

ORIGINAL

Alcoholism as a social determinant of oral diseases

Alcoholismo como determinante social de enfermedades bucales

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ABSTRACT

Introduction: alcoholism, as a public health problem, has significant systemic and oral consequences. The oral cavity reflects many of these alterations, such as caries, periodontal diseases, and precancerous lesions. This study addresses the impact of alcohol on oral health in older adults, highlighting the importance of health status analysis as a tool for risk identification.

Method: a descriptive, cross-sectional epidemiological study was conducted at Clinic No. 10 of the Párraga Polyclinic between May and June 2013. An intentional sample of 12 patients with a history of chronic alcohol consumption was selected. Home visits, structured interviews, and clinical oral examinations were conducted. Demographic data, educational level, and dental diagnosis were collected. The data were processed using descriptive statistics.

Results: of the 12 patients, 7 were men and 5 were women, with the 61-70 age group predominating. 58,3 % had dental caries, the same percentage had periodontal disease, and 25 % had precancerous lesions. An association was found between chronic alcoholism and poor oral health, influenced by factors such as poor hygiene, malnutrition, and xerostomia.

Conclusions: the study reaffirms that alcoholism seriously affects oral health, especially in older adults. Preventive and educational actions need to be reinforced in primary care, taking into account the social determinants of health. Health situation analysis is key to prioritizing interventions.

Keywords: Oral Health; Alcoholism; Periodontal Diseases; Dental Caries; Precancerous Lesions.

RESUMEN

Introducción: el alcoholismo, como problema de salud pública, tiene consecuencias sistémicas y orales significativas. La cavidad bucal refleja muchas de estas alteraciones, como caries, enfermedades periodontales y lesiones precancerosas. Este estudio aborda el impacto del alcohol sobre la salud bucal en adultos mayores, destacando la importancia del análisis de situación de salud como herramienta para la identificación de riesgos.

Método: se desarrolló un estudio epidemiológico, descriptivo y transversal en el Consultorio No. 10 del Policlínico Párraga entre mayo y junio de 2013. Se seleccionó una muestra intencional de 12 pacientes con antecedentes de consumo crónico de alcohol. Se realizaron visitas domiciliarias, entrevistas estructuradas y exámenes clínicos bucales. Se recolectaron datos demográficos, nivel de escolaridad y diagnóstico estomatológico. Los datos fueron procesados mediante estadísticas descriptivas.

Resultados: de los 12 pacientes, 7 eran hombres y 5 mujeres, predominando el grupo etario de 61 a 70 años. El 58,3 % presentó caries dentales, igual porcentaje enfermedad periodontal, y el 25 % lesiones precancerosas. Se evidenció una asociación entre el alcoholismo crónico y el deterioro de la salud bucal, influido por factores como la mala higiene, desnutrición y xerostomía.

Conclusiones: el estudio reafirma que el alcoholismo afecta gravemente la salud bucal, especialmente en adultos mayores. Se requiere reforzar acciones preventivas y educativas desde la atención primaria, considerando

los determinantes sociales de salud. El análisis de situación de salud es clave para priorizar intervenciones.

Palabras clave: Salud Bucal; Alcoholismo; Enfermedades Periodontales; Caries Dentales; Lesiones Precancerosas.

INTRODUCTION

The promotion of oral health in our conception should be directed towards two fundamental aspects: one aimed at controlling the determinants and the other at identifying individuals susceptible to risk to offer them individual protection.⁽¹⁾

Who is responsible for oral health? Individuals, professionals, and communities.

The health status of populations and the factors that condition it are feasible to know through established statistical records, population surveys, research, interviews with formal and informal leaders, documentary reviews, and monitoring the behaviour of diseases, risk factors, and other manifestations.^(2,3)

Health Situation Analysis is an essential topic in the training of stomatologists and other professionals responsible for a population group's health. It is a tool for identifying and solving problems, to be used wholly or partially by health and non-health personnel who are responsible for improving the health status of others.^(4,5,6)

Health phenomena, especially when considered from a population perspective, are of the highest complexity because variables corresponding to different orders of reality, from biological processes to the complex structures of culture and social relations, operate and interact simultaneously.⁽⁷⁾

