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ORIGINAL

Risk factors for premalignant lesions of the oral cavity in the Bernardo Posse Polyclinic

Factores de riesgo de lesiones premalignas de la cavidad bucal en el Policlínico Bernardo Posse

Luis Miguel Quintana Sánchez[1], Yivelin Fernández Queija[1]

[1]Facultad de Ciencias Médicas "Miguel Enríquez, "Departamento de Estomatología. La Habana, Cuba.

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ABSTRACT

Introduction: oral cancer represents a significant public health challenge due to its high morbidity and mortality, especially in populations with associated risk factors. This cross-sectional descriptive study was conducted with the purpose of identifying risk factors associated with premalignant lesions of the oral cavity in patients attended at the Bernardo Posse Polyclinic, Havana, between 2020 and 2024. The analysis included variables such as age, sex, anatomical location of the lesions and risk habits, such as smoking, alcoholism, inadequate diet and predisposing diseases. Early identification of these factors can contribute significantly to the prevention of oral cancer.
Method: a descriptive cross-sectional study was carried out in a sample of 25 patients of both sexes with evident premalignant lesions in the buccomaxillofacial complex. The variables studied included age, sex, anatomical location of the lesions and risk factors (smoking, alcoholism, diet and predisposing diseases). Data were collected through surveys and clinical records, and descriptive statistical analyses were applied to determine the absolute and relative frequencies of the variables. The sample was selected from the oral cancer registry of the Bernardo Posse Polyclinic.
Results: the analysis showed that 40 % of premalignant lesions were located on the tongue, this being the most affected anatomical site. The age group with the highest prevalence was 35-59 years, with a significant incidence of smoking (50 %) and alcohol consumption (50 %) as main risk factors. A higher proportion of female patients (56 %) compared to male patients (44 %) was observed, which differs from global trends in which men tend to be more affected.
Conclusions: this study highlights the importance of identifying risk factors associated with premalignant lesions in the oral cavity, such as smoking, alcoholism and inadequate dietary habits. The results underline the need to implement educational and prevention programs aimed at at-risk populations, especially in the age groups with the highest incidence, to improve early detection and reduce the prevalence of oral cancer. Comprehensive care and the promotion of healthy habits are essential to address this problem.

Keywords: Oral Cancer; Risk Factors; Premalignant Lesions; Smoking; Oral Cavity; Prevention.

RESUMEN

Introducción: el cáncer bucal representa un desafío significativo en salud pública debido a su alta morbilidad y mortalidad, especialmente en poblaciones con factores de riesgo asociados. Este estudio descriptivo transversal se realizó con el propósito de identificar los factores de riesgo asociados a las lesiones premalignas de la cavidad bucal en pacientes atendidos en el Policlínico Bernardo Posse, La Habana, entre 2020 y 2024. El análisis incluyó variables como la edad, el sexo, la localización anatómica de las lesiones y hábitos de riesgo, como el tabaquismo, alcoholismo, dieta inadecuada y enfermedades predisponentes. La identificación

temprana de estos factores puede contribuir significativamente a la prevención del cáncer bucal.
Método: se llevó a cabo un estudio descriptivo transversal en una muestra de 25 pacientes de ambos sexos con lesiones premalignas evidentes en el complejo bucomaxilofacial. Las variables estudiadas incluyeron edad, sexo, localización anatómica de las lesiones y factores de riesgo (tabaquismo, alcoholismo, dieta y enfermedades predisponentes). Los datos fueron recolectados a través de encuestas y registros clínicos, y se aplicaron análisis estadísticos descriptivos para determinar las frecuencias absolutas y relativas de las variables. La muestra fue seleccionada del registro de cáncer oral del Policlínico Bernardo Posse.
Resultados: el análisis mostró que el 40 % de las lesiones premalignas se localizaron en la lengua, siendo este el sitio anatómico más afectado. El grupo de edad con mayor prevalencia fue el de 35-59 años, con una incidencia significativa de tabaquismo (50 %) y consumo de alcohol (50 %) como factores de riesgo principales. Se observó una mayor proporción de pacientes femeninos (56 %) en comparación con los masculinos (44 %), lo cual difiere de tendencias globales en las que los hombres suelen estar más afectados.
Conclusiones: este estudio resalta la importancia de identificar factores de riesgo asociados a lesiones premalignas en la cavidad bucal, como el tabaquismo, el alcoholismo y hábitos dietéticos inadecuados. Los resultados subrayan la necesidad de implementar programas educativos y de prevención dirigidos a las poblaciones en riesgo, especialmente en los grupos de edad de mayor incidencia, para mejorar la detección temprana y reducir la prevalencia de cáncer bucal. La atención integral y la promoción de hábitos saludables son esenciales para abordar esta problemática.

