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SHORT COMMUNICATION

The Impact of Oral Cancer in Argentina: Analysis of Risk Factors and Health Responses in 2024

Impacto del Cáncer Oral en Argentina: Análisis de Factores de Riesgo y Respuestas Sanitarias en 2024

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ABSTRACT

In the year 2024, oral cancer was highlighted as a significant public health problem in Argentina, reflecting global trends and country-specific challenges. Oral cancer, included within malignant neoplasms, was characterized by an abnormal growth of cells that affected the oral cavity and sometimes spread to other parts of the body through metastasis. The disease mainly affected men over 50 years of age, although an increase in cases linked to the human papillomavirus (HPV) was observed in younger people. The geographical distribution of oral cancer in Argentina revealed significant inequalities. Northern provinces, with lower levels of socioeconomic development and limited access to health services, had higher rates compared to metropolitan regions. Risk factors such as smoking, excessive alcohol consumption and poor diets contributed to this disparity. Although prevention and education campaigns were intensified, their reach was insufficient in some rural and peripheral areas. The impact of oral cancer was not only limited to physical health, but also affected patients' quality of life, imposing a considerable emotional and economic burden. The public health system faced difficulties in providing advanced treatments due to lack of resources and unequal access. However, government efforts to strengthen primary care, train professionals and promote HPV vaccination as a key preventive measure were highlighted. Despite the challenges, prevention and early diagnosis were identified as essential strategies to reduce the burden of oral cancer and improve health outcomes in the country.

Keywords: Oral Cancer; Public Health; Risk Factors; Early Diagnosis; Prevention.

RESUMEN

En el año 2024, el cáncer oral se destacó como un problema significativo de salud pública en Argentina, reflejando tendencias globales y desafíos específicos del país. El cáncer oral, incluido dentro de las neoplasias malignas, se caracterizó por un crecimiento anómalo de células que afectaron la cavidad bucal y, en ocasiones, se extendieron a otras partes del cuerpo mediante metástasis. La enfermedad afectó principalmente a hombres mayores de 50 años, aunque se observó un aumento de casos vinculados al virus del papiloma humano (VPH) en personas más jóvenes. La distribución geográfica del cáncer oral en Argentina reveló desigualdades significativas. Las provincias del norte, con menores niveles de desarrollo socioeconómico y acceso limitado a servicios de salud, registraron tasas más altas en comparación con regiones metropolitanas. Factores de riesgo como el tabaquismo, el consumo excesivo de alcohol y dietas deficientes contribuyeron a esta disparidad. Aunque las campañas de prevención y educación se intensificaron, su alcance fue insuficiente en algunas áreas rurales y periféricas. El impacto del cáncer oral no solo se limitó a la salud física, sino que también afectó la calidad de vida de los pacientes, imponiendo una carga emocional y económica considerable. El sistema de salud público enfrentó dificultades para ofrecer tratamientos avanzados debido a la falta de recursos y acceso desigual. Sin embargo, se destacaron esfuerzos gubernamentales por fortalecer la atención primaria, capacitar a profesionales y fomentar la vacunación contra el VPH como medida preventiva clave. A pesar de los desafíos, la prevención y el diagnóstico temprano fueron identificados como estrategias esenciales para reducir la carga del cáncer oral y mejorar los resultados en salud en el país.

Palabras clave: cáncer oral; salud pública; factores de riesgo; diagnóstico temprano; prevención.

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INTRODUCTION

In the Argentine context of 2024, cancer continues to be one of the main public health concerns, with a significant impact in terms of morbidity, mortality, and economic burden on the healthcare system. Although progress has been made in early detection and treatment, historical challenges, such as unequal access to health services and lack of awareness, continue to affect many of the population, especially the most vulnerable sectors.[1]

Argentina, like many countries in Latin America, is facing the effects of the epidemiological transition, in which non-communicable diseases, such as cancer, are gradually replacing infectious diseases as the leading causes of death. Shared risk factors, such as smoking, excessive alcohol consumption, exposure to unhealthy diets, and environmental pollution, exacerbate this phenomenon. In particular, oral cancer, often associated with tobacco and alcohol use, has a high incidence in low-income regions with limited access to medical care.[2]

