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STRATEGY OF THE REPUBLIC OF UZBEKISTAN FOR THE PREVENTION OF PERIODONTIC DISEASES OF THE POPULATION

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Annotation. This article addresses the significant public health challenge of periodontal disease prevalence in the Republic of Uzbekistan. Despite its commonality, particularly gingivitis in youth which poses a high risk for adult periodontitis, there is a noted scarcity of comprehensive epidemiological data and methodological consistency in national studies. This paper argues for a strategic shift towards a prevention-focused and integrated healthcare model. This proposed strategy emphasizes the importance of public awareness, promoting effective patient self-care, and addressing the socio-economic and cultural barriers that limit access to diagnosis and treatment. In this context, dental schools in Uzbekistan must play a pivotal and transformative role. They are essential in training competent, modern professionals who are equipped not only with clinical skills but also with strong biopsychosocial and ethical components. The primary objective is to prepare future dentists to understand and manage the common risk factors shared between oral and non-communicable diseases, and to effectively lead interdisciplinary health teams. Championing this preventative model is critical to meeting the challenge of reducing the prevalence and impact of periodontal disease nationwide.

Key words: Gingivitis, periodontitis, prevention, oral hygiene, risk factor management.

Abstract. Dental schools in Uzbekistan should play a key role in teaching components to specialists. Future dentists of Uzbekistan can address the problem of reducing the prevalence of periodontal diseases by leading interdisciplinary teamwork in healthcare. Key words: gingivitis; periodontitis; prevention. Relevance. Gingivitis is a common type of periodontal disease in people of all ages, including children and adolescents. However, epidemiological data on gingivitis in Uzbekistan are scarce, especially compared to nationwide representative studies [1,2,3]. Additionally, some methodological challenges arise in studying gingivitis, such as the lack of a unified definition of gingivitis status, the critical point for determining its presence, the variety of periodontal indices used, and the use of partial records that may overestimate or underestimate disease prevalence. The most commonly used indices are the Community Periodontal Index and the Community Periodontal Index of Treatment Needs, both of which correspond to partial registries recommended by the World Health Organization (WHO) [3,5,6]. Regarding periodontitis, most available data for Uzbekistan are still based on direct or indirect assessment of periodontal probing depth [1]. Measurement of clinical attachment loss allows assessment of overall periodontal destruction, while periodontal probing depth ignores periodontal destruction accompanied by gingival recession or the position of the gingival margin relative to the size of the periodontal pocket [5,6]. Consequently, using periodontal probing depth assessment leads to contradictory data. Several definitions of periodontitis cases have been proposed and applied; for example, at the 2022 World Workshop (Consensus Report of Working Group 2 of the 2022 World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions) [1]. A single definition of periodontitis has been proposed, defined as interdental clinical attachment loss (CAL) detectable on two or more non-adjacent teeth, or buccal or oral CAL ≥ 3 mm with periodontal pockets > 3 mm on at least 2 teeth [2,3,6,7].

Nevertheless, currently, there are no studies in Uzbekistan that use this definition of periodontitis. According to a recent literature review, inflammatory periodontal diseases are widespread among children and adolescents from Latin America. On average, gingivitis affects 34.7% of young people from Latin America, with the highest prevalence in Colombia (77%) and Bolivia (73%), and the lowest in Mexico (23%). In other countries (Russian Federation, Japan, Korea, etc.), the prevalence of gingivitis ranges from 31 to 56%. In Uzbekistan, it ranges from 22-35%. Thus, due to the high prevalence of gingivitis, it is necessary to identify and treat it in young people, especially as an indicator of the risk of developing periodontitis in adulthood. Currently, various cultural and socio-economic barriers to receiving professional care prevent the population from applying correct preventive approaches, obtaining early diagnosis, and seeking timely treatment, which leads to limited progress in improving periodontal health. Periodontal diseases are socially determined. Effective measures to combat this disease require efforts to reduce social inequality and implement social justice policies. Prevention should be the main focus of actions, policies, and programs in the field of oral hygiene to maintain oral health and prevent periodontal diseases through effective treatment of gingivitis and promotion of a healthy lifestyle. This can be carried out by dentists and healthcare professionals, who provide patients with instructions on effective independent oral hygiene, such as proper tooth brushing and interdental cleaning, in addition to a comprehensive and population-oriented approach to health education focusing on overall risk factors.

