

Prevalence and factors related to malocclusion, normative and perceived orthodontic treatment need, among children and adolescents in Bangladesh

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Objective: The purpose of the present study was to assess the prevalence of normative and perceived orthodontic treatment need in schoolchildren and adolescents, related risk factors, and children/parent's aesthetic perception, compared to orthodontist's opinion, in Dhaka city, Bangladesh.

Methods: A random sample of 800 schoolchildren aging 11-15 years was selected from different schools in the city of Dhaka, Bangladesh. The Dental Health Component (DHC) and Aesthetic Component (AC) of the Index of Orthodontic Treatment Need (IOTN) were assessed as normative treatment need. The Decayed, Missing, Filled Teeth (DMFT) index was used to record caries experience. Children were interviewed on the perception of orthodontic treatment need. Parents also completed a questionnaire on the perception of their child's orthodontic treatment need, assessed by AC/ IOTN.

Results: According to the DHC/IOTN, only 24.7% were in the category of definite need (grade 4-5) for orthodontic treatment. A significant difference was found between the clinician/children and clinician/parents perceived AC score of IOTN ($p=0.0001$). Multiple logistic regression showed children with a higher DMFT were significantly more likely to need orthodontic treatment, according to the DHC of IOTN.

Conclusion: A low proportion of schoolchildren needs normative orthodontic treatment in the city of Dhaka, Bangladesh. Children with a higher DMFT score were significantly more likely to need orthodontic treatment, according to the DHC of IOTN.

Keywords: Malocclusion. IOTN. Normative need. Perceived need. Schoolchildren.

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