Consumption of toxic substances has been observed since antiquity in many peoples and different cultures; it even dates back to the dawn of humanity, when primitive man began to take an interest in the effects of certain plants.⁽⁸⁾

This phenomenon has been passed on to his descendants for thousands of years, and new experiences have been gradually incorporated. Consumption and all its 'new' variants, acquired over the years, have been constant, but the phenomenon of alcohol has reached extraordinary importance only in the last decades, and this fact is part of the characteristics of industrial and consumer society.^(9,10,11)

Alcoholism is a chronic disease of insidious development and progressive evolution, characterized by the person's inability to control their drinking, which in most cases leads to excessive drinking, causing problems in health, family, work, and relationship with society. Currently, the World Health Organisation (WHO) considers it a chronic non-communicable disease and replaces the term alcoholism with alcohol dependence syndrome.⁽¹²⁾

Alcohol is often consumed to relieve psychological tension and stress as an act of self-medication for adverse emotions, such as depression, anxiety, and guilt. Thus, the effects of alcohol on the oral mucosa are added to those of psychological factors and mental illness.

It has been demonstrated that the consumption of alcoholic beverages has repercussions on practically the entire organism, with neurological, cardiovascular, digestive, sexual, and oral cavity manifestations.⁽⁸⁾

The oral cavity reflects the state of general health more frequently than any other part of the organism, which is why the malnutrition characteristic of the alcoholic patient, caused by the individual's lack of concern for a healthy and balanced diet, altered metabolism, and a high tendency to vomit, leads to nutritional deficiencies that aggravate the situation, implies nutritional deficiencies that exacerbate the depression of the immune system and magnify the tissue response initiated by irritative factors and influence the resistance of the host and the capacity of restoration of the soft and hard tissues of the oral cavity, so that alcohol is associated with the origin, severity, and evolution of dental caries, gingival and periodontal diseases, and oral cancer with a much higher probability of suffering from it about non-alcoholic individuals.^(9,10,11)

Alcohol causes epithelial atrophy of the oral mucosa, increases mucosal permeability, and increases the solubility of toxic substances such as those derived from smoking.

Individuals who drink large amounts of alcohol are also often heavy smokers; tobacco and alcohol use are independently associated with a variety of oral pathological conditions in young and adult patients, which would imply a synergistic potential for oral diseases. Studies related to this association are complicated by the confluence of several risk factors in the same person and the lack of objective data for the clinician. Smoking is a risk factor strongly associated with oral diseases due to the tendency to decrease salivary flow, increase the possibility of the formation of antibacterial plaque, and cause a decrease in serum antibody titers and T-lymphocyte response.^(2,3)

In Cuba, community centres have been created that function as therapeutic communities, defined as a form of medium therapy. They try to make the patient function in a healthy way; decision-making is shared with the patients and employees at all levels with the aim of increasing self-esteem and changing attitudes and lifestyles of the patients.

It is one of the few countries today where health is the full right of the people and the state's responsibility.

The struggle to improve physical, psychological, and social well-being does not end with the achievement of low mortality rates, immunization, and high life expectancy, indicators that in our country have been achieved and surpassed in comparison with first world nations; instead, actions aimed at the development of healthy lifestyles and the progressive increase in quality of life are added, for which a tireless fight against toxic habits, such as smoking, alcoholism, sedentary lifestyles, obesity, among others, is carried out.^(8,10,11) Due to the repercussions of these habits and the great controversy that arises from their consequences, it is the source of inspiration for this work.

METHOD

A descriptive cross-sectional epidemiological study was carried out in the 10th Clinic of the 'Párraga' Polyclinic Health Area during May and June 2013 to identify the main oral disorders in patients with chronic alcohol consumption.

The study universe consisted of 652 people registered at the clinic. From this universe, a non-probabilistic purposive sample of 12 patients with a confirmed history of alcoholism was selected, taking into account their willingness to participate in the study and the presence of related clinical oral signs.

Data collection was conducted through structured interviews, home visits, and clinical consultations. Validated instruments were used to collect socio-demographic information (age, sex, educational level), and a direct clinical stomatological examination was performed to identify the presence of dental caries, periodontal disease, and precancerous lesions in the oral cavity. The data obtained were organized in individual clinical records.

