ORIGINAL ARTICLE

AGE FEATURES OF DECIDUOUS TEETH CARIES PARAMETERS IN 3-6 YEARS OLD AGED CHILDREN

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ABSTRACT

The aim: Estimation of caries prevalence and intensity, determination for treatment necessity of deciduous teeth in 3-6 years old aged children from Poltava region for further effective development of programs for caries and its complications prevention.

Materials and methods: Totally 335 children from 3 to 6 years old of preschool institutions of Poltava and Poltava region aged were examined with the signed accordance of their parents. All children were examined for the prevalence (%) and intensity of caries of deciduous teeth by the Decay Extracted Filling index (DEF index). Quantitative parameters were processed by standard statistic methods. The calculation of the highest caries intensity (Significant Index of Caries) was performed according to the D. Bratthol`s method. The level of dental aid (LDA) was assessed by the DEF index according to P.A. Leus recommendations. Treatment necessity of children was also determined.

Results: The research in caries prevalence of deciduous teeth of revealed that the number of children with caries increases with their age. The most significant parameter growth is observed at the age of 4 to 5 years. Carious lesions intensity increases at the age from 4 to 5 and from 5 to 6 years most significantly.

Conclusions: The most common indicator in all studied groups was a D-parameter, which indicates low parents awareness about deciduous teeth treatment necessity. That case confirms low level of dental aid (14%) and significant treatment need which is 50.7 %. Affection of molars always exceeds the affection of other groups of teeth. We did not find a significant difference in caries distribution among children of different genders. The obtained results encourage realization of sanitary and educational propagation on the awareness of parents on dental healthcare of their children.

KEY WORDS: children, deciduous teeth, caries, prevalence, intensity

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INTRODUCTION

Despite the numerous achievements in dentistry dental caries remains one of the prior problems in children. This statement is proved by epidemiological studies held in different regions of Ukraine in different time periods, which indicate a significant prevalence of this dental disease. The above-mentioned investigations indicate a significant impact of environmental features of the region on dental morbidity. The prevalence of caries in different age groups varies from 62% to 96.5% along with the intensity of carious lesions from 3.2 to 7.2 teeth [1-6]. Significantly higher rates of dental caries are found in rural children in comparison to children living in cities [7,8].

Particular disturbance is arised by the high incidence of early dental caries in children, which has 62% spread among children under 2 years old, and 70.3% spread in 3 years old children. This issue induces epidemiological studies performance in order to determine priority areas for deciduous teeth caries prevention in preschool children [9,10]. Receiving of up-to-date data on the prevalence and intensity of major dental diseases of different age groups provides dental scientists with a possibility to objectively assess the necessity in developing and implementation of effective prevention programs and measures. Effective prevention programs and early treatment allow to improve the quality of children dental health and their general somatic health quality respectively [10,11].

THE AIM

Estimation of caries prevalence and intensity, determination for treatment necessity of deciduous teeth in 3-6 years old aged children from Poltava region for further effective development of programs for caries and its complications prevention.

MATERIALS AND METHODS

Totally 335 children from 3 to 6 years old of preschool institutions of Poltava and Poltava region aged were examined with the signed accordance of their parents.

Examinations were held in medical cabinets of preschool institutions of Poltava and its region in compliance with the rules of humane treatment of patients in accordance with the Tokyo Declaration of the World Medical Association, international recommendations of the Declaration of Human Rights of Helsinki, the Council of Europe Convention on Human Rights and Biomedicine and Scientists Code of Ethics.

All children were examined for the prevalence (%) and intensity of caries of deciduous teeth by the DEF-index, according to which "D" is for decayed, "E" is for extracted due to caries

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Conflict of interest:
The Authors declare no conflict of interest.

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