into systemic health: current initiatives, barriers, and future directions**

The discussion highlighted an approach centred on common risk factors and the influence of unhealthy commodity industries. This perspective emphasized the connection between broader health promotion efforts and the creation of healthier environments, with a specific note on the link between obesity and periodontitis.

The importance of training young advocates to disseminate knowledge within their communities was underscored. Emphasis was placed on the necessity of interprofessional collaboration and the development of evidence-based consensus for effectively integrating oral and systemic health.

Key barriers were identified in integrating oral health into global health policies, particularly gaps in medical education concerning oral diseases and the lack of established referral systems between dental and medical professionals. The need to extend oral health training to a wider range of communities was also highlighted. The conversation stressed the importance of joint action among various organizations and cautioned against over-reliance on small-scale studies. The need for more comprehensive research on interventions, especially those focusing on shared risk factors, was emphasized.

The discussion advocated for a holistic approach to health, suggesting that oral health conditions can provide significant insights into systemic health issues. The importance of addressing common risk factors and nutrition in engaging healthcare professionals in oral health was also discussed.

The challenges posed by existing regulatory and professional boundaries within healthcare professions were noted. The discussion highlighted the importance of navigating these boundaries to successfully integrate oral healthcare.

The training of nurses in Sub-Saharan Africa was discussed, particularly their initial lack of awareness about the connection between diabetes and oral health. The '6 by 6' approach, which includes sugar and oral diseases as major components in addressing NCDs, was mentioned as a key strategy.

The need for robust advocacy strategies to influence policymakers was emphasized. Utilizing existing evidence from areas like tobacco control and HIV responses as models for building a strong case for oral health integration was suggested.

## Conclusion

The discussions underscored the need for increased awareness, interdisciplinary collaboration, and more comprehensive research to integrate oral health into systemic health policies effectively. These efforts are crucial in addressing the global challenge of NCDs and enhancing overall health outcomes.



# Presentation 5

## The role of nurses in NCD prevention

**Karin Lavoie, Senior Policy Adviser, Nursing & Health Policy, International Council of Nurses**

Oral health is a vital component of the care provided by nurses, yet it often lacks sufficient emphasis in nursing practice. Nurses need to be more involved in addressing oral health issues, given their crucial role in patient care.

The nursing profession encompasses a broad spectrum of roles including behavioural science, leadership, interdisciplinary collaboration, healthcare teaching, research, supervision, and training. This diversity often leads to a lack of clarity about the profession's scope among other healthcare professionals. The term 'dental nurse' originated in New Zealand, denoting a profession distinct from general nursing in terms of education level and purpose.

Nurses are frequently the first healthcare providers consulted by patients for oral health issues. They play a crucial role in prevention, promotion, care assessment, education, and medical intervention related to oral health. Oral hygiene should be a fundamental part of nursing care. Nurses need to be aware of patients' beliefs and practices related to oral health, as patients often feel comfortable discussing their oral health with nurses due to the personal connection established in care settings. Additionally, nurses who are invested in their own oral health are more likely to provide oral healthcare to their patients, thus highlighting the need for nurses to be educated around the importance of oral health.

NCDs cause 41 million deaths annually, and while nursing plays a significant role in addressing this burden, the integration of NCDs and oral healthcare is not adequately embedded in the nursing curriculum. There is a strong link between nursing, oral health, and mental health, underscoring the need for comprehensive care approaches. The connection between NCDs and oral health is often unclear to nurses. Systematic intervention and enhanced education in this area are necessary. Interdisciplinary collaboration with dental professionals is essential for comprehensive care.

Nurses face several challenges in incorporating oral healthcare, including staff shortages, high workloads, migration, burnout, and toxic work environments. These issues are mirrored in the professions of dental nurses and dental hygienists.

Nurses are crucial in disseminating information to organizations. The global strategic directions for Nursing and Midwifery by the WHO represent successful initiatives that require further collaborative efforts for advancement.

## Conclusion

Nurses need to be involved at various levels in oral health promotion, necessitating more education and information. There is a call for recommendations specifically tailored for nurses to make a difference together and not alone.



