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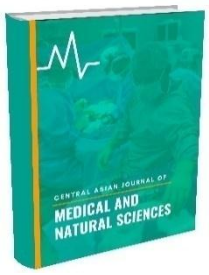

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# Modern Clinical and Epidemiological Aspects of Dentition in Children

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**Abstract:** In pediatric dental –jaw pathologies, the spread of tooth –jaw disorders is one of the problems that must be solved. The rate of incidence of tooth –jaw disorders occurs in 50% of children, and in 30% of adolescents and adults. The results of studies in recent decades show that the downward trend in this indicator has not been fully determined. Tooth – jaw disorders and deformities in children are the third most common among dental diseases after caries and periodontic diseases. Their prevalence ranges from 11.4% to 80%.

At the origin of dental – jaw anomalies in children, congenital bilateral lip and palate arches account for 12-25% of cases, and this is a severe type of pathology of the tooth - jaw. The study of the frequency and prevalence of dental – jaw anomalies in children is one of the pressing problems in modern dentistry. With this anomaly, one child is born out of 1,000 newborns, which is about 0.04% of the planet's population.

The etiology and epidemiological problems of congenital hemtigs of the upper lip and palate, the provision of specialized assistance to such children in a specialized center and the development of specific programs for the complex treatment of children with this pathology remain one of the pressing problems.

Specific programs aimed at treating these pathologies, standardization of activities and the obligation to carry them out by medical examination centers to provide a high level of assistance to children with congenital palate and lip defects, and the implementation of treatment measures by special medical institutions in this scientific and practical direction have a positive economic efficiency.

Dental – jaw abnormalities in children are the second most common in the frequency of occurrence of orthodontic diseases and are among the most severe morphofunctional changes in the face – jaw. Children with dental-jaw abnormalities need complex, long-term and systemic treatment, which must be registered in a dispensary for life [2.4.6.8].

Dental-jaw abnormalities have a significant impact on the quality of life in sick children. Comprehensive rehabilitation of children with dental-jaw anomalies and deformities, planning an individual program for the restoration of vital functions, breathing, sucking, swallowing and restoring the state of chewy efficiency from the first days of life to increase the effectiveness of further activities of psychological and pedagogical service. From the first days of life in children with facial-jaw defects, conducting early orthodontic treatment for children is a preparatory joint in the pre-operative

period, which is aimed at creating favorable conditions for further surgical intervention. Early orthodontic treatment procedures are targeted to separate the oral cavity and nasal cavity, prevent the development of secondary deformities,and normalize the feeding process [1.3.5].

Among patients seeking orthodontic care, patients with distal dental occlusion make up 65%. Analysis of publications on the epidemiology of distal occlusion of teeth has made it possible to determine that this anomaly is one of the most common dental – jaw abnormalities and is on average (12.5-30.5%) of all types of distal occlusions. In the presence of common somatic diseases, this figure increases by 74.6%.

The study of the frequency of developmental pathology of dental – jaw anomalies in children is the first step towards optimizing dynamic monitoring and improving the organization of orthodontic care in children. Over the past 30-40 years, there has been a trend of increased daa frequency in children,which is associated with the influence of stable pathological mechanisms in their formation [10.12].

A number of authors say that the increase in morbidity is associated with a change in the environmental situation: air pollution, a change in the content of microelements of drinking water. Their conclusion is based on an integral connection between macro - and microorganisms. One of the very important factors in the development of dental – jawomalia and deformities in children is the damage of the tooth – jaw,which has occurred for many millennia and is currently ongoing,as a result of exogenous and endogenous influences during the period of embirional development [7.9].

In children, the growth and steepness of the brain part of the skull led to a decrease in the facial part of the skull, a decrease in the jaws, a change in their size, shape and morphology. The development of the tooth – jaw occurred at different rates in different parts of the globe and differently in people of different nationalities and races.

In recent years, there has been a significant increase in interest in the problem of stable growth of tooth – jaw disorders and deformities. Nevertheless, despite the introduction of modern diagnostic methods, the prevalence rate is increasing every year. It is known that the appearance and formation of the body is largely due to the health of the mother, the genetic characteristics of the parents, the conditions of the gestation period, which in turn affect a number of factors. External factors are socio-hygienic, environmental.

Comprehensive epidemiological studies on the prevalence of children with tooth – jaw disorders and deformities are included by co-authors. With tooth-jaw disorders and deformities, the number of newborns indicates an increase, and in the next decade the frequency of such cases will be 2 times higher than 100 years ago. Every year, the number of newborns of these defects increases by 1.38 per 100 thousand of the population.

