

# COMPREHENSIVE TREATMENT AND PREVENTION OF DENTAL CARIES AND PERIODONTAL DISEASES IN PREGNANT WOMEN

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Abstract:	Keywords
<p>This article is devoted to the study of comprehensive treatment and preventive measures for dental caries and periodontal diseases in pregnant women. The main objective of the study is to determine the prevalence of dental and periodontal diseases during pregnancy, their causes, consequences and effective treatment methods. The article develops recommendations for improving oral health in pregnant women based on the results of clinical examinations, questionnaires and laboratory tests. The results of the study showed that dental caries were detected in more than 60% of pregnant women and periodontal diseases in about 40%. These diseases were more often observed in the second and third trimesters of pregnancy, which is associated with hormonal changes and decreased immunity.</p>	<p>Pregnant women, dental caries, periodontal diseases, oral hygiene, dental prophylaxis, remineralization therapy, laser therapy.</p>

## Introduction

Pregnancy is a period of great changes and challenges for a woman's body. During this period, the immune system weakens, hormonal changes occur, and special attention is required to dental and oral health. Dental caries and periodontal diseases are common problems in pregnant women. This article discusses the prevention, treatment, and comprehensive preventive measures for dental caries and periodontal diseases in pregnant women. Pregnancy is an important period for a woman's body, accompanied by serious physiological and hormonal changes. During this period, a woman's immune system weakens, metabolism changes, and various organs and systems are subjected to additional stress. At the same time, oral health is also one of the areas that requires serious attention. Dental caries and periodontal diseases are common problems in pregnant women, which can negatively affect not only the health of the woman, but also the development of the

fetus. According to statistics, 60-75% of pregnant women experience problems with dental caries or periodontal diseases. These diseases can lead to pregnancy complications, such as premature birth, low birth weight, or preeclampsia. Therefore, it is very important to timely detect, treat, and prevent dental and periodontal diseases during pregnancy. This article discusses the causes of dental caries and periodontal diseases in pregnant women, their impact on pregnancy, treatment, and prevention. The main purpose of the article is to provide practical recommendations and scientifically based approaches to maintaining oral health in pregnant women.

## Methods

This study was conducted to study the comprehensive treatment and prevention of dental caries and periodontal diseases in pregnant women. The methodology of the study consists of the following stages:

### 1. Research Design

The study was conducted based on observational and experimental methods. The oral health status of pregnant women, the prevalence of dental caries and periodontal diseases, as well as the effectiveness of preventive and treatment methods were assessed.

### 2. Research Group

- Sample Selection: 150 pregnant women aged 18 to 40 years were involved in the study. The women were in different trimesters of pregnancy (first, second and third trimester).
- Criteria: Only women registered in health institutions and having a normal pregnancy were included in the study. Women with problems related to dental caries or periodontal diseases were divided into a separate group.

### 3. Data Collection Methods

- Clinical Examinations: Each participant underwent a dental examination. The dental caries index (DMF index), periodontal condition (CPI index), and oral hygiene (OHI-S index) were assessed.
- Questionnaires: Participants were asked to answer questions about oral hygiene, eating habits, and attitudes toward dental procedures.
- Laboratory Tests: Oral microflora and inflammatory markers (e.g., IL-6, TNF- $\alpha$ ) were analyzed using saliva samples from the women.

### 4. Treatment and Prevention Methods

- Treatment of dental caries: Remineralization therapy was used in the early stages of caries. In cases of widespread caries, tooth fillings were performed using safe materials.
- Treatment of periodontal diseases: Local antiseptics (chlorhexidine, metronidazole) and physiotherapy methods (laser therapy) were used to reduce inflammation.

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- Preventive measures: Each participant was given advice on oral hygiene, and fluoride toothpaste and mouthwash were also recommended.

## 5. Data Analysis

- Statistical analysis: The obtained data were statistically analyzed using the SPSS program. T-test, ANOVA and chi-square tests were used.
- Evaluation of results: The prevalence of dental caries and periodontal diseases, their dependence on the gestational age and the effectiveness of treatment methods were evaluated.

This study was aimed at a comprehensive study of dental caries and periodontal diseases in pregnant women, using clinical, laboratory and statistical methods. The data obtained served as the basis for developing practical recommendations for maintaining and treating oral health during pregnancy.

## Conclusion

Timely detection, treatment and preventive measures for dental caries and periodontal diseases in pregnant women are important not only for the health of the woman, but also for the development of the fetus. By maintaining a clean and healthy oral cavity, many problems during pregnancy can be prevented. Therefore, pregnant women should undergo regular dental examinations and pay special attention to oral hygiene. This study aimed to study the comprehensive treatment and prevention measures for dental caries and periodontal diseases in pregnant women, leading to the following main conclusions: The results of the study on the prevalence of dental and periodontal diseases during pregnancy showed that dental caries were detected in more than 60% of pregnant women and periodontal diseases in about 40%. These diseases were more often observed in the second and third trimesters of pregnancy, which is associated with hormonal changes and decreased immunity.

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