# Presentation 6

## Pharmacists' contribution to oral health: Promoting oral self-care and the prevention and management of NCDs

**Mr Gonçalo Sousa Pinto, Lead for Practice Development and Transformation, International Pharmaceutical Federation (FIP)**

It is imperative for healthcare professionals to work collaboratively, providing coordinated and multidisciplinary care to patients. This integrated approach is crucial for comprehensive patient management. Pharmacists play a pivotal role in advancing healthcare agendas by providing resources, guidance, and direction. They are instrumental in facilitating an integrated approach to oral health and NCDs.

Recent collaborative efforts between the IDF and FDI have highlighted the role of pharmacists in diabetes prevention. Pharmacists are positioned to identify symptoms, make referrals, and contribute to the management of main NCD areas. They also have opportunities to engage with patients exhibiting 'red flag' symptoms, necessitating effective coordination mechanisms across disciplines, including nutrition and tobacco cessation.

As often the first point of contact, pharmacists play a critical role in advising patients and serving as a gateway to health systems and the referral process. This makes them integral to self-care and early intervention strategies.

To enhance the impact of pharmacists, there is a need for improved access to information, IT systems, and education about the effects of oral health in relation to other medications, such as antibiotics. Pharmacists can offer valuable oral health advice and recommend dental products, but they require adequate training and confidence. A significant challenge is the lack of oral health education in various disciplines, including pharmacy. There is a need to establish early connections between dental clinics and primary care, and to incorporate oral and systemic health connections into educational curricula.

Implementing a formal process for referrals, such as shared electronic health records (EHRs), is essential. Pharmacists should be able to access and contribute to these records, enhancing their role in patient care. Additionally, the focus should be on task sharing rather than task shifting, ensuring that each healthcare professional contributes to providing the best possible care.

Pharmacies represent a crucial resource in the health system, often serving as the first point of contact for patients. They are ideally placed for raising awareness about oral health and providing initial guidance, thereby playing a key role in public health advocacy and education.

### Conclusion

The integration of oral healthcare into the broader healthcare system requires a concerted effort in interprofessional collaboration, education, and resource sharing. Pharmacists, with their unique position in the healthcare delivery chain, are critical to this integrated approach, both in terms of promoting informed oral self-care and hygiene, and in integrating oral health awareness, symptom monitoring and referrals as part of the disease-state management in people living with NCDs.



# Presentation 7

## Caring, ethics, science

### Dr Jacques de Haller, Chair, World Medical Association Associate Members

Founded in 1947, the World Medical Association (WMA) comprises 115 member nations, representing some 10 million healthcare professionals. Its activities centre around reaching global consensus on medical ethics, socio-medical affairs, and providing representation to international organizations. The WMA also supports regional and national medical associations and engages in various projects emphasizing self-governance.

The WMA is known for its historic policies, including the Declaration of Geneva, which outlines the rights, responsibilities, and ethical guidelines for physicians. These policies undergo regular updates to stay relevant to contemporary medical practice.

Oral health has become an essential area of focus for the WMA. Recent roundtable discussions have delved into oral diseases and their general health implications, including pain syndromes like headaches and their connection to oral health.

The WMA asserts that dental medicine and care should not be considered a luxury but a necessity that must be affordable and accessible. It emphasizes that dental care is an integral part of primary healthcare and underscores the importance of oral health prevention as a public health issue.

### World Medical Association declarations and statements

The WMA has made several declarations and statements underscoring the importance of oral and overall health. These include:

- A statement on free sugar consumption (2019), linking high sugar intake to poor dental health and dietary quality, accompanied by advocacy recommendations.
- Emphasis on healthcare professionals' education in counselling and motivating patients for better oral health outcomes.
- A statement on obesity in children (2016), addressing it as a major public health concern and calling for regulated access to education and marketing in the media.
- The WMA's stance on the global burden of NCDs (2011/2022), reflecting its broad commitment to health issues.
- The WMA's Declaration of Ottawa on child health (1998/2020), calling for the full range of appropriate and high-quality healthcare services for all stages of childhood development.
- The WMA showcases a keen interest in collaborating on these topics, demonstrating the importance of a united approach in addressing oral health and related healthcare challenges globally.

