



IADR

International Association
for Dental Research

June 26, 2022

Tedros Adhanom Ghebreyesus, PhD.
Director-General,
World Health Organization
20, Avenue Appia, CH-1211
Geneva 27

Re: Draft Updated Appendix 3 of the WHO Global NCD Action Plan 2013 – 2030.

via email: NCDappendix3@who.int

The International Association for Dental Research (IADR), which represents over 10,000 researchers around the world with a mission to drive dental, oral and craniofacial research for health and well-being worldwide, appreciates the opportunity to share our thoughts on the Draft Updated Appendix 3 of the World Health Organization (WHO) Global Non-Communicable Disease (NCD) Action Plan 2013 – 2030. IADR applauds the WHO for considering the emergence of new evidence of cost-effectiveness and new recommendations since the initial adoption of the WHO Global NCD Action Plan. We also support the provision of interventions that may be used by countries to tailor their approach to accelerate national NCD responses.

While the IADR understands that the menu of cost-effective interventions for oral health is being developed as part of the process to advance the action plan for public oral health and is not included here, it would be a missed opportunity not to comment on this Draft Updated Appendix 3 to better integrate oral health into the NCD Action Plan.

As stated in the [WHO adopted Global Strategy on Oral Health](#), “Oral diseases and conditions share risk factors common to the leading NCDs, that is, cardiovascular disease, cancer, chronic respiratory disease, diabetes and mental health conditions. These risk factors include both smoking and smokeless tobacco, harmful alcohol use, high sugars intake and lack of breastfeeding, as well as the human papillomavirus for oropharyngeal cancers.”

The IADR supports the Draft Updated Appendix 3 of the WHO Global NCD Action Plan 2013-2030 and has the following specific recommended additions:

- T4 – add multi-unit (or multi-family) housing, so it reads “Eliminate exposure to second-hand tobacco smoke in all indoor workplaces, public places, public transport, and multi-unit housing”

Rationale: Second-hand smoke can travel within *multiunit housing* and common areas through doorways, cracks in walls, electrical lines, ventilation systems and plumbing¹.

- H12 [New] – Limit free sugars to less than 10% of total energy intake.

Rationale: There is evidence of moderate quality showing that dental caries is lower when free-sugars

+1.703.548.0066
+1.703.548.1883
1619 Duke Street
Alexandria, VA 22314-3406, USA
www.iadr.org

intake is < 10% E². This systematic review was part of the basis of the WHO Guideline on free sugars for adults and children, which provided “updated global, evidence-informed recommendations on the intake of free sugars to reduce the risk of NCDs in adults and children, with a particular focus on the prevention and control of unhealthy weight gain and dental caries³.” This intervention should stay regardless of the Sugars-Sweetened Beverage (SSB) Taxation analysis as SSBs are but one, albeit important, source of free sugars.

- D7 [New] - Oral health care for people with diabetes.

Rationale: Diabetes has been shown to result in adverse outcomes to numerous body systems and organs including the eyes, nerves, kidneys, and heart. However, oral manifestations and complications related to diabetes include xerostomia, dental caries, gingivitis, periodontal disease, increased tendency to oral infections, burning mouth, taste disturbance, and poor wound healing⁴. These oral diseases can - severely and negatively impact patients’ quality of life. There is evidence that chronic oral complications in these patients have negative effects on blood glucose control, and therefore prevention and management of the oral complications are important⁴. IADR supports the inclusion of an intervention D7 – screening of people with diabetes for oral health diseases linked with timely diagnostic work-up and comprehensive treatment - within the specified interventions for diabetes.

- CA1 – Add “and boys” so it reads, “Vaccination against human papillomavirus (1-2 doses) of 9 – 14-year-old girls and boys.”

Rationale: Human Papillomavirus (HPV) infection has been shown in molecular epidemiology studies to be the driver of the increase in incidence in oral cancers in selected populations over the past 30 years⁵. HPV is thought to cause 70%, 58%, and 36% of oropharyngeal cancers in the United States, United Kingdom, and Central India respectively^{6,9,10}. The HPV vaccine protects against the strains of HPV that can cause oropharyngeal cancers and therefore may be useful in preventing oral cancers⁶. IADR supports an intervention that includes a robust vaccination program against HPV (1-2 doses) of both 9 – 14-year-old girls and boys. Currently, the updated action plan includes vaccination against HPV for girls only however with the incidence and mortality in males two or more times those of females in some countries⁷, it would be critical that boys be included in any HPV vaccination program. HPV vaccination programs targeted to girls and boys will reduce both cervical cancer in women and oropharyngeal cancers in men and women.

- CA9 – add a preventive component so it reads, “Oral Cancer: preventive interventions and screening in high-risk groups linked with timely diagnostic work-up and comprehensive cancer treatment in setting where significant disease burden and programme is recommended”

Rationale: IADR supports the inclusion of screening for oral cancers in high-risk groups linked with timely diagnostic work-up and comprehensive cancer treatment in settings where significant disease burden and program is recommended, but also preventive interventions to reduce the use of areca nuts and other high-risk behaviors. Areca nut chewing is one of the major risk factors for oral cancer, with large-magnitude risks reported in studies comparing betel quid chewers and never users, and it has been evaluated as a group I carcinogen by the International Agency for Research on Cancer⁸. IADR also supports the inclusion of guidance specific to oral cancers in CA12 that considers head and neck cancers.

