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Review Article

**“YOUNG DENTIST SCHOOL” PROJECT AND DENTAL
DISEASE PREVENTION PROGRAM- REVIEW****M.V. Dolgoplova, O.I. Admakin, I.A. Solop, B.V. Margiani**

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Abstract:

The presence of dental pathology in many ways affects the health state during the subsequent life. In Russia, epidemiologic dental surveys revealed improvement in average dental disease incidence rate, although prevalence is still high, especially among children and teenagers. The main factors are limited pediatric dental care availability and low dental education level. Shortage of clinicians and functioning dental offices in schools lead to increase in dental disease incidence rate. In this regard, it is necessary to find ways to improve the provision of dental care to children, and one of the priority areas remains the development, improvement and implementation of prevention programs. One such program is the project "School of the Young dentist", based on the interaction of high school students and junior classes. Thus, the developed educational program "School of a young dentist", with one of the main concepts can be identified as the interaction of schoolchildren senior and junior classes and the principle of accessibility of information can become an independent part of the dental education, the main task of which is to protect the health of children and adolescents

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INTRODUCTION:

One of World Health Organization priority areas is dental health, main aim of which is reducing the incidence of tooth decay and periodontal disease. Epidemiological survey in children is necessary to determine the quality and scope of dental care, as well as to plan and evaluate effectiveness of dental disease prevention programs, the important component of which is dental education.

Dental condition incidence and intensity in children and teenagers is an object of great interest because of the influence of these conditions on health later on.

First national epidemiologic dental survey in Russia was conducted in 1996-1998. This survey revealed intensity and incidence levels of caries in children 6,12, and 15 years old and in periodontal diseases in 12 and 15-year olds. The next epidemiologic survey was conducted in 2007-2008 using WHO criteria.

A comparative analysis of the two epidemiological surveys revealed the following incidence of morbidity among children, demonstrating 10-year stability of average caries in 6-year-olds. The main changes occurred in the structure of the components of the decay-missing-filling index(DMF): decreased number of teeth affected by caries and increased the number of filled teeth. Prevalence of caries of permanent teeth in children 6 years has decreased on 9%, in age groups of 12 and 15-years - on 6%. The average DMF index of 6-year-olds in the 10-year period has not changed, and in 12 and 15-year-olds decreased by 13.7% and 12.8% respectively. Also, the value of D component decreased by 28%, the number of filled teeth increased, and the number of removed teeth decreased by 2-3 times compared to 1998.

Thus, when comparing and analyzing the results of two epidemiological surveys of dental disease incidence in child population, it was revealed that the prevalence of tooth decay was partly reduced, however, compared to the countries of Western Europe and the US remains about 2 times higher. On average, 84% of children aged 6 years have carious lesions with the intensity of DMF index about 4.8. In children 12 years old the average rate of DMF was about 2.5. Average number of unaffected sextants (according to CPITN Index) in 15-year-olds 4/6 (out of six); Prevalence 41%.

An analysis was also conducted to identify the causes of dental diseases in the Russian Federation. The main factors influencing the level of dental pathology: Poor oral hygiene, low concentration of

fluoride in drinking water in most of the territory of the Russian Federation, frequent and excessive carbohydrates intake along with low availability level of dental care for children and teenagers.

In order to increase dental care availability for children and teenagers, the availability of a well-equipped dental office in schools is essential. This is one of the best ways to resolve most of dental problems in children. The school dental office gives a good opportunity for initial examination, identification of risk factors and carrying out basic medical and preventive measures. But, unfortunately, at the moment in most cities of Russia the number of dental offices in schools is decreasing, specialists seek employment in private clinics, so planned child population rehabilitation can not fully be carried out.

Based on various data, 75.9% of schools do not have a dental office, and 25% of school's dental offices do not function for a number of reasons: malfunctioning equipment, the need for upgrade, lack of a work license, and personnel shortage.

As a result of the work of measures carried out by school dental offices, only 33.2% of schoolchildren receive dental care, so the high level of dental disease incidence among children and teenagers is remained.