### Conclusion

The WMA actively engages in various aspects of healthcare, with a growing emphasis on oral health as a critical component of overall health and well-being. Through its policies, declarations, and collaborative efforts, the WMA advocates for accessible dental care, comprehensive health education, and the addressing of public health concerns, reflecting its commitment to improving global health outcomes.



# Open discussion

## Integrating oral health into healthcare education and practice: perspectives and strategies

The discussion underscored the importance of integrating oral health into the broader healthcare context. Emphasis was placed on the significant burden of oral diseases, high out-of-pocket expenditures, and the lack of improvement in oral health outcomes over recent years. The need to balance prevention and treatment in oral healthcare was highlighted.

The FDI's project on improving oral health literacy among health professionals and patients was discussed as a crucial initiative. This project aims to enhance understanding and management of oral health issues among both providers and recipients of healthcare.

The challenge of adding more oral health content to already packed curriculums was discussed, particularly in the context of LMICs. There was a call for creative solutions to integrate oral health education without overburdening the existing curricula.

A report on the readiness for self-care published by the Global Self-Care Federation was mentioned. It aims to help countries identify their strengths and weaknesses in self-care, and the Federation is creating an alliance to develop a global roadmap for health literacy improvement.

The need for dental curriculums to evolve was discussed, with the recognition that some existing content could be removed to make space for new, relevant topics. It was suggested that oral health education does not necessarily need to be embedded in curricula but rather approached as a matter of awareness and priority, with a focus on not missing oral health problems in general healthcare.

The importance of linking different areas of healthcare knowledge and fostering interdisciplinary collaboration was emphasized. The idea of resolving case studies in collaboration with colleagues from various disciplines was suggested as a means to develop shared competencies and a collaborative understanding of patient care.

The role of accreditation in fostering interprofessional collaboration was discussed. The World Health Professionals Alliance presented a statement on interprofessional collaboration (IPC) that has been validated by various health professions, which includes a number of guiding principles for effective IPC.

The role of patient empowerment in managing their health, including oral health, was discussed from a physiotherapy perspective. The importance of patients taking responsibility for their health, alongside professional healthcare provision, was noted.

## Conclusion

In conclusion, the discussion at the roundtable brought forth multiple perspectives on integrating oral health into healthcare education and practice. The strategies proposed included enhancing oral health literacy, revising educational curricula, fostering interdisciplinary collaboration, empowering patients, and updating national regulations and accreditation standards. These approaches collectively aim to improve oral health outcomes and integrate oral healthcare more effectively into the broader healthcare system.



# Presentation 8

## Global Oral Health Action Plan 2023-2030: embedding oral health into NCD and UHC agendas

**Ms Nicole Rendell, Technical Officer, WHO Oral Health Programme, NCD Department, WHO**

Ms Nicole Rendell provided an overview of the World Health Organization's (WHO) work, focusing on efforts in oral health leadership, advocacy, policy development, and providing technical support to member states.

Oral health was acknowledged in the 2011 declaration on Non-Communicable Diseases (NCDs) and the 2019 and 2023 political declarations on Universal Health Coverage (UHC). The WHO is preparing for a global oral health meeting in December 2024, emphasizing the integration of oral health within the NCD and UHC agendas.

The World Health Assembly Resolution on Oral Health (2021) requests greater visibility and integration of oral health within the NCD and UHC agendas. The WHO now has a mandate, with policy documents and tools, to assist countries in implementing this policy agenda.

The adoption of significant policy documents at the World Health Assembly (WHA) in 2022, including the Global Oral Health Action Plan, provides a robust policy framework guiding global oral health direction towards 2030. The goal is to achieve UHC on oral health for all individuals and communities by 2030.

The Global Oral Health policy agenda includes six strategic objectives, 11 targets, and 100 actions, grouped to assign roles to various stakeholders with UHC as the central focus. Two overarching targets, including the concept of UHC for oral health, are under constant monitoring.

