Importance of medical and social factors in etiology of oral diseases of children

Yariyeva Oynisa Oltinovna PhD of the department pediatric dentistry of the Bukhara state medical institute

ABSTRACT

Dental diseases are the most common diseases in relation to other pathologies observed in the human body and damage to the hard tissue of the teeth - caries ranks first in frequency of occurrence. According to the results of epidemiological studies, the spread of caries varies from 70 percent to 90 percent and now there is no trend of decreasing. In addition, according to some authors [1]. Despite the fact that recently active preventive and curative procedures are underway, it's observed growth of disease rate day by day.

Keywords: Oral diseases, teeth - caries

Dental diseases are the most common diseases in relation to other pathologies observed in the human body and damage to the hard tissue of the ranks first in frequency of occurrence. According to the results of epidemiological studies, the spread of caries varies from 70 percent to 90 percent and now there is no trend of decreasing. In addition, according to some authors [1]. Despite the fact that recently active preventive and curative procedures are underway, it's observed growth of disease rate day by day. The spread and intensity of caries depends on several factors they are: ecological and biogeochemical properties of the environment, socio-economic living conditions of the population, nutrition quality, level of health and level of medical knowledge of parents, organization of primary prevention in the region[3.5.7.9.11].

Many scientific studies have found that a number of factors such as the environment, production factors, climatic conditions, the microelement composition of the soil, water and air, the composition of food, living conditions significantly affect the occurrence and course of dental diseases, including carious and non-carious damage to solid dental tissue, diseases of the oral mucosa and inflammation of periodontal tissues [2.4.6.8.10].

In the human population it is very important to study the difference between the state and causes of dental diseases, for which reason the current state involves many diseases in the population. Modern social epidemiology changes from individual risk focus to multi-stage prospective. Treatment of patients with complaints of diseases of the oral cavity is a paradigm of social epidemiology, which makes it possible to pass the barriers that arise before us in considering the biological determinant of caries as a social determinant [12.13.14.15].

The lack of objective data on the prevalence, structure of dental diseases, the peculiarity of clinical symptoms creates difficulties in scientifically-based formation of needs for special dental care, planning prevention of dental diseases in different age groups, implementation of the preventive basis of cases of neglect of parents' health.

Based on the data of the social determinants of caries, it is possible to determine the demand for treatment-and-prophylactic measures for children and the amount of medical care necessary for the population. In view of the above, the examination of the present data is important.

Purpose of scientific research:

The use of modern determinants of testing in determining the significance of the factors of the social condition of parents, the health of mother and child in the etiology of carious and non-carious damage to hard dental tissue among children and adolescents.

Object and methods of research:

During 2016-2018, we conducted surveys among pupils of secondary school No. 16 of Bukhara city and parents living in the Kuksaroy block, Shark-1, on the basis of the Information Letter card approved by order of the Ministry of Health of the Republic of Uzbekistan No. 0461 of February 01, 2018 "On improving the methods of early diagnosis and prevention of dental caries in children". This information letter contains a 13-item questionnaire, the Oral Health leaflet - Related Quality of Life (OHRQoL), which provides that children cannot clearly answer health questions, provides an opportunity to clarify the pathology on the body, including the oral cavity, to determine medical and social factors during and after the period of pregnancy of the mother, as well as to assess their standard of living.(8)

During the survey participated 616 children: 162 at the age of 2-6 years old, 252 at the age of 7-11 years old and 202 at the age of 12-16 years old. During the medical examination, they were diagnosed on the basis of generally accepted objective and subjective examinations for the presence of dental diseases, carious and non-carious damage to the hard tissue of the teeth.

Results:

We can observe that, anemia is 22,07% (in 136 children), varicella (chicken-pox) is 5,7% (in 35 children), measles is 3,9% (in 24 children), various injuries of the body is 5,5% (in 34 children), ear-nose-throat diseases is 19% (in 117 children), nervous system diseases is 4.0 (in 24 children), internal secretory gland diseases is 3.2% (in 20 children), allergic symptoms of drug and food products is 15% (in 92 children), acute respiratory diseases is 36.5% (in 225 children) and other types of diseases are recorded at about 3-5% among the surveyed children. If we observe 7-11 aged children, we can see that anemia is 25,8% (35), varicella (chicken-pox) is 6,7% (17), ear-nose-throat diseases is 22,4% (56), allergic symptoms of drug and food products is 13,9% (35), acute respiratory diseases is 36.9% (93), among the 12-16 aged children, we can observe that, hepatitis is 8,9% (18), measles is 7,9% (16), ear-nose-throat diseases is 20,2% (41), allergic symptoms of drug and food products is 10% (20), internal secretory gland diseases is 14,7% (15), acute respiratory diseases is 24,2% (49) and other types of diseases are recorded at about 3-5%.
Among mothers, whose children surveyed during pregnancy, it was recorded that 12,3% (76%) of them had anemia, 7,9% (49%) had acute respiratory diseases and 2,9% (18) had various types of diseases. At the same time, mothers of surveyed children aged from 2 to 6 years old were at the average of 27, 6 years, mothers of 7-11 months children were 30,6 years and mothers of 12-16 aged children were 33,6 years.

