

Awareness and Knowledge of the Role of Probiotics and Prebiotics in Periodontal Health Among Undergraduate Dental Students: A Cross-Sectional Survey

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ABSTRACT:

Background: Periodontal diseases are highly prevalent and biologically based adjuncts such as probiotics and prebiotics are gaining interest as potential modulators of the oral microbiome. This cross-sectional, questionnaire-based survey aimed to assess the awareness, knowledge and attitudes regarding probiotics and prebiotics in periodontal health among undergraduate dental students.

Materials & Methods: A total of 236 students from first year to internship completed a validated, self-administered questionnaire comprising items on demographics, awareness and knowledge of probiotics and prebiotics, and perceptions about the need for scientific evidence.

Results: Most respondents had heard of probiotics (85.2%) and correctly defined them as live microorganisms that confer health benefits (79.2%). Over half recognised combined antimicrobial mechanisms and multiple delivery forms, and the majority acknowledged broad oral benefits and common probiotic food sources. However, only 42.4% correctly defined prebiotics as non-digestible fibres or carbohydrates, and uncertainty regarding their systemic effects remained considerable despite better recognition of dietary sources and commonly used oligosaccharides. Overall, 80.1% of students considered scientific evidence to be very or somewhat important for integrating probiotics and prebiotics into periodontal care.

Conclusion: The findings indicate that while basic awareness and attitudes towards probiotics are favourable, important gaps persist in detailed mechanistic understanding and in knowledge of prebiotics. Targeted curricular reinforcement on host–microbiome interactions and biologically based adjuncts is warranted to support evidence-based periodontal practice.

KEY WORDS: Probiotics; Prebiotics; Periodontal health; Dental students; Awareness.