



EOC
EUROASIAN
ONLINE
CONFERENCES

ENGLAND CONFERENCE

**INTERNATIONAL CONFERENCE ON
MULTIDISCIPLINARY STUDIES AND
EDUCATION**



Google Scholar

zenodo

OpenAIRE

doi digital object
identifier

eoconf.com - from 2024



INTERNATIONAL CONFERENCE ON MULTIDISCIPLINARY STUDIES AND EDUCATION: a collection scientific works of the International scientific conference – London, England, 2026. Issue 6

Languages of publication: Uzbek, English, Russian, German, Italian, Spanish

The collection consists of scientific research of scientists, graduate students and students who took part in the International Scientific online conference «**INTERNATIONAL CONFERENCE ON MULTIDISCIPLINARY STUDIES AND EDUCATION**». Which took place in London 2026.

Conference proceedings are recommended for scientists and teachers in higher education establishments. They can be used in education, including the process of post - graduate teaching, preparation for obtain bachelors' and masters' degrees. The review of all articles was accomplished by experts, materials are according to authors copyright. The authors are responsible for content, researches results and errors.





The Role of Oral Hygiene in the Prevention of Dental Diseases

Tursunaliyeva Madinakhon Nodirbek qizi

¹Second-year student, Department of Dentistry, Central Asian Medical University International Medical University, 64 Burhoniddin Marg'iloniy Street, Fergana, Uzbekistan ORCID: <https://orcid.org/0009-0006-2765-337X>; Tel: +998 (97) 555 59 901

Alavdinov Salokhidin Ziyovutdinovich

²Head of the Department of Therapeutic and Surgical Dentistry, Central Asian Medical University International Medical University, PhD, Acting Associate Professor, 64 Burhoniddin Marg'iloniy Street, Fergana, Uzbekistan

¹E-mail: tmadinaxon@icloud.com; Tel: +998503035396

²E-mail: alavdinovsalohiddin@gmail.com;

Abstract: This article discusses the importance of oral hygiene in the prevention of dental and periodontal diseases. Based on scientific sources, poor oral hygiene was analyzed as one of the major factors contributing to the development of dental caries, gingivitis, and periodontitis. During the study, the condition of oral hygiene among students was evaluated, and the positive impact of regular hygienic care on oral health was identified.

Keywords: oral cavity, hygiene, dental caries, gingivitis, prevention, dentistry

Introduction

Dental diseases are currently among the most widespread pathologies worldwide. In particular, dental caries and periodontal diseases exhibit high prevalence rates among children and young adults (the prevalence of dental caries ranges from 31–33%, while periodontal diseases range from 40–60%). According to data from the World Health Organization (WHO), the insufficient attention paid to oral hygiene by a significant proportion of the population is considered one of the primary causes of dental diseases [1].

Oral hygiene is defined as a comprehensive set of preventive measures aimed at maintaining the cleanliness of the teeth, periodontium, and oral mucosa.

Inadequate or infrequent tooth brushing results in the formation of bacterial plaque. The microorganisms within this plaque produce organic acids, leading to the demineralization of tooth enamel and, consequently, the development of dental caries [2].

Furthermore, non-compliance with hygiene rules contributes to gingival inflammation, halitosis, and damage to periodontal tissues. Therefore, both individual and professional oral hygiene play a crucial role in the prevention of dental diseases. The objective of the present study was to evaluate the





importance of oral hygiene in the prevention of dental diseases and to assess the state of hygienic practices among young individuals.

Materials and Methods

The study was conducted in 2025 among 60 schoolchildren aged 10–17 years. The following methods were employed: questionnaire survey, clinical examination, and assessment of hygiene indices.

The questionnaire administered to the participants included the following items frequency of tooth brushing, types of hygiene aids used, frequency of dental visits, dietary habits, clinical observation.

During the clinical examination, the condition of the oral cavity was assessed, and the presence of dental plaque, dental caries, and gingival inflammation was determined. The Green–Vermillion Oral Hygiene Index was used to evaluate the level of oral hygiene [3].

The obtained results were analyzed and expressed as percentage values.

Results

According to the study findings, 68% of the respondents reported brushing their teeth twice daily, 22% reported brushing once daily, and 10% reported irregular or no tooth brushing.

Soft dental plaque was identified in 74% of the examined schoolchildren. Dental caries was observed in 58% of the participants. Signs of gingival inflammation were recorded in 36% of the students [4].

A significantly lower prevalence of dental caries was found among schoolchildren who brushed their teeth regularly. Furthermore, participants who visited a dentist every six months demonstrated better hygiene indices.

During the study, improper dietary habits, excessive consumption of sugary products, irregular meal times, and incomplete utilization of hygiene aids were identified as the main contributing factors to the development of dental diseases [5].

Discussion

The obtained results confirm that oral hygiene occupies an important position in the prevention of dental diseases. Bacterial plaque accumulating on the tooth surface is considered the primary etiological factor in the development of dental caries and periodontal diseases.

Regular tooth brushing reduces the microbial load, protects tooth enamel, and maintains the health of periodontal tissues. In addition, modern hygiene aids—including dental floss, oral irrigators, and antiseptic mouth rinses—enhance the efficacy of preventive measures.

Numerous scientific studies have also reported that the formation of individual hygiene habits contributes to a reduction in the prevalence of dental diseases. In





particular, strengthening general sanitary and educational activities among young people is regarded as a pressing issue [6].

Professional dental cleaning and regular preventive examinations also enable early detection of diseases. Therefore, improving the dental health literacy of the population is considered one of the essential tasks of the healthcare system.

Conclusions

Oral hygiene is one of the most effective methods for the prevention of dental and periodontal diseases. The study results demonstrated that regular hygienic care significantly reduces the risk of developing dental diseases. Brushing the teeth at least twice daily, utilizing additional hygiene aids, and undergoing regular dental examinations are of significant importance in maintaining oral health [7].

References

1. Akhmedov AA. Fundamentals of Therapeutic Dentistry. Tashkent; 2022. (In Russian)
2. Green JC, Vermillion JR. The oral hygiene index: a method for classifying oral hygiene status. J Am Dent Assoc. 1964;68(1):7-13.
3. Rasulov KhR. Prevention of Dental Diseases. Samarkand; 2021. (In Russian)
4. Petersen PE. The World Oral Health Report 2022: towards universal health coverage for oral health by 2030. Geneva: World Health Organization; 2022.
5. Usmonov ShT. Oral Hygiene and Preventive Dentistry. Tashkent; 2020. (In Russian)
6. Karimov BM. Prevention of Dental Diseases Among Young People. Andijan; 2021. (In Russian)
7. Mirzaev AA, Khudoyberdiyev NR. The importance of oral hygiene in periodontal diseases. Journal of Stomatology and Maxillofacial Surgery. 2023;(2):45-49. (In Russian)

