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ORIGINAL

Social determinants and oral health conditions in the elderly

Determinantes sociales y condiciones de salud bucal de adultos mayores

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ABSTRACT

Introduction: in older adults, the social determinants of health directly influence the health-disease process; oral health is no exception.
Objective: determine the behavior of social determinants and oral health conditions in older adults.
Method: a descriptive cross-sectional study was carried out on 221 individuals aged 60 years and over from office 19, La Demajagua, in June 2024. Questioning and clinical examination of the oral cavity were used, with prior informed consent of the participants and caregivers. The variables studied were: age, sex, occupation, economic well-being, family functioning, housing conditions, eating habits and oral health conditions.
Results: the most represented age group was 60 to 74 years old with 72,8 %, with a predominance of males. Only 32,6 % of older adults worked and 11,8 % had good oral health conditions. 56,1 % of those examined reported not having economic well-being, and 73,8 % presented a regular oral health condition. Dysfunctional families predominated in 56,6 %, 46,2 % living in homes with regular conditions and 58,8 % with inadequate eating habits.
Conclusions: the unfavorable behavior of the analyzed determinants reveals their negative influence on the oral health condition of older adults.

Keywords: Social Determinants; Senior Adult; Oral Health Conditions.

RESUMEN

Introducción: en el adulto mayor las determinantes sociales de la salud influyen de forma directa en el proceso salud-enfermedad, la salud bucodental no escapa de ello.
Objetivo: determinar el comportamiento de las determinantes sociales y condiciones de salud bucal en adultos mayores.
Método: se realizó un estudio descriptivo de corte transversal en 221 individuos de 60 años y más del consultorio 19, La Demajagua, en junio de 2024. Se utilizó el interrogatorio y el examen clínico de la cavidad bucal, previo consentimiento informado de los participantes y cuidadores. Las variables estudiadas fueron: edad, sexo, ocupación, bienestar económico, funcionamiento familiar, condiciones de la vivienda, hábitos alimentarios y condiciones de salud bucal.
Resultados: el grupo de edad más representado fue el de 60 a 74 años con el 72,8 %, con predominio del sexo masculino. Solo el 32,6 % de los adultos mayores trabajaban y el 11,8 % tenían buenas condiciones de salud bucal. El 56,1 % de los examinados refirieron no tener bienestar económico, y el 73,8 % presentó una condición regular de salud bucal. Predominaron las familias disfuncionales en el 56,6 %, el 46,2 % habitando en viviendas con condiciones regulares y el 58,8 % con hábitos alimentarios inadecuados.
Conclusiones: el comportamiento desfavorable de las determinantes analizadas pone de manifiesto su influencia negativa sobre la condición de salud bucal de los adultos mayores.

Palabras clave: Determinantes Sociales; Adulto Mayor; Condiciones de Salud Bucodental.

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INTRODUCTION

In recent decades, there have been significant changes in the perception and explanation of the causes of health problems,[1,2] so the analysis of the relationship between the socioeconomic structures of the population and the process of obtaining health, well-being, and quality is not new.[3]

The focus on social determinants of health (SDH) emerged as a new paradigm in addressing health inequalities[4,5,6] by explaining the factors that determine people's health status, as these are often the fundamental sources of health problems and most of the global burden of disease.[2,3,7] as well as analyzing the influence of health promotion accompanied by behavioral changes that can modify the impact of environmental, social, and economic factors.

Biomedical healthcare models reduce the adverse consequences of disease, but they are insufficient to improve health at the individual and population levels effectively. This implies accepting that medical care is not the primary determinant of people's health but is primarily determined by the social factors in which they live and work.[8,9]

DSSs are especially important in Latin American countries characterized by socioeconomic disparities and health inequalities.[10,11] Currently, the complex international economic and political landscape has highlighted the poor state of health systems in many countries around the world.[12] The Latin American region is a clear example of this situation, despite implementing development policies focused on sustained economic growth to achieve well-being and improve people's quality of life.

In September 1978, the International Congress on Primary Health Care was held in Alma Ata to generate changes in the approach to health care to open up a more social and inclusive vision[13] with the health approach originating at that time when Evans, cited by Álvarez Pérez et al.[14] proposed a conceptual framework for reflecting on the determinants of health and their links, with the contribution of elements that led to a better understanding of the complexities of health and a starting point for policy-making, research, and priority assessment based on the population health paradigm.