The governance of oral health involves member states, international partners, civil society, and the private sector. Key areas include national oral health policy leadership, international resource mobilization, civil society advocacy, and aligned actions by the private sector.

As part of oral health promotion and oral disease prevention, Member states are urged to address inequalities and commercial factors impacting oral health. International partners should focus on targeting risk factors and determinants, while civil society plays a role in policy development inclusion. The private sector is encouraged to consider product reformulation.

As part of oral health care, the emphasis is on strengthening UHC for oral health, with international partners working towards this goal through inclusion of oral health in programmatic and budget planning for UHC and the private sector investing in digital oral health solutions and public-private partnerships.

WHO provides technical guidance on cost-effective interventions like fluoride toothpaste campaigns, Silver Diamine Fluoride (SDF), glass ionomer cement, oral cancer early detection programmes, and sugar taxation. The WHO UHC compendium includes a package of oral health care interventions, and the 2023 update of the model list of essential medicines now includes fluoride-containing varnishes, gels, and mouth rinses.

The presentation concluded that whole-of-society approach is crucial for the success of these initiatives, with primary healthcare at the centre to achieve UHC. This approach serves as a platform for interprofessional collaboration towards a unified public health agenda for oral health, recognizing the collective benefits of working together in this field.

## Conclusion

WHO's efforts in integrating oral health into general health reflect a comprehensive and collaborative approach, involving various stakeholders and focusing on policy development, governance, prevention, care, and technical guidance to achieve universal oral health coverage.



# Presentation 9

## Sugary drinks: a public health crisis

**Dr Rob Beaglehole, New Zealand Dental Association spokesperson**

The harmful effects of sugary drinks on oral health were discussed, drawing parallels to the dangers of tobacco. It was noted that most sugars are consumed through sugary drinks, significantly impacting dental health.

The ease of administering general anaesthesia (GA) for dental procedures in New Zealand was contrasted with challenges in countries lacking such facilities. The necessity of using GA, particularly for children's teeth extractions, underscores the severity of dental issues caused by sugar consumption. Dr Beaglehole shared a personal experience of being motivated to advocate against sugary drinks after witnessing a soft drinks truck in a hospital, juxtaposed with the economic burden of teeth extractions on health systems.

The industry's tendency to blame parents for not regulating sugar intake in their children was discussed, alongside the presenter's experience treating very young patients, including an 18-month-old requiring full dental clearance. Caries was described as a disease of poverty, with a significant portion of weight gain attributed to diet. New Zealand's high sugar consumption rates correlate with high diabetes prevalence and complications, including diabetes-related blindness. India's high diabetes prevalence, with 74 million people living with the condition and millions potentially undiagnosed, was highlighted. The role of fruit juices as a source of sugar and their high fructose content was also discussed.

The link between artificial sweeteners, type-2 diabetes, and obesity was emphasized. Artificial sweeteners can disorient taste receptors and contribute to unhealthy weight gain, with people feeling less guilty about their sugar consumption.

New Zealand's consensus statement addressing the sugar crisis and the 'Switch to Water' campaign were mentioned. Efforts to address energy drinks, advocacy for restricting sugar sales to under-16s, and a successful campaign to eliminate sugary drinks from WHO premises were discussed. Furthermore, the effectiveness of simple advocacy acts, such as a famous athlete moving away a sugar-sweetened beverage bottle during a press briefing, was highlighted. However, the industry's harsh reactions to efforts to reduce sugar use, including a backlash against a symbolic gesture using extracted teeth, were noted.

Reports illustrating how the industry shifts to new markets when forced out of existing ones were shared. A quote from a former WHO Director-General framed the failure to address obesity as a failure of political will to confront big business.

## Conclusion

The discussion highlighted the significant health challenges posed by sugary drinks and the importance of robust advocacy and policy actions to mitigate their impact. The need for collective efforts to address these challenges, both at the individual and policy levels, was emphasized as crucial for improving public health outcomes.



