

## Caries Experience among Ukrainian School Children

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**Aims:** The prevalence of dental caries among children in Ukraine has increased dramatically during the last few decades and reached 60% - 90 %. Physical, functional, social, psychological and emotional impacts of dental caries have been well documented to diminish the quality of life. The aim of this paper was to investigate the prevalence of dental caries, carious, filled permanent and missed permanent teeth.

**Methods:** For this purpose 1301 5-16-year-old children from Lviv (Ukraine) were examined (612 girls (52, 44%) and 555 boys (47, 56%) by trained dentist examiners. Dental caries was assessed according to the guidelines given by WHO (1997) under natural day light using mouth mirror and probes. Decayed, missing and filled permanent teeth (DMFT) due to caries were recorded and summarized as DMFT by a calibrated investigator. All examinations were performed by the same person, in standard conditions. Ethical approval and parental consent was obtained for this study. Data for the various groups were compared using Student's t-test.

**Results:** It is established that prevalence of dental caries of the permanent teeth for the examined children, is, in the average, 72, 15±1, 31% and caries intensity (DMF index) - 2, 86±0, 21. The detailed analysis depending on sex, showed that for girls, prevalence of dental caries of the permanent teeth, in the average, it is higher (78, 92±1, 65%) comparing with boys (64, 14±2, 04%), ( $p < 0, 001$ ). The analysis of index DMF structure showed that, in the average, on one child was 0, 98±0, 14 decayed tooth, 1, 84±0, 18 filled tooth, and 0, 04±0, 01 missed tooth. Analysis of caries intensity of the permanent teeth depending on age showed that from six to sixteen years the index of decayed teeth - "D" grows from a 0, 27±0, 07 tooth to 1, 43±0, 18 tooth, ( $p < 0, 001$ ) (in five times). Untreated dental caries in children may lead to infection, pain, and lost school productivity—both in terms of lost school day and reduced concentration in school. From six to eight years percentage of decayed teeth is higher from percentage of the filled teeth, on the contrary, from nine years, percentage of the filled teeth prevails and in sixteen years the correlation of percentage of indexes "D" and "F" makes 25, 04±3, 95% and 73, 56±4, 03%. As a result of comparison of caries intensity of the permanent teeth depending on sex, it was found out, that, on the average, for girls it insignificantly differs in comparing to the boys and makes a 3, 41±0, 37 tooth against a 3, 39±0, 34 tooth. Analysis of caries intensity depending on age showed that in all age-dependent groups caries intensity of permanent teeth is more higher for girls.

**Conclusions:** Our study reported that the prevalence of dental caries of the permanent teeth for the examined children, is, in the average, 72, 15±1, 31% and caries intensity (DMF index) - 2, 86±0, 21. The analysis of index DMF structure showed that, in the average, it was revealed 0, 98±0, 14 carious tooth, 1, 84±0, 18 filled tooth, and 0, 04±0, 01 missed tooth.

### Biography:

Chukhray Natalya, working in Danylo Halytsky Lviv National Medical University, Ukraine as a Assoc Prof. of Orthodontics Department Topics of research: epidemiology of dental caries and malocclusions, resistance of tooth enamel to dental caries. Author of more than 140 scientific issues.