SDH is "the social conditions in which an individual is born, grows, and ages, affecting their health." These have remained central to the ideology and daily life of humanity in some populations. Health is conceived holistically in these populations, including the earth, nature, and social and spiritual life.[15]

In 2005, the WHO created the Commission on Social Determinants of Health to revive the discussion on the global level. Based on conceptual contributions, this commission would analyze the problem and develop a proposal to achieve health equity worldwide. Reducing health inequalities will require solutions that address their root causes.[3,10]

The aforementioned approach to social determinants of health has several conceptual and methodological implications for its implementation.[13,16] The SDH commission served as a unifying instrument for the different currents that existed at the time on the subject by specifying the importance of analyzing structural determinants of health (SDH) and intermediate determinants of health (IDH) that condition the health status of a population.[17] The first group (SD) includes the socioeconomic and political context, which refers to structural factors in the social system that significantly affect the social structure and public policies on education and health care. No less important are the axes of inequality in the social structure, as they determine opportunities for access to health resources.[2,18]

SDIs include material conditions such as housing, income level, working conditions, community of residence, and psychosocial circumstances such as lack of social support and stressful situations. Behavioral and biological factors include lifestyle and habits.[19]

Consequently, the health sector is essential in promoting and coordinating policies for action on social determinants. In this regard, the central idea is that medicine and health services are two of several factors that influence the population's health. In reality, the main factors are found in the broad spectrum of social and economic conditions in which individuals live: poverty in its various forms, injustice, lack of education, nutritional insecurity, marginalization and discrimination, inadequate early childhood protection, discrimination against women, unhealthy housing, urban decay, lack of drinking water, widespread violence, and gaps and disparities in systems.[18]

Oral health, lifestyle, and habits are considered risk factors in the clinical onset of oral diseases or may modify their progression. This group includes the consumption of very hot foods, soft foods that do not stimulate chewing, poor oral hygiene, and toxic habits such as alcohol consumption and smoking. Modern dietary habits have been repeatedly linked to various oral conditions.[20,21,22]

Considering that population aging is the main demographic characteristic of Cuba[23] and that studies on oral health in the elderly population have focused more on risk factors than on other elements of the social structure without failing to appreciate that these also condition the position of these individuals in society and have a direct effect on oral health, the authors of this study set as their objective to determine the behavior of social determinants of health and oral health conditions among older adults at Clinic 19, La Demajagua, Isla de la Juventud, June 2024.

METHOD

In June 2024, a descriptive, cross-sectional study was conducted on 221 individuals aged 60 years and older at Clinic 19, La Demajagua, belonging to the "Juan Manuel Páez Inchausti" Polyclinic, Isla de la Juventud.

The following variables were studied: age, sex, occupation, economic well-being, family structure and functioning, housing conditions, eating habits, and oral health conditions, which were divided into three categories: good, fair, and poor.

The first category included older adults whose oral health conditions coincided with the epidemiological classification of healthy with risk. The fair category corresponded to those who, coinciding with the epidemiological classification of sick or disabled, presented one or two of the following conditions: one to three cavities, inflamed gums, abundant tartar, potentially malignant lesions, partial tooth loss or ill-fitting partial dentures; it also included people who had undergone oral cancer surgery or cleft lip and palate surgery and who did not present any aesthetic or functional difficulties.

The category "poor" was assigned when the oral health conditions of the examinee matched the epidemiological classification of sick or disabled but presented three or more of the problems described above. This category also included patients who had more than four cavities; needed secondary periodontal treatment due to mobility and marked periodontal recession; the presence of potentially malignant and malignant lesions requiring referral to secondary care, as well as those who were completely edentulous or whose prostheses were ill-fitting, as well as people who had undergone oral cancer surgery and those who had undergone cleft lip and palate surgery who presented functional alterations or required oral and maxillofacial rehabilitation.

Techniques and procedures

To collect the information, we used participant observation of aspects related to the living conditions of the elderly and a questionnaire for older adults administered in their homes. In addition, a clinical examination of the oral cavity was performed using appropriate instruments and protective barriers. All the information collected was processed digitally, using a computer with Windows 10 as the operating system and Word and Excel programs to prepare the text and statistical tables.

Ethical considerations

The data obtained in the study were used by the Declaration of Helsinki and the Public Health Law of the Republic of Cuba. Informed consent was requested and received from the participants and their companions, if any.

RESULTS

Of a total of 221 older adults, 161 belonged to the 60-74 age group and 134 were male, representing 72,8 % and 60,6 %, respectively (table 1).

Table 1. Age and sex of older adults at Clinic 19, La Demajagua, June 2024

Age	Sex					
	Feminine		Male		Total	
	No.	%	No.	%	No.	%
60-74	68	30,7	93	42,1	161	72,8
75 and more	19	8,6	41	18,5	60	27,2
Total	87	39,3	134	60,6	221	100,0

Of a total of 221 older adults, 97 were unemployed, representing 43,9 %, and 163 had fair oral health, representing 73,8 % of the total (table 2).

56,1 % of older adults reported not having economic well-being. Regarding oral health conditions, 163 and 32 patients in the study sample were assessed as fair and poor, representing 73,8 % and 14,5 % of the total individuals examined during the investigation (table 3).

Table 2. Employment and oral health status

Occupation	Oral health status						Total	
	Good		Regular		Bad			
	No.	%	No.	%	No.	%	No.	%
Working	11	5,0	56	25,4	5	2,3	72	32,6
Not working	9	4,1	73	33,0	15	6,8	97	43,9
Retired	6	2,7	34	15,4	12	5,4	52	23,5
Total	26	11,8	163	73,8	32	14,5	221	100,0

Source: questionnaire for older adults and dental medical history.

