

# World Workshop 2017 Classification of Periodontal Disease and its Implications in the Nepali Scenario

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## INTRODUCTION

Periodontal diseases encompass a range of inflammatory conditions affecting the supporting structures of the teeth, including the gingiva, periodontal ligament, cementum, and alveolar bone. Over the years, the classification of periodontal diseases has evolved, reflecting advancements in research and understanding of their pathogenesis. The World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions, held in 2017, marked a paradigm shift by introducing a comprehensive and evidence-based system. This article examines the 2017 classification, its key features, and implications for periodontal care in Nepal.

## Key Features of the 2017 Classification

The 2017 classification introduced significant updates, emphasising the need for a multidisciplinary approach to diagnosis and management. Key features include:

**1. Inclusion of Peri-Implant Diseases:** A new category for peri-implant diseases and conditions was introduced, recognising the increasing use of dental implants and prevalence of peri-implant disease and conditions. This includes peri-implant health, peri-implant mucositis,

peri-implantitis, and peri-implant soft and hard tissue deficiencies.<sup>1</sup>

**2. Focus on Staging and Grading:** Periodontitis is now classified based on staging (severity and complexity) and grading (rate of progression and systemic impact). Staging ranges from I (mild) to IV (severe), while grading incorporates clinical, radiographic, and risk factor assessments.<sup>2</sup>

**3. Replacement of "Chronic" and "Aggressive" Terminology:** The distinction between chronic and aggressive periodontitis was eliminated, recognising their overlapping clinical and genetic features.

**4. Gingival Diseases and Conditions:** These are categorised into those induced by biofilm (dental plaque) and those unrelated to biofilm, such as genetic, systemic, or traumatic factors.<sup>3</sup>

**5. Recognition of Systemic Influences:** Systemic diseases and conditions, such as diabetes and cardiovascular diseases, are highlighted for their role in modifying periodontal health.

**6. Periodontal Health:** Definitions of periodontal health on both intact and reduced periodontium were established to standardise clinical diagnosis.<sup>4</sup>

## Implications of the 2017 Classification in Nepal

Nepal, a developing country, faces unique challenges in oral health care due to limited resources, lack of awareness, and a high burden of oral diseases. The 2017 classification has significant implications for improving periodontal diagnosis, treatment, and prevention in the Nepali scenario.

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**Enhanced Diagnostic Precision:** The staging and grading system provides a structured approach to diagnosing periodontitis, enabling clinicians to tailor treatment plans. In Nepal, where access to advanced diagnostic tools is limited, this system facilitates effective patient management using available resources. For instance, staging allows clinicians to assess disease severity through clinical attachment loss and bone loss measurements, while grading incorporates risk factors like smoking and diabetes, which are prevalent in Nepali populations.<sup>5</sup>

**Integration of Peri-implant Diseases:** With the increasing use of dental implants in urban centres of Nepal, recognising and managing peri-implant diseases has become essential. The classification provides clear guidelines for diagnosing peri-implant health and disease, aiding clinicians in early intervention and prevention of complications.

**Addressing Systemic Health Links:** The classification underscores the bidirectional relationship between periodontal health and systemic health. In Nepal, where non-communicable diseases like diabetes and cardiovascular conditions are rising, integrating periodontal care into systemic health programs can enhance overall health outcomes.<sup>6</sup>

**Public Health Implications:** The emphasis on early detection and prevention aligns with public health goals in Nepal. Community-based programs can use the classification's framework to educate populations about maintaining periodontal health and its impact on systemic conditions. This is particularly relevant in rural areas, where access to dental care is limited.

### Challenges in Implementation

Despite its advantages, implementing the 2017 classification in Nepal faces challenges:

- 1. Lack of Awareness:** Many dental professionals and patients are unaware of the updated classification and its benefits. Training programs and workshops are needed to bridge this gap.<sup>7</sup>
- 2. Resource Constraints:** Limited access to advanced diagnostic tools and standardised protocols may hinder effective application of the classification.
- 3. Cultural and Behavioural Factors:** High

tobacco use and poor oral hygiene practices in Nepal require tailored interventions to address these risk factors within the framework of the classification.<sup>8</sup>

- 4. Integration into Dental Curriculum:** Updating dental education programs to include the 2017 classification is crucial for training future practitioners.

### Strategies for Implementation in Nepal

To maximise the benefits of the 2017 classification, the following strategies can be adopted:

- 1. Capacity Building:** Organise training programs for dental professionals to familiarise them with the classification's principles and applications.
- 2. Community-based Programs:** Implement awareness campaigns focussing on periodontal health and its systemic implications, using simple tools for risk assessment and early detection.
- 3. Integration into Health Policies:** Collaborate with government health programs to include periodontal care in broader health initiatives.
- 4. Research and Data Collection:** Conduct studies to assess the prevalence of periodontal and peri-implant diseases in Nepal, providing evidence for targeted interventions.

### CONCLUSIONS

The 2017 World Workshop classification represents a significant advancement in the understanding and management of periodontal and peri-implant diseases. Its implementation in Nepal holds great promise for improving periodontal care and overall health outcomes. However, overcoming challenges related to awareness, resources, and systemic integration is essential. Through collaborative efforts among dental professionals, policymakers, and the community, Nepal can effectively leverage the 2017 classification to enhance oral health care.

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