

Abstract

Objectives: To assess the prevalence of malocclusion and orthodontic treatment needs of the patients using the Dental Aesthetic Index (DAI).

Materials and Methods: 150 pre-treatment study models were assessed. The DAI score was used to classify malocclusion severity and categorise orthodontic treatment. Stata version 14 was used to analyse the data and all statistical tests were conducted at 5% significance level.

Results: The overall mean DAI score was 54.67 ranging from 16 to 85. Handicapping malocclusion requiring mandatory treatment was 92.67% of the sample. Severe malocclusion was 2%, indicating the need for treatment and Definitive malocclusion was 2%, indicating elective treatment. Minor malocclusion requiring slight or no orthodontic treatment was in 3.33%. Incisal crowding (90%), anterior mandibular overjet (87.33%), and anterior maxillary irregularity (85.33%) were the most observed occlusal problems.

Conclusion: The DAI showed that 96.67% of the sample had malocclusion requiring orthodontic treatment. The index can be recommended for orthodontic needs and treatment prioritization in the public sector.