The average indicators of caries disease; the prevalence was 82,5%, the caries growth intensity - 1,2, caries pulpitis removal - 8,5. These indicators are moderate; the prevalence in the 2-6 age group was 78%, growth intensity - 1,0, caries pulpitis removal + kp - 1,8%, spread in 7-11 years was 82%, growth intensity - 1,1, caries pulpitis removal + kp - 1,4, in the age group 12-16 was 87%, growth intensity - 1,4, caries pulpitis removal - 1,3. The above indicators when compared to the sex differentiation among children, in sequence, were 84,5%, 1,3, 9,2 in boys; 80,1%, 1,1, 7,8 in girls.Non-caries injuries of the tooth tissue: its amount was on average 22.4% in surveyed, including hypoplasia - 11.2%, fluorosis - 9.2%; among the 7-11 and 12-16 age groups, the hypoplasia increased to 14.7%, and the fluorosis - 11.8%, at the 12-16 age groups.In somatic diseases of 7-11 years; the caries prevalence in anemia was 83.5%, in hepatitis - 84.2%, at the 12-16 age group, caries in ear-nose-throat diseases was 84,8%, in internal gland diseases - 89%, in acute respiratory diseases - 85%. Non-caries injuries of the tooth

tissue among the children were observed in allergic diseases - 28%, inner secretion gland disease- 29.4%, and especially prevalence in the 12-16 age group. Also among children with anemia, hepatitis and non-caries injuries, dark blue or brown colour of the teeth was observed up to 17,8%.Also, if we pay attention to results on Oral Health - Related Quality of Life (OHRQoL) list, which assessed the social life of 616 children's parents, we can observe that there is a certain relationship between somatic diseases, paroxysmal diseases, social life styles and dental diseases.

The survey determined that: parents who drink alcohol - 23, smoke - 62, married with close relatives - 19, have experienced toxicosis in the first half of the fetal period - 230, in the second half - 64, and parents who regularly took various vitamins during pregnancy - 151; including yodomarin - 28, magniy B6 - 15, antibiotics - 9, in the survey, the first pregnancy - 152, the second pregnancy - 241, the third pregnancy - 169, the fourth pregnancy - 40, from the surveyed children - 269 were first, 215 were second, the rest were 3-4 children, during pregnancy - 316 cases were completed fast, premature birth was in 125 cases, delayed in 79 cases, in 401 cases born on time, in 67 cases used the surgical procedure, breastfeeding after birth, continued in 54 children, 12 months in 43 children and 499 children over 12 months, 62 children were transferred to artificial feeding after birth, 252 children - 12 month after birth, and 67 children were inadequate in their weight compared to their age.

Discussion of the results.

As we analyze the obtained results, we compare the diagnosis of anemia, varicella (chicken-pox), measles, various injuries of the body, ear-nose-throat diseases, diseases of the nervous system, internal secretory gland diseases, allergic symptoms of drug and food products, acute respiratory diseases, listed in the survey, which indicate a higher incidence of other types of pathologies, also, the aforementioned diseases with the younger age group, there was observed a large number of diagnosis of anemia, varicella (chicken-pox), ear-nose-throat diseases, allergic symptoms of drug and food products, acute respiratory diseases, hepatisis, measles, internal secretory gland diseases and acute respiratory diseases in children aged 7-11 and 12-16.

The results of the survey also show that during pregnancy, among mothers, anemia, acute respiratory illnesses and this type of other diseases have been reported.

Prevalence of caries disease, caries growth intensity, indicators of caries pulpitis removal elements, non-caries wounds - confirm that hypoplasia and fluorosis are higher than the average for children aged 7-11 and 12-16, as well as in girls and in boys.

Dental diseases - traumatic tissue injury non-caries and caries is observed in high values, in the section of somatic diseases - anemia, hepatitis, ear-nose-throat diseases, internal secretory gland diseases, acute respiratory diseases.