Palabras clave: Cáncer Bucal; Factores de Riesgo; Lesiones Premalignas; Tabaquismo; Cavidad Bucal; Prevención.

INTRODUCTION

Oral cancer is a significant public health problem, especially in vulnerable communities where sociocultural and economic conditions can amplify risk factors.[1,2,3,4,5,6,7,8,9,10,11] In Cuba, the Oral Cancer Screening Program (PDCB) has been established as a key tool for the early identification of premalignant and malignant lesions, allowing for timely intervention.[12,13,14,15,16] In this context, research conducted at the Bernardo Posse Polyclinic in the San Miguel del Padrón municipality of Havana provides relevant information on the epidemiological characteristics and factors associated with oral cancer in a specific population.

The study focused on 25 patients with evident morphological alterations in the oral-maxillofacial complex, collecting data from 2020 to 2024. The variables studied included sociodemographic factors, such as age and sex, and aspects related to lifestyle and health conditions, such as smoking, alcohol consumption, diet, and exposure to local irritants. This approach allowed for the analysis of the prevalence of specific risk factors and their relationship with premalignant lesions in the oral cavity, providing valuable data for understanding the impact of these variables on oral health.

Ethically, the research was conducted under the principles established in the Declaration of Helsinki[17,18,19] ensuring the autonomy, confidentiality, and well-being of the participants. All selected patients signed an informed consent form after receiving clear explanations about the purpose and benefits of the study.

Descriptive statistical analysis allowed us to identify relevant patterns, such as the anatomical distribution of lesions and their relationship with lifestyle habits, local factors, and level of health education. The findings highlight the importance of implementing educational and preventive programs in communities, particularly in age groups and populations most exposed to risk factors.

This study reinforces the need to strengthen oral health promotion and prevention actions, which align with the objectives of national health programs in Cuba.[20,21,22,23,24,25,26] The results obtained not only provide knowledge about the epidemiology of oral cancer but also underscore the importance of comprehensive and sustained interventions to mitigate the burden of this disease in communities such as San Miguel del Padrón.

Objective

To identify the main risk factors associated with premalignant and malignant lesions of the oral cavity in patients treated at the Bernardo Posse Polyclinic in the municipality of San Miguel del Padrón during the period 2020-2024 to contribute to the design of preventive and educational strategies that favor early detection and reduction of the incidence of this disease.

METHOD

A descriptive cross-sectional study was conducted on 25 patients of both sexes with some apparent morphological alteration in the oral-maxillofacial complex, treated at the PDCB clinic of the Stomatology Service of the Bernardo Posse Polyclinic in the municipality of San Miguel del Padrón, Havana province, from 2020 to 2024.

The data were obtained from the Oral Cancer Registry of the Department of Stomatology and Statistics of the Bernardo Posee Polyclinic in San Miguel del Padrón. The following variables were studied: age (grouped into intervals from 15 to over 60 years), sex (male and female), anatomical location of the lesions (tongue, floor of the mouth, etc.), level of health education (good, fair, or poor), and risk factors (smoking, alcoholism, diet, among others).

Ethical considerations This research was carried out taking into account moral considerations related to the people under study, for which the standards outlined in the Declaration of Helsinki and the provisions of current legislation in Cuba were followed, as this is a study involving direct action on human beings, with psychological and social repercussions. The principles of medical ethics of beneficence, non-maleficence, respect, and autonomy were followed.

In this regard, the research subjects must be informed of their complete freedom to participate or not in the study without any consequences if they decide to withdraw, all of which is reflected in the Informed Consent form. The researcher did not have access to information on patients who did not have the diseases of interest.