# Presentation 10

## Sugar reduction advocacy in action

**Dr Rob Beaglehole on behalf of Prof. Manu Mathur**

The first “Two risk factors, too many diseases” workshop, was held in Mumbai, India in June 2022, focused on the issue of sugar and tobacco consumption. Sugar, having its origins in India, is a major contributor to the country’s type 2 diabetes burden. The workshop underscored the cultural significance of sugar in India and highlighted the mismatch between commerce and science, with unhealthy food options often being more affordable than healthier alternatives.

The development of the workshop emphasized four key areas: Conversation, Co-option, Collaboration, and Coalition. These components were aimed at fostering dialogue, partnership, and collective action against the excessive consumption of sugar. This workshop led to a Sugar declaration and the first “No Sugar Day” being celebrated on 1 November 2022, and “Less Sugar Month” throughout November (Figure 1) in India and is being rapidly adopted by other countries globally. Additionally, similar workshops conducted in Saudi Arabia and the Bahamas resulted in the Saudi and CARICOM Declarations, respectively, each addressing regional concerns about sugar consumption and its health impacts.

**Figure 1. Social media graphic from the Indian Dental Association**



An Action Almanac was proposed, outlining a strategic approach to address the challenge of sugar consumption. The Almanac’s framework includes:

- Assembling an array of influencers to drive change.
- Adopting an agreed agenda focused on specific goals.
- Aligning actors for concerted action against sugar overconsumption.
- Amplifying advocacy efforts to raise awareness and promote healthier choices.
- Accelerating action by discussing implementation strategies and progress monitoring, along with creating systems for replication.
- Asserting accountability to ensure that commitments are met, and progress is tracked.

## Conclusion

The workshops and declarations across various regions, including India, Kathmandu, Saudi Arabia, and the Bahamas, reflect a growing global concern about the health impacts of sugar consumption. The initiatives undertaken, such as the ‘No Sugar November’ campaign and the Action Almanac, demonstrate a concerted effort to address this challenge through international collaboration, strategic planning, and effective advocacy. These efforts are aimed at reducing the prevalence of sugar-related health issues, by promoting healthier dietary choices and lifestyle changes.





# Presentation 11

## FDI Position on Free Sugars

**Prof. David Williams, Professor of Global Oral Health, Queen Mary University and Chair FDI Vision 2030 Implementation and Monitoring Working Group**

The need to focus on countries with large populations and to implement impactful policies was highlighted. This approach is essential for addressing the global issue of excessive sugar consumption.

Prof. Williams presented the FDI's position on free sugars, emphasizing the need for countries to establish policies aimed at reducing sugar intake. The presentation referenced findings from the International Association for Dental Research (IADR) report on sugar consumption and noted the significant pushback from the sugar industry. The report identified the sugar industry as a major driver of sugar use in various countries. The FDI's position paper stresses the importance of holding industry accountable for its role in promoting high sugar consumption.

The FDI's position underscores the need for countries to not only develop policies that address sugar consumption but also to ensure that the sugar industry is held accountable for its marketing and distribution practices.

Prof. Williams highlighted the importance of promoting healthy workplaces, particularly in hospitals. There was a discussion on the dilemma faced by healthcare providers in hospitals regarding patient food choices. Patients often desire unhealthy foods during their hospital stay, leaving providers in a predicament between insisting on healthy options and accommodating short-term patient preferences.

## Conclusion

FDI's position on free sugars calls for concerted efforts at both the policy and practical levels to reduce sugar consumption. This includes targeting policies in populous countries, holding the sugar industry accountable, and addressing the role of healthcare environments in promoting healthier dietary choices. The presentation emphasized the broader implications of sugar consumption on public health and the need for a holistic approach to tackle this challenge.



# Presentation 12

## No Sugar November

**Dr Charanjit (Chaz) Jagait, Communications and Advocacy Director, FDI World Dental Federation**

'No Sugar Day', was an initiative originally started by the Indian Dental Association and has since been adopted by various countries. Initially conceived as a single-day event, it has evolved into a month-long campaign, 'No Sugar November'. This provides more flexibility and opportunities to make noise throughout the month rather than one specific day and also allows other sugar-reduction activities that are already taking place to be encapsulated i.e. New Zealand's 'Switch to Water' campaign. During November national dental associations and other organizations are encouraged to promote awareness about the need to reduce excessive sugar consumption.