The diagnosis and treatment of patients with Distal bites has been adequately studied throughout the world. Despite the fact that this anomaly has been studied, the existing anthropometric, cephalometric diagnostic indicators do not coincide. Planning orthodontic treatment is not always justified. Most often, the initial forms of dental rows in patients are not taken into account. The above affects the quality of orthodontic treatment and causes recurrence of the disease in orthodontics. This negatively affects the psychoemotional state of patients [10.12.14].

According to the WHO, the birth frequency of children with these defects in the world is 0.6-1.6 cases per 1000 newborns.

According to statistics from Kazakhstan, the birth frequency of children with birth defects in the Republic is high and is 1:880. More than 6,000 children are counted in the dispensary, with about 400 children born each year.

The birth rate of children with birth defects in the Republic of Bashkortostan is higher than the average for the Russian Federation.

The frequency of continental birth defect pathology of the area among newborns in the Perm region and the city of Perm is 1:700.

Children with dental – jawomaly and deformities need long-term, comprehensive and systemic treatment and are considered in the dispensary [16].

Dental-jawomaly and deformities occupy a leading position in the structure of all antenatal anomalies and lead to changes in the aesthetics of the child's face, disorders of the immune system, nutritional function, breathing, speech defects. These are children with disabilities from birth until functional disorders are completely eliminated.

According to statistics from a number of European countries, the birth frequency of children with cleft lip and palate is one in 500-1000 newborns. The total frequency of morphological defects in children under 1 year of age is about 27.2 per 1000 inhabitants. At the same time, almost every fifth typical crack is a component of severe syndrome [11.13.15].

Ontogenesis is exacerbated or weakened by various factors of the internal and external environment, depending on the width of the range of genetic or acquired Adaptive stability of the phenotype "mother-placenta-fetus" single structural-functional system, which is caused only by a brief repetition of Phylogenesis characteristic of a particular genotype. From this conception, conditions of intrauterine development during the study can, in a broad sense, lead to the manifestation of many diseases in fetal development,including tja, through negative Ante - and perinatal factors.

Murtazaev S.S. and, according to other authors, the importance of using aesthetics in modern dentistry has increased. The author conducted a biometric study of the teeth of the Uzbek population, which determined significantly smaller sizes of all tooth groups compared to the Southern Altai, except for the lower molars. Tooth-jawomaly and deformities develop due to many negative factors that occur in the process of growth and development of the child's body. Thus, pathology of the respiratory system, bad habits, dental caries and its complications, rickets, diseases of the endocrine system, chronic intoxication of the child are generally accepted factors in the appearance and development of dental – jawomaly and deformities. It can also be noted that temporary and reversible bite pathology, which was not eliminated during its formation, can persist and eventually acquire more pronounced and severe forms in permanent occlusion, as well as be accompanied by complications in the form of dental caries, periodont diseases. Affects the work of body systems and the psycho-emotional state of patients. On the basis of statistical analysis of epidemiological studies, 1,200 scientific sources have been published found the average frequency of tooth – jawomalia and deformities, as well as their individual nasological forms and dysfunctions. Tooth-jawomalia and deformities are temporary bites, transitions are also common in permanent teeth.

Currently, the number of tooth - jaw disorders is increasing. According to who dental care in Europe, dental pathology occurs in 50% of children, meaning that orthodontics is increasing in importance [15].

According to epidemiological examinations of the population of children in large cities of Russia, seeking specialized help caries in children complications of the process account for about 35-50% of general dental pathologies.

However, there is a statistically significant trend towards an increase in caries complications as the child ages: from 21% in 2-year-olds to 64% in 7-year-olds. The maximum number of teeth involved in the inflammatory process of the periodont is observed in four-year-olds in 37% of cases, pulp tissue damage in 5-year-olds in 17% of cases. With the symptom of "acute pain" in preschool age, the

number of teeth to be removed increases by 8 times and is 25% in preschool patients. General somatic pathology negatively affects the development of complications of the carious process.

Inflammatory diseases of the dental pulp and periodonty in children are severe complications of caries. One of the decisive reasons for the development of this pathology is the morphological features of temporary teeth: wide root canals, large apical hole, expansion of the periodontal fissure, the presence of additional contact with periodontal tissues in 50% of cases. Root bifurcation area. This begins both the rapid course of the inflammatory process in the dental pulp and the rapid transition to neighboring tissues [12].

Analyzing a large amount of clinical and X-ray materials, there are also conclusions that in the presence of abcedent events or leakage pathways of chronic granular periodontitis of temporary molars, from 2 years of age, it negatively affects the jaw, which in some cases leads to lysis of permanent teeth dysplasia. Most often, the pile teeth located in the upper jaw and the second premolars in the lower jaw have a higher rate of retentation according to Englia II Class. When processing the data obtained, no statistically significant correlation was found between the presence of affected teeth and the condition of the teeth,the presence of tremas and diastemas [13].

