



EVALUATION OF DENTAL AND FACIAL MIDLINES AMONG DENTAL STUDENTS

Katerina Zlatanovska, Natasa Longurova, Julija Zarkova Atanasova, Bruno Nikolovski, Sandra Atanasova, Sanja Naskova, Ljubica Proseva Pelivanov

Faculty of Medical Sciences, Goce Delcev University, Stip, Macedonia

29th BaSS
Congress

Belgrade, Serbia
April 24-26, 2025

Objectives:

Ensuring the alignment of the facial midline with the maxillary dental arch midline is considered as essential aesthetic principle in dental prosthetic rehabilitation, as symmetry plays a key role in achieving facial harmony and the overall success of esthetic treatments. Identifying any discrepancies between these midlines can help clinicians plan more precise and esthetically pleasing restorations. The findings may also contribute to developing guidelines for midline evaluation during prosthodontic and orthodontic treatment planning

The objective of this study was to determinate the coincidence of the dental and facial midlines in young individuals.



Materials and methods:

The study included 110 dental students of both sexes aged 18-22 years who had never been subjected to any dental treatment. Frontal full-face photos were taken with teeth in occlusion using professional digital camera Nikon Z6 II–24.5 MP from distance of 100cm each. Specialized software programs were utilized to analyze the alignment of the facial and dental midlines. SPSS Version 23.0 was used for data analysis with level of significance set at 0.05.



Results:

The results indicate that the midline is situated in the exact middle of the mouth in approximately 60% of the students. Out of a total of 110 participants (60 females and 50 males), 66 individuals (60%) demonstrated coincidence between the facial and dental midlines. Among them, 38 males (76%) and 28 females (46.7%) showed alignment. The remaining 44 participants exhibited no alignment—this included 32 females (53.3%) and 12 males (24%).

Most of the study participants displayed a deviation of 0–1 mm between the facial midline and the midline of the anterior teeth.

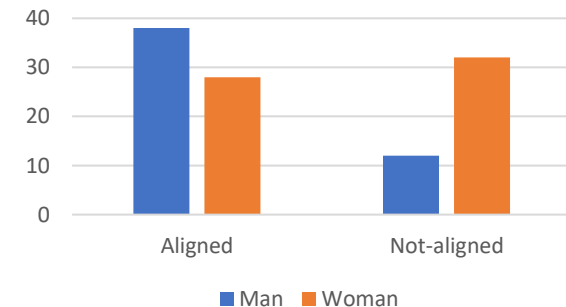
Additionally, the coincidence between the maxillary and mandibular dental midlines was observed in 42 participants (38.1%).

Left-sided deviations were also recorded more frequently.

Conclusion:

The coincidence of the maxillary and mandibular midlines was observed in just over one-third of the participants. The facial midline aligned with the anterior teeth midline in approximately 60% of the sample, with left-sided deviations being more frequent.

Alignment of the facial midline with the maxillary dental arch midline



GOCE DELCEV
UNIVERSITY
FACULTY OF
MEDICAL SCIENCES