In this context, public health policies have attempted to implement prevention and early detection programs, such as regular dental checkups in primary care centers. However, the implementation of these initiatives has been uneven, and their effectiveness is limited by structural problems such as a shortage of trained professionals, a lack of adequate equipment, and geographical disparities that particularly affect rural and peripheral areas of the country.[3]

Early diagnosis of oral cancer is crucial, as this disease is often more treatable in its early stages. However, a lack of awareness and education about the initial symptoms among the general population hinders its timely detection. Recent studies in Argentina have shown that many people are unaware of the risk factors for oral cancer, such as prolonged tobacco and alcohol use, as well as the association with infections such as human papillomavirus (HPV). In addition, public health campaigns, while valuable, do not always effectively reach all communities, leaving significant segments of the population at risk.[4]

Historically, advances in oncology in the country have been consistent with global trends. Genetic studies on proto-oncogenes, tumor suppressor genes, and DNA repair mechanisms have contributed to a better understanding of cancer at the molecular level. However, this research has not yet been fully translated into practical and widespread access to advanced therapies in the public health system. In a country with significant economic disparities, advanced cancer care remains a luxury reserved for those with access to private health insurance or who can afford treatment outside the public system.[5]

Oral cancer in Argentina mainly affects men over the age of 50, with a growing prevalence among people exposed to risk factors such as smoking and alcohol consumption. However, there has also been an increase in HPV-related cases among younger individuals, reflecting a change in etiological factors. In this regard, HPV vaccination campaigns represent an essential step in the prevention of certain types of oral cancer, although coverage is still insufficient in some regions of the country.[6]

The geographical distribution of oral cancer also reflects social inequalities. The northern provinces of Argentina, characterized by lower socioeconomic development and limited access to specialized health services, have higher incidence rates compared to metropolitan areas such as Buenos Aires. This is due, in part, to prolonged exposure to risk factors, lack of access to regular check-ups, and cultural barriers that hinder the search for medical care.[7]

The impact of oral cancer goes beyond physical health, profoundly affecting the quality of life of patients and their families. The costs associated with treatment, ranging from surgery and chemotherapy to dental prostheses, represent a significant economic burden, especially in an inflationary context such as Argentina's in 2024. In addition, the social stigma associated with visible lesions and functional difficulties, such as problems speaking or eating, exacerbate the emotional and psychological impact of the disease.[8,9,10]

In response to these challenges, the Argentine government has launched initiatives to strengthen the primary care network and train health professionals in the early detection of oral lesions. Educational campaigns targeting the population have also been intensified, emphasizing the importance of giving up harmful habits such as smoking and excessive alcohol consumption and promoting a diet rich in fruits and vegetables. However, the success of these measures requires effective intersectoral coordination and long-term political commitment.[11,12,13]

The year 2024 marks a crucial point for implementing comprehensive strategies that address existing inequalities and strengthen the health system's capacity to tackle oral cancer. This includes increasing investment in local research to better understand the disease's epidemiological patterns in different regions of the country and adapting public policies accordingly.

Effectively closing the gap between theory and practice in the fight against oral cancer in Argentina will depend on the health system's ability to prioritize prevention and ensure equitable access to effective treatments. Only through an integrated and sustainable approach will it be possible to reduce the burden of this disease on the population and improve the quality of life of those who suffer from it. With a renewed commitment to equity and prevention, Argentina can aspire to become a regional model in the fight against oral cancer.

