

Neglected area of oral cancer: A word about the International Agency for Research on Cancer (IARC) “Handbook of Oral Cancer Prevention”

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Dental and Medical Problems, ISSN 1644-387X (print), ISSN 2300-9020 (online)

Dent Med Probl. 2024;61(4):479–480

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Funding sources

None declared

Conflict of interest

None declared

Acknowledgements

None declared

Received on June 18, 2024

Reviewed on June 20, 2024

Accepted on June 25, 2024

Published online on August 16, 2024

Keywords: oral cancer, leukoplakia, oral potentially malignant disorders

The International Agency for Research on Cancer (IARC) “Handbook of Oral Cancer Prevention”, vol. 19, provides a thorough and comprehensive evidence-based evaluation of primary and secondary prevention interventions for oral cancer.

In order to provide a due introduction to “Handbook of Oral Cancer Prevention”, vol. 19, released by the International Agency for Research on Cancer (IARC) in November 2023, it is relevant to start with a short history of the IARC handbooks programme.¹ This series was launched in 1995 by Dr. Paul Kleihues, the former director of IARC. The IARC handbooks evaluate the evidence on the cancer-preventive potential of various agents and interventions for primary and secondary prevention. Previous volumes have covered the issues of Breast Cancer Screening (Handbook 15), Absence of Excess Body Fatness (Handbook 16), Colorectal Cancer Screening (Handbook 17), and Cervical Cancer Screening (Handbook 18).

Here we report on the IARC first evaluation regarding Oral Cancer Prevention, presented in Handbook 19 (Fig. 1). A working group comprising 25 independent international experts from 12 countries (South Africa, United States of America, Taiwan (China), United Kingdom, India, Switzerland, Japan, Brazil, Panama, France, Colombia, and Malaysia) met remotely between September and December 2021. For the first time, this handbook synthesizes all the available evidence related to the primary and secondary prevention of oral cancer.

The volume begins with two preambles, one for primary and one for secondary prevention. These preambles establish the methodological procedures for developing the handbook, i.e., criteria for including studies, definitions, the selection process for interventions, and outcomes. The methods used to select cancer prevention studies are described, along with the criteria used to assess the strength of evidence in each evidence stream contributing to the overall evaluation. From the perspective of medical education, these two preambles lay the foundation for the epidemiological evaluation of the available scientific evidence.

The first chapter details the anatomy of the oral cavity and the oropharynx, followed by an overview of oral cancer, oropharyngeal cancer and oral potentially malignant disorders (OPMDs). Further discussion focuses on the natural history, the stage at diagnosis, the survival rates, and the available treatment and management options for oral cancer and OPMDs.

Cite as

Duś-Ilnicka I. Neglected area of oral cancer: A word about the International Agency for Research on Cancer (IARC) “Handbook of Oral Cancer Prevention”. *Dent Med Probl.* 2024;61(4):479–480. doi:10.17219/dmp/190468

DOI

10.17219/dmp/190468

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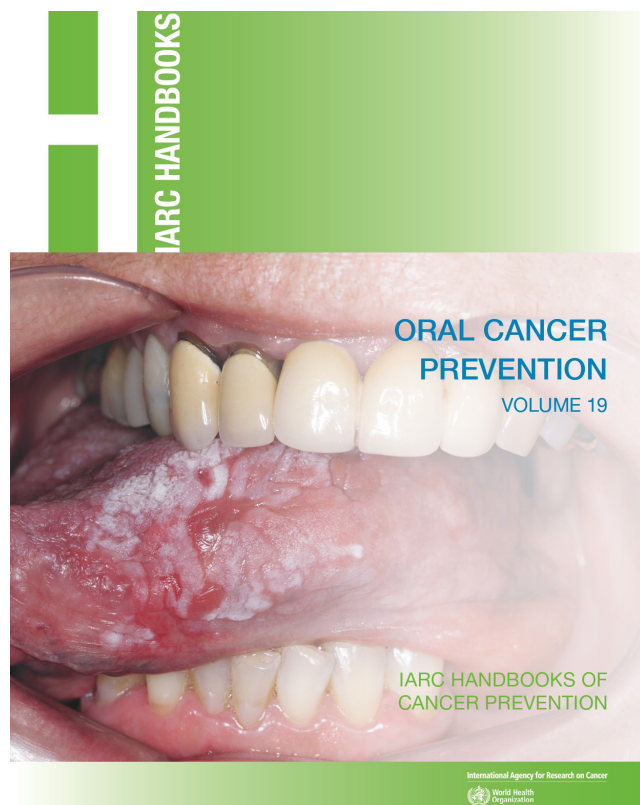


Fig. 1. International Agency for Research on Cancer (IARC) "Handbook of Oral Cancer Prevention", vol. 19 (title page)

The second chapter begins with the description of the established risk factors for oral cancer. Then, it evaluates the evidence regarding the impact of quitting tobacco smoking, reducing alcohol consumption, stopping smokeless tobacco (SLT) use, and refraining from chewing areca nut products (including betel quid) with and without tobacco on reducing oral cancer development. Additionally, this chapter presents the evidence on the association between the consumption of preventive dietary agents, such as coffee, tea, fruits, vegetables, and dietary fiber, on oral cancer and OPMD development.

The third chapter depicts the various types of SLT and areca nut products used worldwide, providing a detailed description of their prevalence across different World Health Organization (WHO) regions. The chapter also reviews the available evidence on various interventions (behavioral, pharmacological – alone or in combination) for the cessation of using SLT or areca nut products among both adults and adolescents. In the context of global health discussion, the comprehensive description of this topic in Handbook 19 can help broaden the knowledge about SLT use, even in countries where areca nut products or SLT are less prevalent, but where international students are taught about oral cancer epidemiology and prevention.

The fourth chapter discusses the available methods for screening and the early diagnosis of oral cancer. Correct clinical oral examination requires expertise and training

in screening for oral mucosal abnormalities (OPMDs and oral cancer). The chapter also explores innovative approaches, like mobile phone applications and patient self-examination for oral cancer screening. Additionally, adjunctive methods, such as autofluorescence, narrow-band imaging, tissue reflectance, and vital staining, are described. The second half of the chapter discusses the existing organized and opportunistic screening activities, as well as the factors influencing participation, and presents a systematic review of the evidence on the benefits and risks of screening for oral cancer.

Following the four main chapters, the fifth chapter offers the summaries of the preceding text. The sixth chapter, "Evaluations, Statements, and Considerations", presents the evaluations made by the working group and the rationale behind these assessments.²

A special report detailing the evaluations of this handbook has also been published.²

In conclusion, Handbook 19 provides a thorough and comprehensive evidence-based evaluation of primary and secondary prevention interventions for oral cancer, including cessation strategies for SLT and areca nut products, the impact of reducing exposure to risk factors, and the effectiveness of screening for oral cancer. The information contained in the handbook could be a useful addition to dental school curricula, particularly in shaping subjects such as oral pathology and oral medicine, as well as in promoting the dissemination of knowledge on oral cancer prevention and screening.

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References

1. World Health Organization (WHO), International Agency for Research on Cancer (IARC). *IARC Handbook of Oral Cancer Prevention*. Vol. 19. Geneva, Switzerland: WHO, IARC; 2023.
2. Bouvard V, Nethan ST, Singh D, et al. IARC perspective on oral cancer prevention. *N Engl J Med*. 2022;387(21):1999–2005. doi:10.1056/NEJMSr2210097