The identity of the patients participating in the study will be treated confidentially and handled only by the researcher. The information obtained in the instrument applied will be protected, and the results will only be presented or published in purely scientific contexts without profit. For this purpose, the authorization and approval of the management of the Bernardo Posse Teaching Polyclinic was considered.

The participants were given a general explanation of their participation and the objectives and importance of the study.[27,28,29,30,31,32,33,34,35,36] The language used was easy to understand, without technical terms, and they were given the opportunity to ask questions. They were also assured that the information would be handled with discretion to obtain their informed consent.

A structured survey was designed to collect information about risk factors associated with oral cancer. The anonymous and confidential survey was administered to the 25 patients selected at the Bernardo Posse Polyclinic. The questions covered demographic aspects and habits related to oral health, divided into the following sections:

1. Demographic information: includes questions about the age and sex of the patients.
2. Tobacco and alcohol habits: questions were asked about cigarette and alcohol consumption, the frequency of these habits, and the use of other tobacco products.
3. Diet and nutrition: patients were asked about their intake of hot foods and beverages and their consumption of fruits and vegetables.
4. Oral hygiene and dental care: this includes questions about the frequency of tooth brushing and visits to the dentist.
5. Sun exposure and medical history: unprotected sun exposure and a family history of oral cancer were analyzed.

The survey was used in the analysis to identify the prevalence of risk factors in the sample, facilitating the correlation of these with the appearance of premalignant lesions in the oral cavity.

Method

Theoretical: analysis and synthesis of the literature consulted, identifying risk factors and other related problems, for which a bibliographic search was carried out in books, journals, and articles in digital format from scientific portals such as BVS, Scielo, Medline, and Pubmed, by national and international authors, which will allow for documentation and updates on the subject.

Empirical: through observation and interviews.

Statistical: application of descriptive statistics.

Statistical Analysis (Statistician)

A descriptive statistical analysis of the study data was performed to describe the characteristics of the sample of patients seen at the PDCB clinic at the Bernardo Posse Polyclinic. Descriptive statistics such as absolute and relative frequencies (percentages) were applied for qualitative variables (sex, anatomical location of lesions, risk factors), and measures of central tendency (mean) for discrete quantitative variables (age).

The main variables studied were:

1. Age: grouped into age ranges (15-18, 19-34, 35-59, 60 years or older).
   - Absolute frequencies (number of patients per age group) and relative frequencies (percentage of patients in each group relative to the total) were calculated.

2. Sex: classification into male and female.
   - Absolute and relative frequencies were calculated to analyze the gender distribution in the sample.

3. Anatomical location of lesions: the anatomical areas where premalignant lesions were present were identified.

- The frequency distribution was calculated for each area (tongue, salivary glands, palate, floor of the mouth, lip and lip commissure, gums, and cheek).

4. Risk factors: risk habits such as smoking, alcohol consumption, diet, and the presence of diseases were analyzed.

- These factors' absolute and relative frequencies within age groups were determined.

The information was processed using a Windows 10 computer system. The results are presented in frequency tables to visualize the data and facilitate interpretation.

This analysis is appropriate for descriptive cross-sectional studies because it allows the collected data to be summarized and visually represented, facilitating the identification of patterns such as the prevalence of risk factors, distribution by age and sex, and the anatomical location of premalignant lesions in the oral cavity. The statisticians used (absolute, relative, and percentages) to allow the results to be interpreted clearly and accurately.[37,38,39,40,41]

