Comparison of Simplified Oral Health Index (OHI-S) between Rural and Urban Middle School Students of Shahriar City

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## **Abstract**

**Background and Aim:** Epidemiologic studies play an important role in planning strategies to improve public oral health. The aim of current study was to determine Simplified Oral Health Index (OHI-S) in middle school students of urban and rural areas of Shahriar city during year 1386.

Materials & Methods: In this descriptive-analytic study, 400 middle school students of urban and rural areas of Shahriar city with age range of 12-14 years old were randomly selected after license acquisition from related committees. M/F and urban/rural ratios were 1 among selected students. Dental examination was performed on each student using mirror and dental explorer under light of reading lamp. Indices of debris, caries and OHI-S were recorded in each sextant of oral cavity based on WHO criteria. Demographic data and recorded indices were statistically analyzed using Mann-Whitney and Dunett paired comparison tests.

**Results:** Measured OHI-S was  $1.96 \pm 0.57$  in urban areas which was significantly lower than its rural counterpart  $2.33 \pm 0.56$  (P<0.0001). Most of students (52.5%) have brushed their teeth once a day. 71.3% of students have not used tooth floss and 28.8% have used it regularly or irregularly. 52.3% of subjects have not met a dentist and 33.8% have had an emergency dental appointment. Regular dental appointments were encountered in only 14% of students. Distribution of oral hygiene level was 22 students (5.5%) with good hygiene and 359 (89.8%) and 19 (4.8%) students with moderate and poor oral hygiene, respectively. There was no significant correlation between sex, type of school and age with oral health status.

**Conclusion:** According to results of current study, oral health status of involved students is moderate. Despite this, some deficiencies were encountered in preventive strategies applied to students. So, further efforts to increase public knowledge about oral health and preventive measures is recommended.

Key words: Oral health, Debris index, Caries index, Preventive dentistry