Dr Jagait emphasized that the sugar agenda is extensive, and while 'No Sugar November' cannot replace the health-focused days of individual international NGOs, it serves as an effective strategy for addressing the issue of sugar consumption in a holistic manner. She highlighted that 'No Sugar November' is not the exclusive domain of any single organization but is instead a campaign that can be co-owned and supported by various groups. This collective approach is key to creating a movement that effectively tackles the global sugar crisis.

FDI expressed a desire to collaborate with other organizations to further develop and promote 'No Sugar November' as a global campaign. This initiative aims to leverage the support of different stakeholders to bring attention to the adverse effects of sugar consumption on health.

## Conclusion

The 'No Sugar Day' campaign, which has expanded into 'No Sugar November', represents a growing global effort to address the health issues associated with excessive sugar consumption. The campaign's evolution into a collaborative, month-long event provides a platform for various organizations to unite and amplify their advocacy efforts, aiming to create a significant impact on public health awareness and behaviours regarding sugar intake.



# Open discussion

## Strategies for advancing global advocacy and action against excessive sugar consumption

The discussions highlighted the importance of targeting public health approaches in various settings, including schools, prisons, and hospitals. Nutrition in prisons was specifically mentioned as being substandard, indicating a need for targeted public health initiatives.

The need for scaling up action and advocacy globally was emphasized. Participants expressed a need for advocacy materials to challenge the prevalence of sugary drinks and junk food in healthcare settings like hospitals. Additionally, they acknowledged the need for advocacy materials to support their efforts in reducing sugar consumption. FDI was identified as capable of providing advocacy materials and was encouraged to take tangible actions in collaboration with other organizations.

The importance of focusing on intermediate goals, such as advocating for sugar taxation, was discussed. The differentiation of sugar from tobacco and alcohol was highlighted, considering that sugary foods and drinks are essential goods and often cheaper. The importance of establishing healthy habits early in life was emphasized. Studies indicating early introduction of sugar in Latin America causing early childhood caries were mentioned.

The potential impact of sugar-free campaigns was recognized, with suggestions for making organizational events visibly sugar-free. These campaigns were seen as achievable commitments for raising public awareness. The symbolic nature of 'No Sugar Day' was discussed, alongside the need to engage policymakers and consider cultural differences in sugar consumption. The potential of joint events and communications among organizations was discussed. Collaborative efforts, such as during World Diabetes Day, could amplify the message against excessive sugar consumption.

The need for a broader strategy and clear target audiences was discussed. Educating healthcare workers about the campaign's objectives and consequences of sugar consumption was seen as crucial. The discussion concluded with an emphasis on the need to tackle sugar consumption at all levels, not just through symbolic events. Engaging journalists, local politicians, and raising the voice of civil society were suggested as ways to ensure oral disease and sugar-related issues are taken seriously.

In summary, the discussions underscored the urgency of addressing excessive sugar consumption through global advocacy, targeted public health approaches, and collaborative efforts across organizations. 'No Sugar November' and similar initiatives were recognized as starting points for broader campaigns and policy actions aimed at reducing sugar intake and promoting public health.

## Conclusion

In conclusion, the roundtable highlighted the multifaceted nature of the challenge posed by excessive sugar consumption and the necessity of a coordinated, multi-stakeholder response. By combining advocacy, policy development, education, and collaborative actions, the aim is to achieve significant and lasting improvements in public health.



# Key messages

## **Healthcare professionals need to work together in a coordinated and interdisciplinary manner.**

There was a strong emphasis on the need for healthcare professionals, including nurses, pharmacists, and dental professionals, to work together in a coordinated, interdisciplinary manner. This collaboration is essential for comprehensive patient care, especially in integrating oral health with systemic health.