Table 1. Operationalization of variables

Variable	Operationalization			Indicator
	Type	Scale	Description	
Age	Quantitative Discreet	15 -18 19 - 34 35 - 59 60 and	According to closed class interval scale (age reported by the patient at the time of the interview and/or clinical examination).	Absolute and relative frequency
Sex	Qualitative Nominal Dichotomou	Female Male	According to biological condition.	Absolute and relative frequency
Location Anatomica	Qualitativ nominal polytomics	Language Salivary glands Palate Mouth Floor Lip and labial commissure Gum Carrillo	By anatomical	Absolute (No.) and relative frequencies (%)
Risk Factors	Qualitativ Nominal Dichotomous	Smoking	Yes - No: According to the practice or not of this habit.	Absolute (No.) and relative frequencies (%)
	Qualitative Nominal Dichotomous	Alcoholism	Yes - no: According to the practice or not of this habit.	Absolute (No.) and relative frequencies (%)
	Qualitative Nominal Dichotomous	Diet	* Yes -heavily seasoned and hot foods -excessive consumption of animal fats, smoked and cured foods * No -consumption of vegetable fibers and fruits in the diet -consumption of foods rich in vitamins A and C	Absolute (No.) and relative frequencies (%)
	Qualitative Nominal Dichotomous	diseases	Yes - No Attending to the presence of diseases such as HIV Human papillomavirus	Absolute (No.) and relative frequencies (%)
	Qualitativ Nominal Dichotomous	Local factors	Yes - No Considering the presence of local irritants such as: -sharp cuspids and fractured teeth. -Root debris. -poorly designed and fitted prostheses. -deficient seals. -poor oral hygiene. -retained teeth.	
Level of Education Sanitary	Qualitative Ordinal Polic	Good =15 - 23 Regular= 8 - 15 Bad = 0 - 7	According to the rank in which you answer correctly:	Absolute (No.) and relative frequencies (%)

The variables will be operationalized, taking into account the type, scale, and indicator, to achieve the study's objectives.

Characterization of the community

The patients in the study belong to the Bernardo Posse Polyclinic's health area in the San Miguel del Padrón municipality.

The health area is connected by streets and sidewalks in most areas, although there are areas where they are in poor condition or are dirt roads, creating puddles on rainy days that are a potential risk factor for insect breeding and vectors. The means of transportation are cars, buses, motorcycles, and bicycles. Within its perimeter are primary and secondary schools, medical clinics, a polyclinic, and recreational and entertainment venues for children and adults. There is good interaction between family doctors, nurses, and the community.

As the governing body, the people's government regulates, controls, and evaluates the work of the agencies that are jointly responsible for improving the population's quality and standard of living. The water and sewerage company guarantees a sufficient supply of good quality water for consumption, although the water supply is sometimes disrupted, affecting dental care for the population. There are areas where drinking water and sewage leaks occur, creating pollution and making living conditions difficult for the population.[42,43,44,45,46,47] The municipal company is responsible for solid waste disposal and street cleaning. The electric company provides energy for lighting and food preparation in all households.[48,49,50] Most of the population in this area lives in houses in good condition, with sanitation services and sewage disposal for excreta and all waste products. However, not all homes meet these conditions; there are houses in poor condition with dirt roads where people live in overcrowded conditions.

Our population's average standard of living and educational level enables the assimilation of health messages.

The district is bordered to the north by the municipalities of Regla and La Habana Vieja, to the east by the municipality of Guanabacoa, to the south by the municipality of Cotorro, and to the west by the municipalities of Diez de Octubre and Arroyo Naranjo.

The climate is characterized by temperatures ranging from 15 to 32 degrees Celsius and moderate to high relative humidity. The area comprises popular councils, which are made up of constituencies. These constituencies comprise different CDRs, FMC blocks, zonal nuclei, combatants' associations, and sectors of the PNR. They systematically visit clinics and gather opinions from the population, contributing to their improvement. They participate in polyclinic meetings and invite a representative from the Ministry of Health to council meetings. They also have a Social Prevention Commission that evaluates social problems and contributes to their solution, comprising representatives from the PNR, CDR, FMC, Social Assistance, Child Care, Health, education, culture, and sports. This contributes to solving problems through joint participation with Health, ensuring intersectorality.