Furthermore, it is necessary to emphasize the concept that every individual should play an active role throughout their life in being informed about oral health, self-care measures, health promotion, and disease prevention for optimal oral and overall health. Additionally, it is recommended to raise public awareness about the importance of identifying early signs of periodontal diseases, explaining the significance of gum inflammation, the presence of gum bleeding, and the importance of self-examination of gingival tissues in preventing these diseases. To achieve these goals, social networks can be a useful tool that should be explored, considering that they provide quick, convenient, and widely accessible means of disseminating information that can help implement strategies for teaching periodontology to our patients and the general public. For example, a self-report questionnaire designed for population-based epidemiological monitoring of gingivitis in adolescents can be utilized. Moreover, these platforms can increase awareness of periodontal health among both the public and professionals. A long-term sustainable global oral health strategy should focus on health promotion and disease prevention by controlling common and variable risk factors, based on the integrated relationship between oral health and overall well-being. Thus, common oral diseases such as periodontitis should be effectively prevented, controlled, cared for, and treated by all healthcare professionals through a collaborative approach to achieve overall health status. Nevertheless, despite the need for additional research in Uzbekistan, the currently available data is very useful for developing a national policy focused on health promotion, oral disease prevention, and comprehensive care. In almost all cases, if the prevention and treatment of severe gingivitis begin at an early age, it is possible to reduce or prevent destructive periodontal disease. The fact that untreated periodontal diseases can negatively affect people's overall health puts additional pressure on improving periodontal health among young people in Uzbekistan. Although periodontitis is one of the most prevalent public health problems, it is unfortunately often overlooked in public health strategies and policies. This has led to significant socio-economic consequences in terms of healthcare costs, absence from studies or work, as well as impacts on people's daily lives and self-esteem. Periodontal diseases and non-communicable diseases share common risk factors such as tobacco use. Thus, it is crucial to include oral health in the overall health agenda to achieve optimal health and overall well-being. In this context, dental schools should play a key

role in promoting, preventing, and early diagnosis of oral diseases, including periodontal diseases, and in training specialists, taking into account risk factors and strong biopsychosocial and ethical components. Consequently, future dentists in Uzbekistan can address the issue of reducing the prevalence of periodontal diseases by leading interdisciplinary teamwork in the healthcare field. Thus, general practitioners should be professionally prepared to treat the majority of patients with periodontitis in mild and moderate stages (stages I and II according to the 2018 Classification of Periodontal Diseases and Conditions), as well as be able to identify cases that should be referred to specialists in periodontology.

Conclusions:

1. The long-term success of periodontal management is proven to be heavily reliant on modifying patient behavior. Effective, evidence-based measures to improve and sustain oral hygiene in patients with periodontal diseases include the implementation of structured goal setting, encouraging consistent self-monitoring of oral health (e.g., gum bleeding), and collaborative care planning between the patient and the dental professional.
2. Consequently, the challenge extends beyond simple clinical treatment; it requires a fundamental evolution in modern dental education. We must cultivate a new generation of dentists who not only recognize the clinical severity and systemic impact of periodontal diseases but also profoundly understand the psychosocial principles of motivating and sustaining patient behavior change.
3. These future professionals must be trained to manage periodontitis within a framework of comprehensive, holistic patient care. This includes treating mild to moderate stages (I and II) effectively, confidently identifying cases for specialist referral, and addressing the common risk factors (like tobacco use) that link oral health to overall systemic well-being.
4. Dental schools are the cornerstone of implementing this national strategy. They must champion the integration of oral health into the general public health agenda and prepare graduates to lead the necessary interdisciplinary teamwork. This educational reform is critical to effectively reduce the prevalence of periodontal diseases and improve the overall health and quality of life for the population in Uzbekistan.

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