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LETTERS TO THE EDITOR:

Social Determinants of Oral Health in Old Age. A Vulnerable Group in Mexico

Determinantes sociales de la salud bucal en la vejez. Grupo vulnerable en Mexico

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INTRODUCTION

Attention to the quality of life of the elderly population is imperative today, considering the global aging of the population; to achieve this goal, it is essential to focus on the social determinants of health, which encompass social, economic, and political factors that directly influence the well-being of older adults; this approach differs from the traditional perspective of risk factors, focusing on understanding the inequalities between different social groups. In this context, it is necessary to explore the specific characteristics of aging, recognizing that old age is not a disease, but presents particular challenges, especially in terms of psychological and social health; in addition, the importance of addressing oral health in the elderly population is highlighted, as it plays a fundamental role in overall quality of life (1).

The social determinants of health these are defined as the social conditions in which people live and work, encompassing the social characteristics that influence life, focusing on specific aspects of the social context that impact health, as well as the mechanisms through which these social conditions translate into health effects; it is undeniable that old age is not a disease; however, it is clear that there are specific characteristics in older adults that are associated with higher morbidity, as many conditions become more prevalent in the second half of life; in addition, during this stage, psychological and social factors take on particular importance, an aspect that has gained relevance in the current conception of the health-disease process, this is due to the decline in neuropsychic capacity to adapt to the environment that is experienced at this stage of life (2).

The aging of the population poses challenges for public health, as it is a global phenomenon and a health concern; the health sector is in a position to implement a significant series of actions to provide health care and services that ensure a better quality of life for older people, promoting their full participation in society; aging involves certain biological, systemic, physiological, cognitive, psychological, and social changes, caused by a loss of homeostasis and a decrease in the ability to adapt to internal and external stress, which makes individuals more vulnerable to disease and mortality (3).

Globally, by 2050, the world population of people aged 60 and over will have doubled, and the number of people aged 80 and over is expected to triple (4). According to Mexico's National Population Council, older adults make up 12.8% of the total population; it is predicted that by 2030, this figure will reach 14.96%, and by 2070, it will be 34.2% (5). Thus, aging can be a challenge that leads to a burden of disease, increased risks of disability, and a greater need for care related to aging; in this way, public health can have a negative impact on this population if the true definition of health is not understood. Mexico is one of the countries with the greatest social and economic diversity, based on its cultural and ecological wealth; however, it has low levels of inclusion; multifactorial conditions of poverty influence access to health services and the health status of Mexicans. National health surveys have consistently identified significant differences in health levels according to social strata and geographic location; these circumstances are the result of the distribution of money, power, and resources at the global, national, and local levels, which in turn depends on the policies adopted by each country; social determinants of health explain most health inequalities, that is, the unfair and avoidable differences observed in and between countries in terms of health status (3,5).

Oral health directly affects quality of life, and it is claimed that oral health is partly responsible for the general condition of patients; this is of utmost importance in older adults. Adults aged 65 and over may experience tooth loss and chronic oral diseases such as dental caries, periodontal disease, oral infections, oral mucosal lesions, and temporomandibular disorders; older adults have chronic damage or systemic diseases that require more medication, sometimes requiring more than three drugs, but this medication can have effects on oral health such as xerostomia or hyposalivation, which can cause damage to the teeth and oral mucosa, leading to multiple complications in oral health, causing difficulty in chewing, swallowing, and communicating, leading to health problems such as inadequate nutrition and negative psychological emotions (6).

A brief description of these changes is provided below:

Changes in the lining tissues. Alterations mainly occur in the skin due to changes in the epithelium; in turn, the skin becomes dehydrated and loses its resistance and elasticity, which contributes to the thinning of the oral mucosa.

Changes in bone tissue. From the sixth decade of life onwards, bone remodeling is affected, generating an imbalance in bone density, which leads to weakening of the bone, manifesting as bone pain, fractures, flattening, and loss of height of the temporomandibular joint.

Changes in salivary function. Changes may be due to atrophy of the glandular acini as part of the aging process, or to the action of medications or radiation in the head and neck area.

Changes in dental tissue. Signs of natural aging appear, as it is not only poor hygiene but

also the process that older people go through, for example: wear and tear as a result of chewing without causing discomfort, darkening of the teeth due to changes in the dental tissues themselves, loss of teeth, loss of vertical dimension and occlusal plane, among others. In addition, teeth show variation in shape (rotation, inclination), position (extrusion, inclusion), and size (abrasion, erosion).