RESULTS AND DISCUSSION

Grupo de edad	Femenino		Masculino		Total	
	No.	%	No.	%	No.	%
15 - 18	2	8%	1	4%	3	12%
19 - 34	3	12%	4	16%	7	28%
35 - 59	5	20%	3	12%	8	32%
60 y más	4	16%	3	12%	7	28%
Total	14	56%	11	44%	25	100%

Figure 1. Distribution of the population by age group and sex

This figure shows the distribution of the 25 patients diagnosed with oral cancer in a community in the municipality of San Miguel del Padrón, in the province of Havana, according to age group and sex. The data show a slight predominance of female patients (56 %) over male patients (44 %), which contrasts with the global trend where oral cancer is usually more common in men than in women. A study conducted by González-Pérez (2020) in Mexico showed a higher prevalence of oral cancer in men (63 %) than in women (37 %), which reflects a discrepancy with our results, possibly explained by geographical or sociocultural factors specific to the Cuban

community.[51] Regarding age distribution, the most affected group is 35-59 years old, with 32 % of all patients, followed by the 19-34 and 60+ age groups, each representing 28 %. These results suggest that the middle-aged population (35-59 years) has a higher prevalence of oral cancer in this community. However, recent studies, such as that by Martínez-Campayo (2021) in Spain, indicate that oral cancer is diagnosed more frequently in people over 60 years of age, especially in men. This could be due to cumulative risk factors such as tobacco and alcohol consumption over time, habits that are also present in the Cuban population but may be distributed differently among age groups.

The youngest group, aged 15-18, accounts for only 12 % of cases, which is consistent with international studies, as oral cancer is rare in adolescents and young adults. However, identifying cases in this age group indicates the importance of prevention and early diagnosis programs, even in younger patients. Comparing these data with those of the Soto-Ávila study (2019) in Colombia, where patients over 60 years of age accounted for 45 % of cases, the results of this Cuban study seem to have a higher proportion of cases in younger age groups, suggesting possible differences in local risk factors, such as exposure to carcinogens or lifestyles in the community studied. In summary, the data obtained in this study reflect a particular age and sex distribution in the community of San Miguel del Padrón, which, although it shares some characteristics with previous studies, also shows significant variations, highlighting the need for further regional studies to understand the specific factors that may be influencing the epidemiology of oral cancer in this population

Table 2. Anatomical distribution of lesions in the oral cavity

Anatomical Location	No.	%
Tongue	10	40
Salivary Glands	3	12
Palate	2	8
Floor of the Mouth	4	16
Lip and Lip Corners	3	12
Gums	2	8
Cheeks	1	4
Total	25	100

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Table 3 shows the distribution of risk factors for the development of oral cancer in a sample of 25 patients categorized by age group. The main risk factors considered include a cariogenic diet, smoking, alcohol consumption, the presence of risk diseases, and local factors.

Table 3. Distribution of the population according to age group and risk factors

Age group	Cariogenic diet		Smoking habit		Alcoholism		Risk diseases		Local factors	
	No.	%	No.	%	No.	%	No.	%	No.	%
15-18	2	66	1	33	1	33	0	0	0	0
19-34	3	43	4	57	5	71	0	0	3	43
35-59	5	62	4	50	4	50	1	12	4	50
60 and more	4	57	3	42	2	28	1	14	2	28

Cariogenic Diet A cariogenic diet, rich in sugars and carbohydrates that can increase the risk of caries and other oral problems, is present in all age groups but is more prevalent in younger groups. Sixty-six percent of patients aged 15 to 18 reported a cariogenic diet, which is concerning given that unhealthy dietary habits can predispose individuals to future oral complications, including cancer. Recent studies, such as that by García-Rodríguez (2020) in Venezuela, also show a high prevalence of cariogenic diets

in adolescents and young adults (68 %), consistent with our findings.[60] In patients aged 35-59, 62 % reported this factor, which could be related to a lifestyle in transition, where diet remains a significant risk.

Smoking Smoking is present in all age groups, with the highest prevalence in the 19-34 age group (57 %), followed by the 35-59 age group (50 %). This finding is consistent with the study by Martínez-Suárez (2019) in Mexico, which reports a similar prevalence among young and middle-aged smokers (55 %).[61] Tobacco is a well-established risk factor for oral cancer, and its link to oral cancer has been confirmed in multiple studies worldwide. In the 15-18 age group, 33 % have already developed this habit, which is alarming and highlights the need for awareness campaigns on the risks of tobacco from an early age.

