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**DENTAL DISEASES AMONG ADULT POPULATION: STRUCTURE, RISK FACTORS,
AND PREVENTION**

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Resume

Dental diseases among adults remain a major medical and social challenge despite advances in preventive and therapeutic technologies. The high prevalence of dental caries, periodontal diseases, and oral mucosal disorders is driven by behavioral, socio-economic, and systemic factors. This article summarizes current evidence on the epidemiological structure of adult dental morbidity, outlines key risk factors, and substantiates priority directions for prevention. A comprehensive preventive strategy that combines individual hygiene practices, professional dental care, and public health interventions can significantly reduce oral pathology and improve quality of life in adult patients.

Keywords

dental diseases, adult population, dental caries, periodontitis, prevention, oral hygiene.

Introduction

Maintaining oral health in the adult population is an important goal of modern healthcare. Diseases of the oral cavity negatively affect not only mastication and facial aesthetics but also general health, contributing to chronic inflammatory processes and a reduced quality of life. Despite the development of new diagnostic methods and treatment technologies, the prevalence of dental caries and periodontal diseases in adults remains consistently high worldwide [1,2].

This issue becomes especially significant in the context of increasing life expectancy, a growing proportion of working-age and older individuals, and widespread risk factors such as unhealthy diet patterns, tobacco use, and comorbid chronic diseases. Consequently, adult dental morbidity should be considered a multifactorial condition requiring integrated preventive and clinical approaches [3,4].

Materials and Methods

This article is based on an analytical review of recent national and international publications addressing the epidemiology of dental diseases in adults. Methods included comparative analysis and synthesis of scientific sources published over the last 10–15 years. Risk factors were evaluated considering clinical, socio-hygienic, and behavioral determinants. The main outcomes of interest were the prevalence and distribution of dental caries, periodontal diseases, and oral mucosal pathology, as well as current evidence-based prevention strategies [1,3,5].

Results and Discussion

Epidemiological studies indicate that dental caries affects more than 90% of adults, and a considerable proportion of patients present with complicated forms of the disease (pulpitis, apical periodontitis, tooth loss), reflecting delayed access to care and insufficient preventive control [1,2]. Periodontal diseases are reported in 60–80% of adults, with severe periodontitis being more common after the age of 40, which is associated with cumulative exposure to plaque, smoking, metabolic disorders, and systemic inflammation [3,6].

Oral mucosal disorders in adults often have a chronic course and may be linked to local irritants, reduced immune reactivity, systemic diseases, and long-term exposure to behavioral risk factors. These conditions may manifest as inflammatory and dystrophic changes and, in some cases, precancerous lesions requiring timely monitoring [7].

Key Risk Factors

The major determinants of adult dental morbidity include:

- **Poor individual oral hygiene** and inadequate plaque control;
- **High carbohydrate consumption**, frequent snacking, and low dietary quality;
- **Tobacco use** and alcohol consumption;
- **Endocrine and cardiovascular diseases**, particularly diabetes mellitus and metabolic syndrome;
- **Low motivation for preventive dental visits** and delayed professional care [2,4,6,8].

Importantly, adult dental pathology is rarely attributable to a single cause. It is typically multifactorial, involving biological, behavioral, and socio-economic mechanisms that interact and amplify the risk of caries progression and periodontal tissue breakdown [3,4].

Prevention Strategies

Prevention of dental diseases in adults should incorporate both **individual** and **professional** measures. Individual prevention includes stable oral hygiene habits (twice-daily toothbrushing with fluoride toothpaste, interdental cleaning), dietary modification, and reduction of harmful habits. Fluoride exposure remains a cornerstone of caries prevention and enamel remineralization [5,9].

Professional prevention includes regular dental check-ups, professional cleaning, early diagnosis of caries and periodontal inflammation, application of remineralizing agents when indicated, and timely treatment of initial lesions. For periodontal health, supportive periodontal therapy and risk factor control (especially smoking cessation and glycemic control) are essential [3,6,10].

In addition, public health interventions—health education programs, promotion of oral health literacy, and motivation for preventive examinations—play a decisive role in reducing the burden of dental diseases in adult populations [1,4].

Conclusion

The high prevalence of dental diseases among adults is determined by a complex interplay of biological, behavioral, and social factors. Effective prevention requires an integrated approach that combines individual hygiene and dietary measures, professional dental care, and broader public health initiatives. Improving preventive programs and increasing adult motivation for regular dental control represent key priorities for reducing dental morbidity and enhancing quality of life.

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