**Conclusion.** Lusevich and other co – authors believe that at the age of 4-15 years, 20% of tooth-jawomalia and deformities are associated with secondary hypodentia and with dysfunction of the chewing apparatus. According to him, it can reduce the incidence of various deformities by 30-60%. According to the author's conclusion, teeth obtained at the age of 3-5 years in a temporary bite have the greatest negative effect on the formation of occlusions, and at 5-6 years of age, slightly less changes occur with the loss of milk teeth. Removal of these teeth at the age of 7-8 does not significantly affect the formation of physiological occlusion. Thus, a wide range of medical, social, geographical and environmental factors affects the frequency and level of structure of dental – jawomaly and deformities in children.

**LIST OF LITERATURE USE**.

1. Fozilov U.A. Optimization of prevention of caries development during orthodontic treatment.// AJMIR Asian Journal of Multidimensional Research. – 2020. – Vol. 9. - Issue 1. – P. 48-50 (Impact: Factor: 6.882)
2. Фозилов У.А. Ортодонтик мосламаларни қўллашда юзага келадиган бошланғич оқдоғ кариесни замонавий даволаш усуллари // Tibbiyotda yangi kun. –2020. - №2 (30). 250-251. - б. (14.00.00. №22)
3. Фозилов У.А. Беморларни ортодонтик даволашда асоратларнинг олдини олишга қаратилган профилактик чора тадбирлар мажмуини қатъий технология ёрдамида ишлаб чикиш ва амалга ошириш.// Tibbiyotda yangi kun. – Бухоро, 2020. - №2(30). 580-583. - б. (14.00.00. №22)
4. Fozilov U.A. White treatment of white spot caries in the application ofmodern medicine. // academicia an international multi disciplinary research journal. – 2020. - vol. 10, issue 5. – P. 1811-1813 (impact factor: 7.13)
5. Fozilov U.A. Diagnostic of caries by using the machine Qrayview C // ICDSIIL-20 International Online Conference In Association with International engineering journal for Research Development. – 2020. - vol. 10, issue 5. – P. 259-262 (Impact Factor - 6.549)
6. Fozilov U.A. Development and implementation of a set of preventivemeasuresaimed at preventing the development ofcomplications in the orthodontic treatmentofpatients using fixed technology

//American Journal of Medicine and Medical Sciences. – 2020. - №10 (7). – P.469-472 (14.00.00. №2)

7. Fozilov U.A., Rizaeva S.M. Development of modern preventive programs in orthodontic treatment of dental caries in children on the basis of hygienic requirements // (IEJRD) International Engineering Journal for Research Debelopment. – 2020. ISSN 7149-0771 P. 1-4. (impact factor: 6.549)
8. Фозилов У.А. Ризаева С.М. Ортодонтик даволашда кариеснинг ривожланишини Бухоро вилояти худудлари негизида ўрганиш // Stomatologiya. – 2020. - №3 (80). 36-38. - б. (14.00.00. №12)
9. Fozilov U.A., Rizaeva S.M. Optimization of diagnosis and prevention of development of caries for orthodonic treatment European Journal of Molecular & Clinical Medicine 2020. Volume 7. Issue 3. - P. 3714-3719.
10. Фозилов У.А. О проблеме скученности фронтальных зубов // научно-методический журнал Academy. – 2017. - №7(22). – С. 94-96.
11. Fozilov U.A. Optimization of prevention of caries development during orthodontic treatment // Научно-практическая конференция «Актуальные вызовы современной науки». – 2020. - Выпуск 4(48). - Часть 1. – С. 48
12. Fozilov U.A. Diagnostic and prevention of the development of caries and its complications in children at orthodontic treatment // Journal NX A Multidisciplinary Peer Reviewed Journal. – 2020. - Volume 6, Issue 7. – P. 276-280
13. Fozilov U.A. Evaluation of the efficiency of Demineralizing Agents in Treatment with Removable and Fixed Orthodontic Equipment in Children.// International Journal on integrated Education. – 2020. - Volume 3, Issue VII. – P. 141-145
14. Fozilov U.A. Orthodontic treatment optimization of caries prevention // Сборник научных трудов научно-практической конференции с международным участием «Актуальный вызовы современной науки». – 2020. - №4(48). – Часта 1. - С. 50.
15. Фозилов У.А. Ризаева С.М. Болаларни ортодонтик даволашда кариес ва унинг асоратлари ривожланишини олдини олиш: методические рекомендации. – Ташкент, 2020. – С. 20.
16. Фозилов У.А., Ризаева С.М. Оценка деминерализации эмали в динамике ортодонтического лечения при применении несъёмной ортодонтической техники: методические рекомендации. – Ташкент, 2020. – С. 20.