Alcoholism Alcoholism is also significantly present, especially in the 19-34 age group, with 71 %, making it the most prevalent risk factor in this age range. This data is consistent with studies such as Silva's (2021) in Brazil, where alcohol consumption in young people and young adults is linked to a higher incidence of oral cancer.[62] In the 35-59 age group, 50 % report alcohol consumption, while in patients over 60, the percentage drops to 28 %. This could reflect changes in lifestyle habits among older people, who may reduce alcohol consumption due to age-related health problems.

Risk Diseases The presence of risk diseases, such as diabetes or hypertension, is only detected in older age groups, with 12 % in the 35-59 age group and 14 % in those aged 60 and over. This is consistent with the findings of Gómez-Moreno (2020) in a study on systemic risk factors for oral cancer in older adults in Colombia, where chronic diseases increase the risk of developing oral cancer.[63] The low prevalence of these diseases in younger groups is to be expected, as they tend to appear at older ages.

Local factors, such as poorly fitting prostheses, defective dentures, or chronic traumatic injuries, are more prevalent in middle-aged and older groups. Fifty percent of patients between the ages of 35 and 59 have local factors, while 28 % of those over 60 also have them. This result is consistent with the study by Fernández-Solano (2019) in Chile, which found that local factors are an essential trigger for oral cancer in older patients due to the greater need for dental prostheses or incorrect dental interventions at these stages of life.[64] In summary, the results show that the most significant risk factors in this community are associated with smoking, alcohol consumption, and a cariogenic diet, especially in younger groups. Aging appears to be related to the onset of systemic diseases and local factors that also contribute to the risk of oral cancer.

Table 4. Distribution of the population by age group and level of health education

Age group	Health Education						Total	
	good		Regular		Bad			
	No.	%	No.	%	No.	%	No.	%
15-18	2	66	1	33	0	0	3	12
19-34	4	57	2	29	1	14	7	28
35-59	4	50	3	37	1	12	8	32
60 y más	3	42	2	28	2	28	7	28
Total	13	52	8	32	4	16	25	100

This table shows that as patients' age increases, their level of health education tends to decrease, with a higher percentage of patients with "good" education levels in the younger groups and a progressive decrease in the older groups.

Age group 15-18: this group shows a predominant level of "good" health education (66 %), which is positive given that intervention in prevention and knowledge about oral cancer at an early age is essential to reduce the

risk of harmful behaviors, such as tobacco or alcohol use, which are known risk factors for this disease. Thirty-three percent of patients in this group have a "fair" level of education, and no cases of "poor" education are reported, indicating that educational efforts in this age group appear to be achieving significant results.

Age group 19-34: the proportion of "good" education (57 %) compared to the younger group slightly decreases. Although this percentage remains high, the presence of 14 % of patients with a "poor" level of education in this age group could indicate a gap in educational efforts for young adults, who are also exposed to risk factors.

Age group 35-59: in this group, the percentage of "good" health education decreases further (50 %), with an increase in patients with "fair" (37 %) and "poor" (12 %) education levels. This change suggests that educational campaigns may not be effectively reaching the middle-aged population, which is concerning given that this group is more vulnerable to developing oral cancer.

Age group 60 and over: among patients over 60, only 42 % have "good" health education, while 28 % have "fair" education, and the same percentage have "poor" education. These data reflect a worrying decline in health education among older people, which may be related to factors such as decreased access to information or low levels of education in previous generations.

Comparison with previous studies: we find similar findings when comparing these results with those of recent studies. For example, a study conducted in Brazil in 2020 on oral cancer knowledge among young and older adults highlighted that knowledge levels decreased with age, with a significantly lower percentage of older adults recognizing risk factors or early signs of oral cancer.[65] This study found that knowledge was considerably limited among older adults (60 years or older), which is consistent with the high percentage of "poor" education observed in your study for this age group. In addition, a study conducted in 2021 in Spain, focusing on the adult population, revealed that educational level directly influenced knowledge about oral cancer and the adoption of preventive measures.[66] This is in line with the findings of this study, where middle-aged and older adults with "fair" or "poor" education had a higher prevalence, suggesting that educational efforts should be intensified in these groups.[67]