Simple descriptive statistical methods (absolute frequency and percentage) were applied to process the information, aiming to characterize the population studied and establish preliminary associations between the variables analyzed. Patients with more complex oral lesions were referred to the second level of care for specialized follow-up.

The research complied with ethical principles, obtaining verbal informed consent from the participants, who were informed about the study's objectives, the procedures to be performed, and the confidential nature of the information provided.

RESULTS AND DISCUSSION

The demographic aspects indicate that 12 people were examined, five female and seven male. The predominant age group was 61-70, with five persons making up 41,6 % of the population. Demographic studies at the national level show an accelerated aging of the Cuban population due to the increase in life expectancy. Age and sex are variables that are related to people's health. However, it has been shown that age is more important, especially in the field of stomatology, as it influences the main oral health problems such as dental caries, periodontopathy, and oral cancer. The predominance of females in this study supports the statistical criterion found in other national and international research, which highlights a greater number of females as age increases concerning males, even though there is a predominance of males over females at birth. Women and men age differently. First and foremost, women live longer than men, and part of their advantage in life expectancy is biological. Far from being the weaker sex, women seem more resilient than men at any age.

Regarding the level of schooling in the population, with a total of 12 people in the sample, three patients have a low level of education (25,0 %), 5 have an intermediate level of education (41,6 %), and 4 have higher education (33,3 %).

The opportunities for study and improvement provided by the revolution result from the level of schooling found in our study group, who have been able to pursue middle and higher education, raising their educational and intellectual preparation. In this research, the level of schooling is determined by the time older adults receive schooling when health education is not a priority for the prevailing health system. Still, in most of the cases treated, the level of education is not an influencing factor in the development of a chronic alcohol-dependent disease.

The distribution of the sampled population according to oral disease due to alcoholism showed that a total of 7 persons had dental caries at 58,3 %, seven patients had periodontal disease at 58,3 %, and three patients had pre-cancerous lesions at 25,0 %.

Alcoholism neglects oral hygiene often as a consequence of the disease itself being associated with depressive and marginal disorders. Primary xerostomia in some mental disorders such as depression, and secondary to psychotropic drugs, increases with the action of alcohol on the salivary glandular parenchyma, producing atrophy; or sometimes, it appears enlarged with signs of sialadenitis as a result of fatty deposits in the parotid glands. As a consequence of xerostomia, poor oral hygiene, and nutritional and dietary alterations, there is an increase in dental caries, missing teeth, and advanced periodontal disease.

It must be taken into account that both tobacco and alcohol are oral irritants of the oral mucosa, which often react to the chemical effect by keratinizing and subsequently developing pre-cancerous dysplastic

alterations. It acts on the cerebral ascending reticular system and can cause nocturnal bruxism during sleep. Dental attrition is higher among alcoholics.

Mucosal disorders such as cheilitis, candidiasis, superficial erosions, and glossodynia have been described in alcoholics as a consequence of their poor nutritional status and disease.

Among the effects of alcohol, whether or not accompanied by drugs, are oral cancer, complete loss of teeth, and an extended inventory of adverse physical and neurological effects. Generally speaking, however, the use of any medication or drug affects not only the oral cavity but also the whole organism.

The effects of addiction to these substances range from the destruction of irreplaceable and fundamental enamel to the disruption of the mouth's tissues, changes in the mucosa, and the appearance of various ulcers. These substances weaken the bone structure and promote tooth loss.

Oral or buccal cancer usually involves the tissue of the lips or tongue but can also occur on the floor of the mouth or in the salivary glands, cheek lining, gums, or palate (roof of the mouth). Most oral cancers look very similar under the microscope, are called carcinomas, are malignant, and tend to spread rapidly.

CONCLUSIONS

Health Situation Analysis is a useful scientific-methodological tool to identify, prioritize, and solve community health problems. A cross-sectional descriptive epidemiological study was carried out on 12 people belonging to clinic No. 10 of the 'Policlinico Párraga' Health Area between May and June 2013 to describe the behavior of oral diseases in alcoholic patients. A sample of 12 people was taken from a universe of 652. Patients were visited in the field and summoned to consultations, where promotion, prevention, and cure activities were carried out. The predominant sex was female, and the age group was 61-70. The educational level of this population is medium. There is a higher number of patients with carie, and periodontal disease. Patients were referred to the second level of care for pre-cancerous lesions.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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