GLOBAL AND EUROPEAN UNION ORAL CANCER CHARACTERIZATION FROM THE GLOBAL BURDEN OF DISEASE 2019 – WHAT DATA SHOW US?

Marta Clemente[1], Carina Ladeira[1,2,3]

[1]NOVA National School of Public Health, Public Health Research Centre, NOVA University Lisbon, Lisbon, Portugal.
[2]H&TRC-Health & Technology Research Center, ESTeSL-Escola Superior de Tecnologia da Saúde, Instituto Politécnico de Lisboa, Lisbon, Portugal.
[3]CHRC, NOVA University Lisbon, Lisbon, Portugal.

1 BACKGROUND

- Lip and oral cavity cancer is a growing public health concern globally. In 2019, cancer accounted for 10 million deaths worldwide, with lip and oral cavity cancer responsible for approximately 200,000 of these deaths[1].

- This type of cancer significantly impacts both mortality and morbidity, with survivors often experiencing substantial reductions in quality of life[2].

This study **aims** to characterize **global** and **European Union** (EU) trends of lip and oral cavity cancer, using data from the **Global Burden of Disease** (GBD) 2019, providing insights for oral cancer prevention strategies.

2 METHODS

- Data on the burden of lip and oral cavity cancers from 1990 to 2019 were obtained from the Global Health Data Exchange (GHDx) query tool[1].

- The analysis incorporated data on the prevalence, incidence, mortality, disability-adjusted life years (DALYs), age-standardized rates, and attributable risk factors of lip and oral cavity cancer.

3 RESULTS

- Globally, the age-standardized rate of lip and oral cavity cancer slighty increased from 4,28 per 100,000 individuals in 1990 to 4.52 per 100,000 individuals in 2019.

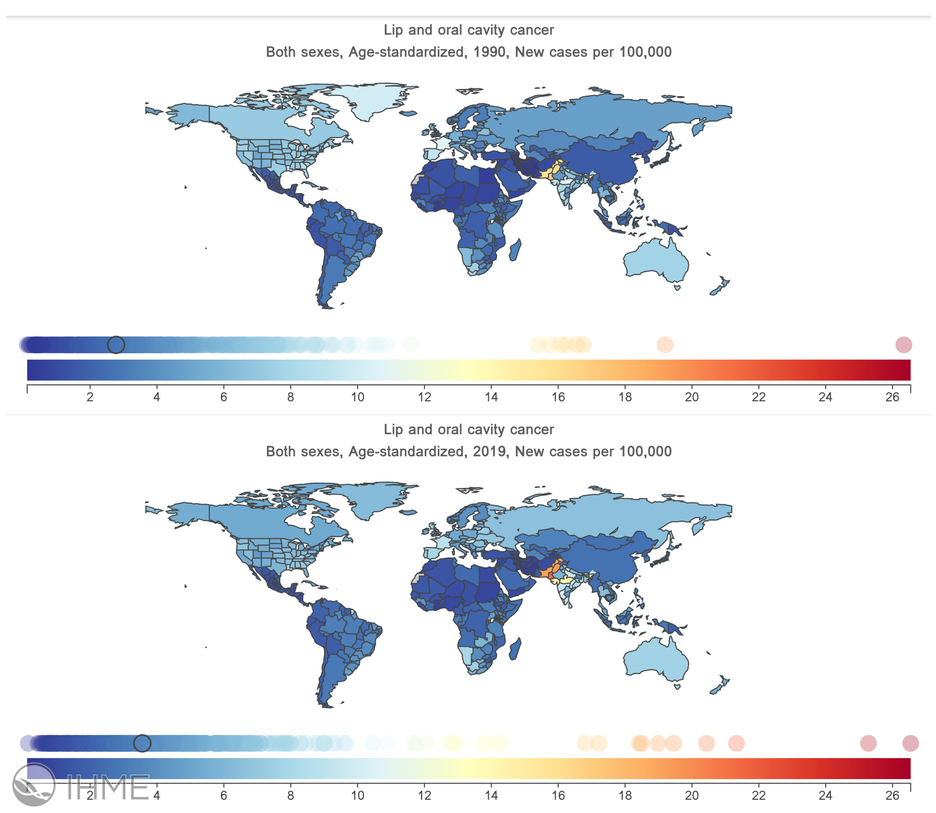

Figure 1 – Age-standardized incidence of lip and oral cavity cancer globally in 1990 and 2019.

- The number of DALYs due to this type of cancer showed a more significant rise, growing from 2,936,205.46 in 1990 to 5,664,617.17 in 2019.

- Throughout the study period, a higher prevalence of lip and oral cavity cancer was consistently observed among men compared to women, both globally and within the EU.

- In the EU notable declines in the incidence of lip and oral cavity cancer were observed in France, Slovakia, Hungary, and Spain.