## **Oral health education should be incorporated into the curricula of other healthcare professions.**

Oral health education should be incorporated into the curricula of various healthcare professions including nurses, doctors, pharmacists, and other healthcare professionals. This includes educating them on oral health's significance, its connection to systemic diseases, and the need for effective patient counselling and referral systems. Improving this education can enhance the ability of various healthcare professionals to identify, manage, and refer cases related to oral health.

## **Pharmacists' potential to help prevent and manage oral diseases as well as other NCDs should be maximized.**

Pharmacists are positioned to play a pivotal role in early detection, patient education, and referrals related to oral health issues. Their potential to contribute to managing non-communicable diseases (NCDs) and oral health should be maximized through better integration into the healthcare system.

## **Formal referral processes including shared electronic health records should be established.**

The establishment of formal referral processes, including shared electronic health records (EHRs) can facilitate better communication and coordination among healthcare professionals.

## **Task sharing not task shifting is essential to person-centred care.**

Task sharing, not task shifting, can help ensure that all healthcare professionals contribute effectively to patient care, encompassing both oral and systemic health aspects.

## **Robust advocacy strategies are needed to integrate oral health into broader health policies.**

There is a need for robust advocacy strategies to influence policymakers and integrate oral health into broader health policies. This includes leveraging existing models from other health areas such as tobacco control. Addressing oral health within the context of global public health concerns and the burden of NCDs is essential.

## **There is an urgent need to address the excessive consumption of sugar globally.**

In recognition of the significant global impact that excessive sugar consumption has on oral health, the development of non-communicable diseases (NCDs), and overall public health, there is an urgent need to address this common risk factor. A collaborative and multi-disciplinary approach is vital and key stakeholders including healthcare professionals, civil society organizations, dental associations, medical organizations, nutrition experts, public health advocates and policymakers need to work together.



# Calls to action

## Advocacy and policy development

- Develop and distribute advocacy materials targeting sugar consumption.
- Advocate for policy changes at national and international levels, including sugar taxation and marketing regulations.

## Education and awareness campaigns

- Implement education campaigns to improve oral health literacy among health professionals and patients.
- Promote public awareness about the risks associated with sugar consumption.

## Interprofessional collaboration and integration

- Strengthen interprofessional collaboration between various healthcare providers, including dentists, nurses, and pharmacists.
- Integrate oral health into general health policies and practices, especially within the context of NCD prevention.

## Targeting different settings and populations

- Focus on settings like schools, prisons, and hospitals to promote public health approaches tailored to specific needs.
- Address sugar consumption from early childhood to prevent habit formation.

## Global and local campaigns

- Support and expand the 'No Sugar November' campaign.
- Encourage organizations to host sugar-free events and congresses as symbolic actions against sugar consumption.

## Collaborative projects and joint communications

- Engage in joint projects and communications to amplify the message against excessive sugar consumption.
- Share success stories and best practices among organizations to foster a cohesive global response.

## Research and evidence gathering

- Conduct and share research to build a strong evidence base for advocacy and policy-making.
- Evaluate the impact of interventions and policies aimed at reducing sugar consumption.

## Engaging policymakers and industry stakeholders

- Directly address policymakers to advocate for public health policies targeting sugar consumption.
- Challenge and expose the influence of the sugar industry in public health matters.

## Fostering patient empowerment and self-care

- Promote patient empowerment and responsibility in managing their health, including oral health.
- Integrate oral health into self-care strategies and policy documents.

## Leveraging international events and platforms

- Leverage international annual diseases awareness days and health events to raise awareness and advocate for sugar reduction.
- Collaborate on dedicated events to create a unified message and joint outcomes.

## Practical implementation and monitoring

- Focus on practical implementation strategies, including progress monitoring and creating replicable systems.
- Assert accountability in the execution of these strategies.