Table 5. Timeline

Task to be carried out	Start date	Completion date
Study planning	February 2023	April 2023
Preparation and delivery of the protocol.	May 2023	December 2023
Information gathering	February 2024	May 2024
Statistical processing, analysis, and interpretation of results.	June 2024	July 2024
Preparation of the final report.	August 2024	November 2024
Delivery of the final report	December 2024	
Discussion of the TTE	April/May 2025	

Table 6. Resources

Direct Expenses				
Description	**Unit**	**Unit Price**	**Quantity**	**TOTAL**
Mirror	unit	$0,57	25	$85,50 CUC
Mirror handle	unit	$1,78	25	$267 CUC
Gloves	pair	$0,26	25	$112,32 MN
Office Supplies				
MLC Office Supplies (Other Expenses)				
HC Forms	box x 100	$26,83	1	$53,66 MN
Legal Plastic Envelopes	one	$0,15	1	$0,15 CUC
Manila Envelopes	one	$0,09	2	$0,18 CUC
Pens	one	$0,27	2	$0,54 CUC
Two-color Pencils	one	$0,11	3	$0,33 CUC
Pencils	one	$0,12	3	$0,36 CUC
Sheets of Paper	one thousand	$5,00	2	$10 CUC
Folders	one	$3,50	2	$7 CUC
Printing Costs	quarter	$ 1,00	Aprox 200	$ 200 MN

Inclusion criteria

- Community residents: include individuals who have lived in the community under study for a minimum period, for example, one year.
- Age: Consider participants of all ages to obtain a representative sample, from adolescents to older adults.
- Informed consent: obtain informed consent from participants or their legal guardians before including them in the study.
- Oral cancer diagnosis: include participants diagnosed with oral cancer confirmed by clinical, histopathological, or laboratory tests.
- Availability: select individuals willing to participate voluntarily in the study and provide accurate information about their medical history, lifestyle habits, and environmental exposures.
- Community representativeness: ensure the sample's representativeness by including participants from different ethnic groups, socioeconomic levels, and geographic areas.
- Active participation: include participants willing to actively collaborate in the study by attending interviews, completing questionnaires, and undergoing clinical examinations as necessary.
- These inclusion criteria will help ensure the validity and representativeness of the study results by appropriately selecting participants who will contribute to answering the research questions about oral cancer risk factors in the community.

CONCLUSIONS

This study identified the main risk factors associated with premalignant oral cavity lesions in the patients seen. Among the most relevant findings, the predominance of lesions on the tongue and a significant relationship between smoking and alcohol consumption habits and the development of these lesions were highlighted. In addition, it was observed that most patients have low or inadequate health education, which underscores the need to implement educational programs focused on oral cancer prevention.

Early detection of risk factors and timely interventions in the population's lifestyle habits could significantly reduce the prevalence of premalignant lesions and improve patient prognosis. Strengthening health promotion actions, especially in vulnerable populations, is essential to achieving a more significant impact on preventing this disease.

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FINANCING

None.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTION

Conceptualization: Luis Miguel Quintana Sánchez, Yivelin Fernández Queija.
Data curation: Luis Miguel Quintana Sánchez, Yivelin Fernández Queija.
Formal analysis: Luis Miguel Quintana Sánchez, Yivelin Fernández Queija.
Research: Luis Miguel Quintana Sánchez, Yivelin Fernández Queija.
Methodology: Luis Miguel Quintana Sánchez, Yivelin Fernández Queija.
Project administration: Luis Miguel Quintana Sánchez, Yivelin Fernández Queija.
Resources: Luis Miguel Quintana Sánchez, Yivelin Fernández Queija.
Software: Luis Miguel Quintana Sánchez, Yivelin Fernández Queija.
Supervision: Luis Miguel Quintana Sánchez, Yivelin Fernández Queija.
Validation: Luis Miguel Quintana Sánchez, Yivelin Fernández Queija.
Visualization: Luis Miguel Quintana Sánchez, Yivelin Fernández Queija.
Drafting - original draft: Luis Miguel Quintana Sánchez, Yivelin Fernández Queija.
Writing - proofreading and editing: Luis Miguel Quintana Sánchez, Yivelin Fernández Queija.