



THE 4TH MULAWARMAN INTERNATIONAL
CONFERENCE ON TROPICAL PUBLIC HEALTH
(MICTOPH) 2025



ABSTRACT

Title of Abstract : Narrative Review: Periodontitis Risk Factors in Prolanis Participants With Systemic Comorbid Diseases
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Periodontitis is a chronic inflammatory disease affecting the supporting tissues of the teeth and is increasingly recognized for its systemic implications. Chronic periodontal inflammation contributes to persistent immune activation, endothelial dysfunction, insulin resistance, and dyslipidemic profiles, thereby elevating the risk of cardiovascular and metabolic disorders.

Objective : This narrative review aims to summarize current evidence regarding risk factors of periodontitis among patients with systemic comorbidities, particularly those enrolled in chronic disease management programs.

Research Methods/ Implementation Methods : A literature search was conducted across PubMed, Science Direct, and BMC Oral Health databases for articles published between 2020 and 2025 using keywords such as “periodontitis,” “systemic inflammation,” “diabetes mellitus,” “hypertension,” and “cardiovascular disease.” Inclusion criteria consisted of full-text research articles in Indonesian or English focusing on associations between periodontitis and systemic diseases. A total of 33 relevant articles were identified and narratively synthesized. The review consistently demonstrates that systemic comorbidities significantly influence periodontal status.

Results : Patients with diabetes, hypertension, and dyslipidemia experience more severe periodontitis due to poor metabolic control and inflammation. Inadequate oral hygiene worsens this condition, while non-surgical periodontal therapy can improve HbA1c, lipid levels, and blood pressure.

Conclusion/Lesson Learned : Systemic factors synergistically worsen periodontitis through chronic inflammation and endothelial impairment. Integrating oral health services into chronic disease management may improve metabolic outcomes and prevent systemic complications.

Keyword : periodontitis, systemic inflammation, diabetes mellitus, hypertension, dyslipidemia, cardiovascular disease.