Table 3. Economic well-being and oral health status

Economic well-being	Oral health status						Total	
	Good		Regular		Bad			
	No.	%	No.	%	No.	%	No.	%
yes	21	9,5	71	32,2	5	2,3	91	43,9
No	5	2,3	92	41,6	27	12,2	124	56,1
Total	26	11,8	163	73,8	32	14,5	221	100,0

Source: questionnaire for older adults and dental medical history.

Of the total study sample (221), 125 families were classified as dysfunctional, representing 56,6 % of the families investigated. With fair oral health, 86 families were classified as dysfunctional, representing 38,9 % of the total sample of families examined; in turn, with poor oral health, 28 families were classified as dysfunctional, representing 12,7 % of the total study sample (table 4)

Table 4. Family functioning and oral health status

Family operation	Oral health status						Total	
	Good		Regular		Bad			
	No.	%	No.	%	No.	%	No.	%
Functional	15	6,8	77	34,9	4	1,8	96	43,4
Dysfunctional	11	5,0	86	38,9	28	12,7	125	56,6
Total	26	11,8	163	73,8	32	14,5	221	100,0

Source: questionnaire for older adults and dental medical history.

Of the total study sample (221), 102 older adults lived in homes with fair conditions, representing 46,2 % of the individuals who participated. With fair oral health, 87 older adults lived in dwellings with fair conditions, representing 39,4 % of the total sample examined; in turn, with poor oral health, 14 older adults lived in homes with poor conditions and 13 in homes with fair conditions, representing 6,3 % and 5,9 % of the total study sample, respectively. With good health, 23 lived in houses with good conditions, representing 10,4 % of the total number of adults evaluated (table 5).

Table 5. Housing conditions and oral health status

Property conditions	Oral health status						Total	
	Good		Regular		Bad			
	No.	%	No.	%	No.	%	No.	%
Good	23	10,4	69	31,2	5	2,3	97	43,9
Average	2	0,9	87	39,4	13	5,9	102	46,2
Poor	1	0,5	7	3,2	14	6,3	22	9,9
Total	26	11,8	163	73,8	32	14,5	221	100,0

Source: questionnaire for older adults and dental medical history.

Of 221 older adults, 130 had poor eating habits, representing 58,8 %. Among those with fair oral health, 97 had poor eating habits, representing 43,9 % of the total sample studied; in turn, 26 with poor oral health had poor eating habits, representing 11,8 % of the sample studied. However, 19 older adults had adequate eating habits, representing 8,6 % of the patients examined during the study (table 6)

Table 6. Eating habits and oral health status

Eating habits	Oral health status						Total	
	Good		Regular		Bad			
	No.	%	No.	%	No.	%	No.	%
Suitable	19	8,6	66	29,9	6	2,7	91	41,2
Unsuitable	7	3,2	97	43,9	26	11,8	130	58,8
Total	26	11,8	163	73,8	32	14,5	221	100,0

Source: questionnaire for older adults and dental medical history.

DISCUSSION

According to Rodríguez et al.[24] and Valenzuela et al.[25], working people have worse oral health than retirees. However, authors such as Gispert et al.[26] suggest that the prevalence of diseases affecting the stomatognathic system is associated with sources of employment, as unemployed people are more likely to suffer health problems due to the psychological instability caused by this condition.

Upon closer analysis, the authors reveal two significant aspects in this regard:

- People who are employed have less time to visit the dentist; they generally do so when they have problems that affect their work and social life. Retired people, on the other hand, use their free time for activities that promote self-care.
- A new condition emerges old for those who reach this stage of life without employment or a pension, which leads to associated health deterioration.

Regarding economic well-being, the results of this study coincide with those obtained by Márquez and Medina cited by Martínez[27] and Cueto et al.[28], who indicate that a poor economic situation leads to poor oral health. The current socioeconomic context is similar to another period known in Cuba as "special," in which Álvarez et al.[29] conducted a study similar to the present one, demonstrating that there was an increase in poverty, a loss of social equity, and an apparent decline in the oral health of the population.

Regarding family functioning and oral health status, the results of this study coincide with those obtained by Cueto[28], Díaz[30], Domínguez[31] and Arias[32], who found that individuals with poor oral health predominate in dysfunctional families. Regarding housing conditions, the results do not coincide with those reported by Cueto[28] but they do coincide with those of Sueiro[33], who found that those living in poor housing conditions have the worst oral health.

Regarding eating habits, the present study coincides with studies conducted by Martínez[27], Cueto[28], and Sueiro[33], which analyzed the relationship between nutrition and oral health and confirmed that it is bidirectional. Losing teeth and not replacing them limits the type of food consumed, reducing protein and fiber intake and affecting older adults' nutritional status and oral health.

Studying populations in their social contexts is essential to determining the factors that negatively affect older adults' general and oral health. Understanding the social determinants of health is essential for providing well-being and quality of life to older adults.

CONCLUSIONS

The determinants addressed in the research are proportionally related to oral health. The determinants' unfavorable behavior highlights their negative influence on the oral health status of older adults.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTION

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