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## Participants list

<b>Alzheimer's International</b>
<ul style="list-style-type: none"><li>• Mr Lewis Arthurton, Communications and Policy Manager</li></ul>
<b>C3 Collaborating for Health</b>
<ul style="list-style-type: none"><li>• Mrs Christine Hancock, Founder and Director</li></ul>
<b>FDI World Dental Federation</b>
<b>Vision 2030 Implementation and Monitoring Working Group</b>
<ul style="list-style-type: none"><li>• Prof. David M. Williams (Chair), Professor of Global Oral Health at Bart's and The London School of Medicine and Dentistry, Queen Mary University of London and Academic Lead, Centre for Dental Public Health and Primary Care</li><li>• Prof. Chris Vernazza, Alliance for a Cavity Free Future Trustee, Head of School, Professor of Oral Health Services, School of Dental Sciences, Newcastle University</li><li>• Dr Rita Villena-Sarmiento, Professor Universidad Peruana Cayetano Heredia, Head of the Department of Pediatric Dentistry San Martín de Porres University, Peru</li><li>• Dr Margaret Wandera, School of Dentistry, College of Health Sciences, Makerere University Kampala, School of Dentistry, Uganda Christian University</li><li>• Development and Innovation at Central Northwest London NHS Foundation Trust and Professor and Honorary Consultant in Dental Public Health at University College London (UCL). Director of the World Health Organization Collaborating Centre for Oral Health Inequalities and Public Health at UCL. Director of Research.</li><li>• Prof. Richard Watt</li></ul>
<b>Oral Health within General Health Task Team</b>
<ul style="list-style-type: none"><li>• Dr Graham Lloyd-Jones, Consultant Radiologist, Salisbury Hospital</li><li>• Dr Zehra Yonel, Clinical Lecturer and Honorary Specialist Registrar in Restorative Dentistry, School of Dentistry, University of Birmingham</li><li>• Dr Rob Beaglehole, New Zealand Dental Association Spokesperson</li></ul>
<b>Headquarters team</b>
<ul style="list-style-type: none"><li>• Dr Rachael England, Education and Public Health Manager</li><li>• Dr Paula Anabalon, Education and Public Health Manager</li><li>• Mr David Cooke, Associate Director, Partnerships and Corporate Relations</li><li>• Dr Charanjit Jagait, Communications and Advocacy Director</li><li>• Ms Nina Noest-Fowler, Education and Public Health Manager</li><li>• Ms Marina Novachuk, Education and Public Health Director</li><li>• Ms Tolu Osigbesan, Advocacy and Policy Manager</li></ul>
<b>Global Self-care Federation</b>
<ul style="list-style-type: none"><li>• Dr Muriel Schneider, Program Director</li></ul>



<b>International Pharmaceutical Federation</b>
<ul style="list-style-type: none"><li>• Mr Gonçalo Sousa Pinto, Lead for Practice Development and Transformation</li></ul>
<b>International Council of Nurses</b>
<ul style="list-style-type: none"><li>• Ms Karine Lavoie, Senior Policy adviser, Nursing &amp; Health Policy</li></ul>
<b>International Diabetes Federation</b>
<ul style="list-style-type: none"><li>• Dr Daniel Vegh, Specialist in Prosthodontics Group Leader, Dentistry and Prosthodontics Diabetes Dental Research Group, Semmelweis University</li></ul>
<b>NCD Alliance</b>
<ul style="list-style-type: none"><li>• Ms Liz Arnanz Dagan, Policy &amp; Advocacy Manager – NCD Prevention</li></ul>
<b>World Heart Federation</b>
<ul style="list-style-type: none"><li>• Ms Lana Raspail, Science Programme Manager</li></ul>
<b>World Health Organization</b>
<ul style="list-style-type: none"><li>• Ms Nicole Rendell, Oral Health Programme, NCD Department</li></ul>
<b>World Health Professions Alliance</b>
<ul style="list-style-type: none"><li>• Dr Joannah Caborn Wengler, Manager</li></ul>
<b>World Medical Association</b>
<ul style="list-style-type: none"><li>• Dr Jacques de Haller, Chair of the World Medical Association Associate Members</li></ul>
<b>World Obesity</b>
<ul style="list-style-type: none"><li>• Ms Maggie Wetzel, Head of Policy &amp; Advocacy</li></ul>
<b>World Physiotherapy</b>
<ul style="list-style-type: none"><li>• Ms Birgit Mueller-Winkler, Policy Manager</li></ul>



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