Also; on the bases of Oral Health - Related Quality of Life (OHRQoL) list results, it is possible to observe the correlation between indicators of medical and social factors, the somatic diseases of observed children, the mother's illness, dental disease observation.

Conclusions: -

Medical and social environment in the family, maternal health, especially in the context of healthy lifestyle during pregnancy - medical supervision, various somatic disorders and a number of factors during childbirth play an important role in the future health of the child, including the healthy appearance and formation of the tooth tissue.

Anemia, hepatitis, ear-nose-throat diseases, internal secretory gland diseases, acute respiratory diseases in mother during her fetus and postpartum period is of course, an important factor in causing toothache severe tissue injury non-caries and caries.

The high incidence of prevalence of caries and non-caries wounds in teeth tissue in children confirms the direct affiliate between the rate of 7-16 years of age and the level of occurrence of various somatic diseases.

Conducting regular medical examinations through dental clinics, including

medical and social survey cards (Oral Health - Related Quality of Life (OHRQoL)) give opportunity not only to determine, prevent somatic diseases, but also to prevent early diagnosis of somatic disease, prevent its etiologic factors, to predict about its origin and duration.

References.

1. Yariyeva O.O. Importance of medical and social factors in etiology of carious and non-carious diseases of children// Scopus. «International journal of pharmaceutical». - 2019. - №11(3). – P. 456-461.
2. Yariyeva O.O. Clinic, Early Diagnosis and Treatment of Dental Caries in Children// International journal of Bio-Science and Bio-Technology. – India. – 2019. - №11(6). – P. 15-23.
3. Яриева О.О., Митронин А.В., Беленова И.А. Значение медико-социальных факторов в этиологии кариозных и некариозных заболеваний среди детей и подростков // Cathedra. - Россия. - 2019. - №69. - С. 62-66.
4. Яриева О.О. Болаларда тиш кариесининг этиологияси, клиникаси ташхиси ва даволашга бағишланган илмий-адабий тахлилий шарх// Доктор ахборотномаси. - 2019. - №3. - Б. 179 -182.
5. Yariyeva O.O. The degreeof damagetohar dtissuesof tee thof carious and non-carious among children and adolescent of the Bukhara city// Eurasian. Bulletin of Pediatrics. - Uzbekistan. - 2019. - №3 (3). - P. 3-9.
6. Яриева О.О. Болалар орасида кариес ва нокариоз касалликларнинг этиологиясида тиббий- ижтимоий омилларнинг ахамияти// Вестник врача. - 2019. - №3. - Б. 45-50.
7. Яриева О.О. Распространенность и интенсивность кариеса временных зубов у детей Бухарского региона// Сборник статей. - Башкортостан, - 2017. - С. 252- 253.
8. Яриева О.О. Общие результаты анкетирования родителей детей по вопросам профилактики и лечения кариеса зубов в городе Бухаре// Проблемы биологии и медицины. - 2017. - №4.1(98). - С. 29.
9. Яриева О.О. Раннее выявление соматических болезней у детей и подростков как предикция кариеса// Стоматология Славянских государств. - 2019. – С. 105-107.
10. Яриева О.О. Алгоритм ранней диагностики и профилактики кариеса зубов у детей// «Образование, наука и практика стоматологии XXI века» VI-го международного конгресса стоматологов. - 2019. - С 12-13.
11. Yarieva O. O. Clinical evidence of efficacy inThe early diagnosis, treatment And prevention of dental caries Etiology in children// Academicia: An International Multidisciplinary Research Journal. - 2020. - P. 386-389.
12. Yarieva O. O. The grade of damage to hard tissues of teeth of noncarious and carious among children and teenagers of The Bukhara region// World Journal of Pharmaceutical Research . - 2020. - P. 345-350.
13. Яриева О.О. Оценка распространённости и интенсивности кариеса временных зубов у детей// Международный журнал: гуманитарных и естественных наук. - Россия. Новосибирск. - 2017 . - №1. - С. 19-21.
14. Яриева О.О. Результаты анкетирования родителей детей по вопросам профилактики и лечения кариеса зубов в городе Бухаре// Стоматология. Научно-практический журнал. Узбекистан. Ташкент. - 2017. - №3(68). – С. 69-70.
15. Яриева О.О. Распространенность и интенсивность кариеса временных зубов у детей Бухарского региона// Сборник статей Международной научно-практической конференции “Актуальные воспросы стоматологии”. - 2017. – С. 27.