Changes in periodontal tissue. Gingival tissues react to aging with thinning and loss of keratin, resulting in fragile tissue that is sensitive to lacerations; periodontal tissue often experiences gingival recession at the neck of the tooth, as well as loss of the characteristic pink color and texture; on the tongue, there are changes in the papillae, changes in the structure and consistency of the muscles, and glossitis; there is a decrease in salivary flow and an increase in consistency (7).

The fascies, characteristic of many elderly people, are caused by tooth loss, as teeth have an important morphological and aesthetic component; the salivary glands lose about 30% of their parenchyma, but there is no loss in the amount of saliva produced; in many cases, the temporomandibular joint shows flattening of the mandibular condyle, but in some patients there is a painful condition of joint origin and in many others there is not. The information collected during this time revealed various diseases affecting oral health, with the following standing out not only for their frequency but also for their impact on the general health of the population: dental caries, periodontal disease, and dental trauma (8).

Periodontal disease has been considered one of the most prevalent diseases in the elderly population; it is closely linked to partial tooth loss, systemic diseases, and smoking; it negatively affects a person's social life, emotional health, and overall quality of life; it is related to the deterioration or complications of cardiovascular and respiratory diseases (pneumonia) and diabetes (8,9).

Edentulism is one of the biggest problems affecting oral health, and it is caused by the accumulation of multiple oral diseases and socioeconomic factors throughout life; the loss of teeth, whether partial or, in this case, total, significantly affects stomatognathic functions such as chewing, swallowing, and therefore nutrition, as well as aesthetics, which has an impact on quality of life, low self-esteem, and a lack of social integration. Xerostomia is one of the most common oral disorders, and longitudinal population studies have shown that xerostomia increases linearly with age; it affects both sexes, with men being more affected during the night shift than during the day shift, and women being more affected during the day shift than during the night shift. This condition also affects other vital functions such as chewing, swallowing, and even the adhesion of partial or total dentures; xerostomia has also been shown to cause tooth decay and erosion, as well as burning mouth syndrome, problems opening and closing the jaw, and bleeding gums; it provides the ideal environment for fungal and bacterial infections; changes in taste, difficulty chewing and swallowing affecting nutrition (10).

Due to psychological and physical changes, older adults do not have the motor skills to maintain the same level of hygiene as in previous years; similarly, the importance they place on personal care diminishes as they acquire a different mindset, other priorities, or simply become accustomed to it, which is most common. Poor oral health directly affects people's quality of life, as it becomes a cycle that does not stop; for example, tooth loss leads to poor nutrition, affects interpersonal relationships, and causes self-image to deteriorate, especially when people do not have the resources to replace their teeth; this population is particularly vulnerable, as they depend on others for personal care, and in most cases, those responsible for their care do not have sufficient knowledge or training to perform proper hygiene tasks (11).

CONCLUSION

Ensuring an adequate quality of life for the elderly population requires special attention to the social determinants of health; these determinants, which encompass social, economic, and political aspects, as well as living and working conditions, are crucial to understanding health inequalities among older adults; as the world's population ages, the health sector faces significant challenges in providing comprehensive care that promotes the active participation of older adults in society.

Old age should not be considered a disease, but it does have specific characteristics that can increase vulnerability to various diseases and affect psychological and social adaptation. In addition, population aging poses challenges, especially in countries such as Mexico, where social and economic conditions can influence access to health services.

When it comes to oral health in older adults, its crucial role in overall quality of life stands out; biological changes and the impact of chronic oral diseases can affect stomatognathic function, nutrition, and emotional health; prevention and proper management of conditions such as periodontal disease and xerostomia are essential for improving oral health and, therefore, quality of life in old age; addressing the social determinants of health, as well as preventing and properly managing oral health problems in the older adult population, are crucial steps in ensuring active aging and a better quality of life at this stage of life.

In this context, the decision to develop policies aimed at dental care requires reflection on older adults as a vulnerable group, as well as knowledge of epidemiological indicators of oral health and which interventions are most cost-effective; it is important that the issue of oral health be included in the national political agenda; in Mexico, public health policymakers, members of the dental profession, and dental educators should be encouraged to base their decisions more explicitly on this vulnerable group.

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