



# Knowledge and Awareness about the Periodontal Flap Surgery among Undergraduate Dental Students

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**ABSTRACT:** Periodontal diseases significantly impact oral health, often requiring advanced surgical interventions like periodontal flap surgery. This study aims to evaluate the knowledge and awareness of periodontal flap surgery among undergraduate dental students, identifying gaps in their education and training. A cross-sectional survey of 166 students was conducted using a structured questionnaire covering various aspects of flap surgery, including its purpose, indications, techniques, complications, and post-operative care. Data analysis using descriptive statistics and chi-square tests revealed that while most students understood fundamental concepts such as the purpose of flap surgery and common indications, knowledge gaps persisted in advanced techniques, material use, and post-surgical healing processes. Statistically significant differences were observed in key areas of understanding.

The findings highlight the importance of enhancing the dental curriculum with a focus on practical exposure and advanced theoretical training to ensure students are well-prepared for clinical roles. Strengthening periodontal education will contribute to improved clinical outcomes and better preparation of future dental professionals.

## KEYWORDS:

### I. INTRODUCTION

Periodontal diseases, which affect the supporting structures of teeth, are a critical concern in oral health care. Effective management of advanced periodontal conditions often requires surgical interventions such as periodontal flap surgery. This widely used therapeutic procedure allows access to the underlying structures of the periodontium, facilitating treatment and promoting better oral health outcomes<sup>(1)(2)(3)</sup>. As part of the undergraduate dental curriculum, students are introduced to various aspects of periodontal therapy, including flap surgery. This exposure is designed to prepare them with the knowledge and skills necessary for clinical practice<sup>(4)(5)</sup>. However, the extent of their awareness and understanding of periodontal flap surgery may vary, depending on factors such as their academic level, exposure to

theoretical knowledge, and clinical training<sup>(6)</sup>. This study aims to assess the awareness and knowledge of periodontal flap surgery among undergraduate dental students. By evaluating their current understanding, the research seeks to identify educational gaps and highlight areas within the curriculum that may require additional emphasis. The findings have the potential to enhance periodontal education and training, ultimately leading to improved preparation of future dental professionals and better clinical outcomes for patients undergoing periodontal treatments<sup>(7)(8)(9)</sup>. In order to accomplish this, structured questionnaire will be employed to obtain data on key aspects, including the theoretical foundation of the procedure, its indications, techniques, complications, and post-operative care. This comprehensive assessment will provide valuable insights into the readiness of undergraduate dental students to perform periodontal flap surgeries in their future professional roles<sup>(10)(11)(12)</sup>.

### II. MATERIAL AND METHOD:

The study adopted a cross-sectional design, with questionnaires circulated to undergraduate students via an online survey link. The questionnaire contained 15 questions. Ethical approval was obtained from the College's scientific research committee, and detailed information about the study's purpose and methodology was provided. A total of 166 students, both undergraduate participated in the survey. Responses were first compiled in Excel and then imported into IBM SPSS software for analysis. Descriptive statistics were evaluated, and the chi-square test was used to assess the data and determine statistical significance at the 0.05 level. The results were presented in tables showing both frequency distributions and statistical significance.

### III. RESULTS AND DISCUSSION:

Descriptive statistics were presented using frequency and percentage for qualitative data. The chi-square test was used to evaluate the differences in knowledge. Data analysis was conducted using



SPSS (IBM SPSS Statistics for Windows, Version 26.0, Armonk, NY: IBM Corp., Released 2019). A significance level of 5% ( $\alpha = 0.05$ ) was set, and a p-value of  $<0.05$  was considered statistically significant.

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