Additionally, IADR supports HPV DNA screening, starting at the age of 30 years with regular screening every 5 to 10 years (using a screen-and-treat approach or screen, triage and treat approach) as an intervention for oral cancer and not only for cervical cancer (CA2)^{11,12}.

IADR appreciates the opportunity to provide comments on the Draft Updated Appendix 3 of the World Health Organization (WHO) Global Non-Communicable Disease (NCD) Action Plan 2013 – 2030. IADR also supports the response provided by the FDI World Dental Federation and stands ready to work with the WHO, the Division of UHC/Communicable and Noncommunicable Diseases, and other stakeholders to further include oral diseases within the action plan. If you have any further questions, please contact Dr. Makyba Charles-Ayinde, Director of Science Policy, at mcayinde@iadr.org.

Sincerely,



Christopher H. Fox, DMD, DMSc
Chief Executive Officer

¹Centers for Disease Control and Prevention. (2021). Going Smoke Matters: Multiunit Housing. Retrieved from: https://www.cdc.gov/tobacco/basic_information/secondhand_smoke/going-smokefree-matters/multi-unit/index.html. Accessed on [06/21/2022].

²Moynihan PJ, Kelly SAM. Effect on Caries of Restricting Sugars Intake: Systematic Review to Inform WHO Guidelines. *Journal of Dental Research*. 2014;93(1):8-18. doi:[10.1177/0022034513508954](https://doi.org/10.1177/0022034513508954).

³World Health Organization. (2015). Guideline: Sugars Intake for Adults and Children. Retrieved from: <https://www.who.int/publications/i/item/9789241549028>. Accessed on [06/20/2022].

⁴Rohani B. (2019). Oral manifestations in patients with diabetes mellitus. *World journal of diabetes*, 10(9), 485–489. <https://doi.org/10.4239/wjd.v10.i9.485>.

⁵Kreimer AR, Chaturvedi AK, Alemany L, Anantharaman D, Bray F, Carrington M, Doorbar J, D'Souza G, Fakhry C, Ferris RL, Gillison M, Hayes DN, Hildesheim A, Huang SH, Kowalski LP, Kuhs KAL, Lewis J, Lowy DR, Mehanna H, Ness A, Pawlita M, Pinheiro M, Schiller J, Shiels MS, Tota J, Mirabello L, Warnakulasuriya S, Waterboer T, Westra W, Chanock S, and Brennan P. (2020). Summary from an international cancer seminar focused on human papillomavirus (HPV)-positive oropharynx cancer, convened by scientists at IARC and NCI, Oral Oncology. 108:1368-8375.

⁶Centers for Disease Control and Prevention. (2021). HPV and Oropharyngeal Cancer. Retrieved from: https://www.cdc.gov/cancer/hpv/basic_info/hpv_oropharyngeal.htm. Accessed on [06/19/2022].

⁷Zhang SZ, Xie, L, Shang ZJ. (2021). Burden of Oral Cancer on the 10 Most Populous Countries from 1990 to 2019: Estimates from the Global Burden of Disease Study 2019. *Int. J. Environ. Res. Public Health* 2022, 19, 875. <https://doi.org/10.3390/ijerph19020875>.

⁸Warnakulasuriya S, Chen THH. Areca Nut and Oral Cancer: Evidence from Studies Conducted in Humans. *Journal of Dental Research*. April 2022. doi:[10.1177/00220345221092751](https://doi.org/10.1177/00220345221092751)

⁹Lechner, M., Liu, J., Masterson, L. et al. HPV-associated oropharyngeal cancer: epidemiology, molecular biology and clinical management. *Nat Rev Clin Oncol* 19, 306–327 (2022). <https://doi.org/10.1038/s41571-022-00603-7>.

¹⁰Gheit T, Vaccarella S, Schmitt M, Pawlita M, Franceschi S, Sankaranarayanan R, Sylla BS, Tommasino M, Gangane N. Prevalence of human papillomavirus types in cervical and oral cancers in central India. *Vaccine*. 2009 Jan 29;27(5):636-9. doi: 10.1016/j.vaccine.2008.11.041. Epub 2008 Dec 3. PMID: 19056450.

¹¹Wasta V. (2014). Blood and Saliva Tests Help Predict Return of HPV-linked Oral Cancers. Retrieved from: https://www.hopkinsmedicine.org/news/media/releases/blood_and_saliva_tests_help_predict_return_of_hpv_linked_oral_cancers. Accessed on [06/20/2022].

¹²Kreimer A and Waterboer T. (2020). Screening for HPV-driven Oropharyngeal Cancer. Retrieved from: <https://www.hpvworld.com/articles/screening-for-hpv-driven-oropharyngeal-cancer/>. Accessed on [06/20/2022].