

Prevalence of voice disorders in Iranian primary school students

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Background: The voice has an important role in verbal communication. A child's voice disorder may significantly impair his or her ability to be heard and understood. Therefore, any lesion to it may cause communication problems.

Purpose: The purpose of this study was to determine the prevalence of voice disorders in primary school students.

Materials & Methods: In this descriptive-analytical study, a total of 501 fourth and fifth grade primary school students (boys = 51.6%, girls = 48.4%) aged 10 to 12 years old were selected from nine public schools in Tehran assessed in October 2013 through March 2014.

Presence of a voice disorder characterized by hoarseness was identified by a dual approach including investigator screening and parent identification. We used the grade of overall dysphonia, roughness, breathiness, asthenia, and strain scale for perceptual evaluation of voice. All children were assessed with video laryngoscopy examination by an otorhinolaryngologist. The recordings were made during spontaneous speech, counting numbers, sustained utterance of the (/a/) vowel, reading a standard passage in Farsi, and the s/z ratio. Statistical analysis was done via chi-square test and t test.

Results: The results indicated that the prevalence of voice disorders is 53.2%. The results indicated significant differences between gender and subjects with lesions ($P=0.00000$), gender and vocal disorders ($P = 0.04$), and s/z ratio and type of lesion ($P=0.0002$).

Conclusions: Phonotrauma seems to play an important role in child dysphonia, with nodules as main diagnosis and the risk of lesions is more prevalent in boys than girls.

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