FINANCING

None.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTION

Conceptualization: Nairobi Hernández Bridon.
Data curation: Nairobi Hernández Bridon.
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BIBLIOGRAPHIC REFERENCES

1. Molina-Ávila I, Pimentel-Solá JM, Buschiazzo E, Echazú A, Piemonte E, Gilligan G. Association between coca (Erythroxylum coca) chewing habit and oral squamous cell carcinoma: a case-control study from Argentina. Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology 2024;138:279–88. https://doi.org/10.1016/j.oooo.2024.04.011

2. Andrian R, Müller A, Solá JMP, Ávila IM, Gilligan G. Development of a telemedicine network for early oral cancer diagnosis: the Argentine Patagonia experience—a perspective through a pilot study. Explor Digit Health Technol 2024;2:279–90. https://doi.org/10.37349/edht.2024.00028

3. Hagen LM, da SILVA BM, da CUNHA AR, Hugo FN, Amenábar JM. LIP AND ORAL CANCER INCIDENCE AND TOBACCO CONTROL POLICIES IN MERCOSUR. Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology 2024;137:e303. https://doi.org/10.1016/j.oooo.2023.12.720

4. Dorati PJ, Lazo GE, Ogas CS, Bander MP, Álamo GM del V. Estrategia para disminuir la demora en el diagnóstico del cáncer bucal, 2024

5. Morelatto RA, Coll V, Belardinelli PA, Bolesina NJ, Liandro MF, López de blanc S, et al. COMPARATIVE STUDY OF HUMAN PAPILLOMAVIRUS IN PATIENTS WITH ORAL CANCER AND IN THE POPULATION WITHOUT LESIONS.. Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology 2024;137:e294. https://doi.org/10.1016/j.oooo.2023.12.683

6. Palmieri MA, Monti Hughes A, Trivillin VA, Garabalino MA, Ramos PS, Thorp SI, et al. Cobaltabis(Dicarbollide) [o-COSAN]− for Boron Neutron Capture Therapy of Head and Neck Cancer: Biodistribution and Irradiation Studies in an Experimental Oral Cancer Model. Pharmaceuticals 2024;17:1367. https://doi.org/10.3390/ph17101367

7. Dorati PJ, Lazo GE, Arcuri MO, Mayocchi KA, Ogas CS, Fernández M, et al. Campaña nacional de prevención de cáncer bucal etapa uno, 2023

8. Gilligan G, Galindez Costa MF, Piemonte E, Lazos J, Panico R. Oral Oncology: Two elective courses for advanced undergraduates - An Argentine teaching experience. Oral Oncology Reports 2024;11:100598. https://doi.org/10.1016/j.oor.2024.100598

9. Olaiz N, Monti Hughes A, Pozzi ECC, Thorp S, Curotto P, Trivillin VA, et al. Enhancement in the Therapeutic Efficacy of In Vivo BNCT Mediated by GB-10 with Electroporation in a Model of Oral Cancer. Cells 2023;12:1241. https://doi.org/10.3390/cells12091241

10. Garola F, Romero Panico JC, Marchetti G, Frascaroli F, Gilligan G, Panico R, et al. Histoplasmosis oral como diagnóstico diferencial de cáncer oral. Serie de casos y revisión de la literatura. Revista de La Asociación Odontológica Argentina 2024;112:1–1. https://doi.org/10.52979/raoa.1120831.1252

11. Espinoza IL, Serna YE, Fuentes MC, Jaramillo A, Piedrahita KT, Alvarez GJ. Oral cancer knowledge in adults evaluated through a phone survey in the context of the SARS-CoV2 health emergency in Colombia. Med Oral Patol Oral Cir Bucal 2023;28:e630–7. https://doi.org/10.4317/medoral.26031

12. Martínez-Ramírez J, Saldivia-Siracusa C, González-Pérez L-V, Cuadra Zelaya FJM, Gerber-Mora R, Cabrera OFG, et al. Barriers to early diagnosis and management of oral cancer in Latin America and the Caribbean. Oral Diseases 2024;30:4174–84. https://doi.org/10.1111/odi.14903

13. Martínez-Ramírez J, Saldivia-Siracusa C, Pérez-de-Oliveira ME, Normando AGC, Kowalski LP, Curado MP, et al. Head and Neck Cancer in Pan-American Notable People: An International Survey. Dentistry Journal 2024;12:305. https://doi.org/10.3390/dj12100305