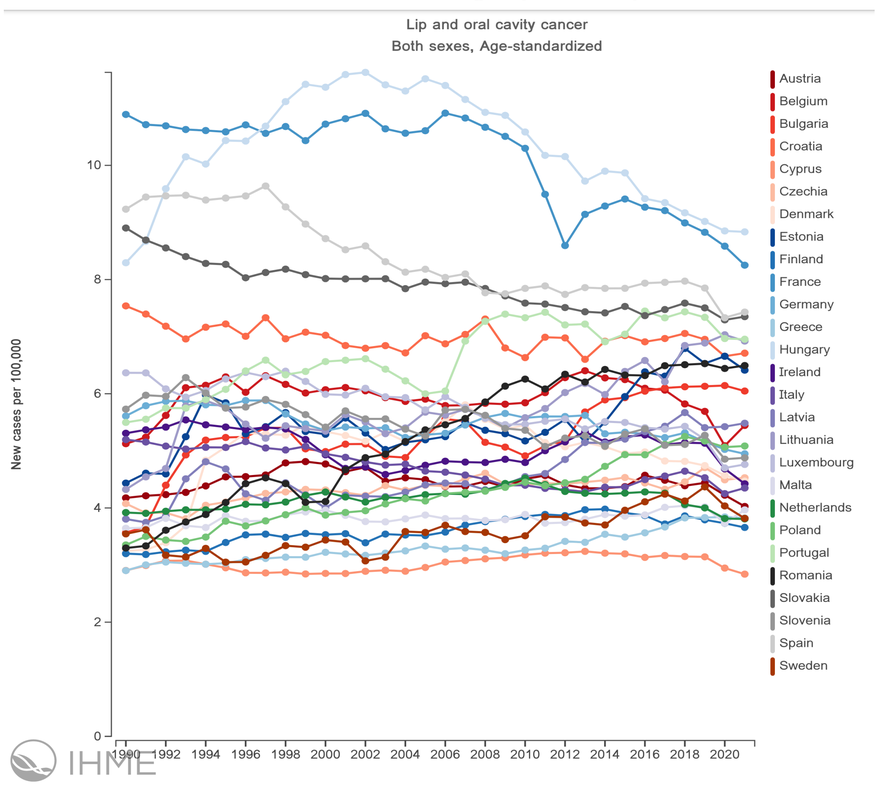

Figure 2 - Age-standardized incidence of lip and oral cavity cancer in the European Union between 1990 and 2019.

- Recognized risk factors contributing to lip and oral cavity cancer include tobacco use, alcohol consumption, betel quid consumption, and HPV infection. Among these, tobacco stands as a significant global contributor, while alcohol emerges as particularly noteworthy within the EU context.

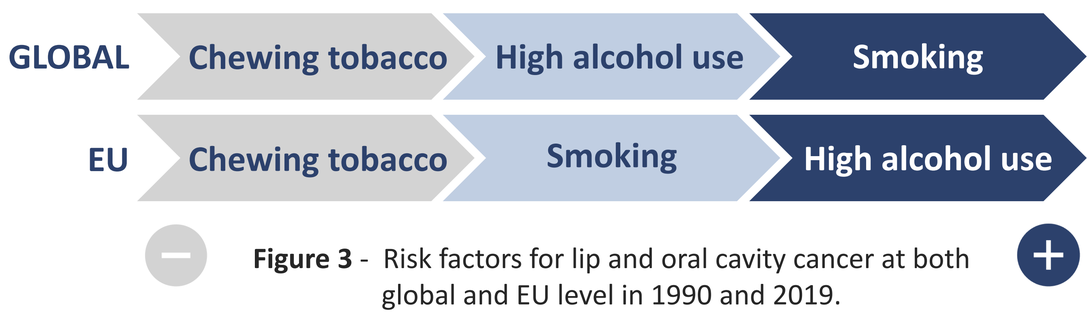

Figure 3 - Risk factors for lip and oral cavity cancer at both global and EU level in 1990 and 2019.

4 CONCLUSION

- In conclusion, recognizing the diverse burden of lip and oral cavity cancer across time and location underscores the **urgent need for targeted intervention policies.**

- **Prioritizing early diagnosis** through resource allocation and **policy support** is essential to mitigate the significant burden on countries, healthcare systems, and households.

- Moreover, attention to addressing oral cancer burden from attributable risk factors is paramount for effective disease management and prevention strategies.

5 REFERENCES

[1]Institute for Health Metrics and Evaluation. Global Burden of Disease Study 2019 (GBD 2019) Data Resources. [Internet]. Seattle, WA: University of Washington; 2019. Available from: https://ghdx.healthdata.org/gbd-2019

[2]Valdez JA, Brennan MT. Impact of Oral Cancer on Quality of Life. Dent Clin North Am. 2018 Jan;62(1):143–54.

This article/publication is based upon work from COST Action "Interception of oral cancer development" (INTERCEPTOR) CA21140, supported by COST (European Cooperation in Science and Technology).

COST (European Cooperation in Science and Technology) is a funding agency for research and innovation networks. Our Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.

Funded by the European Union