In this regard, currently, it is necessary to find ways to improve dental care for children, and one of such priority and economically advantageous directions remains the development, improvement and implementation of prevention programs.

Mainly dental personnel's tasks are: program development, measurable tasks establishment, program implementation and effectiveness evaluation. There is a number of problems in this approach such as limited time to carry out prevention programs, lack of material base, workload of nurses, difficulties in the assistance of teachers and parents, lack of motivation in children and teenagers, low level of dental education of children and parents and insufficient level of training of medical and pedagogical personnel in the issues of dental prophylaxis.

Thus, it seems relevant to increase the effectiveness of prevention of dental diseases among schoolchildren due to the introduction as active participants of the program of teachers and schoolchildren themselves, the expansion of the role of educational component in the structure of the school preventive dental program.

One possible solution to this problem may be the development and implementation of the educational programs for schoolchildren to prevent the development of dental diseases in order to implement the program "School of young dentist", where the important role of dental education of schoolchildren in junior classes are assigned to high school students who, in fact, will be mentors for juniors schoolchildren, or, in a different way, mentors.

Investigating mentoring in Russia, we have traced the development of mentoring in our country. The Institute of mentoring in Russian pedagogy existed in Russia from the beginning of the XVI century and actively developed until the pre-revolutionary period. Unfortunately, practice of mentoring at the moment is not so developed in domestic pedagogy as it is in other countries.

The most famous teacher and theoretician was Paulo Freire (Paulo Freire). He actively developed the theory of mentoring abroad in the 1960s.

At the moment, there are a number of studies demonstrating a significant advantage of mentorship of high school students over pupils of junior school.

The advantages of mentoring are numerous, but among them one can single out the main ones: improving academic performance, improving relationships with peers and personal development as mentors, and wards, which is a huge plus of this form of interaction.

This format promotes increase of self-esteem, teaches empathy and patience both sides of interaction, which potentially creates new friendships, promotes social adaptation, forms the continuity of knowledge and skills among schoolchildren, and creates a unified informational space inside the school. Mentor-schoolboy (or student) is closer to the age of their wards, closer to knowledge, experience and cognitive development than adult mentors, and these similarities make it much easier for mentors to understand the personal and academic problems that wards may have.

The high sickness rate of the population is directly related to the dental education, which role for a long time was clearly underestimated. Therefore, the active development of dental education for children and adults programs is growing very fast, with a focus on hygienic education of the younger generation. The main obstacle in the implementation of preventive programs among children and adolescents is the lack of motivation, understanding

of the relationship between the lack of minimum sanitary-hygienic skills and the occurrence of dental diseases and lack of responsibility for one's health, including dental health. When developing prevention programs for different age groups for schoolchildren we should take into account the nature of thinking and age-appropriate psychological characteristics. Thus, for example, in children 6-10 years of age, who have the visual nature of thinking, it is necessary to prepare a material that will not be difficult for visual perception. It can be a poster, a layout, a presentation, a fairy tale, a cartoon, a mini-production, etc.

In the work with schoolchildren of 5-9 grades, it is possible to hold various contests, quizzes, situational games and dialogues; all activities that involve different ways during those students interact with each other and with the teacher. Sanitary and hygienic education of schoolchildren of 10-11 grades is based on the use of predominantly scientific data, and also aims at educating young people as future parents. Often children of junior and middle school age are wary of people in "White coats", and sometimes it is quite difficult for adults to establish contact with children, so development and implementation of programs for the prevention of dental diseases based on interaction among schoolchildren of the senior and junior classes, are more effective. Advantages of the program "School of young dentist" are: saving time for medical staff, since it will be used only at the first stage in the training of high school students; facilitating understanding and interaction between schoolchildren due to the small age difference; minimum economic costs, as a result of attracting fewer medical personnel. Also, among the positive aspects of the program, it should be noted that the form of enlightenment is shown more attractive for younger and older children, and can even help senior pupils in the choice of professional activity.

CONCLUSION:

Thus, the developed educational program "School of a young dentist", with one of the main concepts can be identified as the interaction of schoolchildren senior and junior classes and the principle of accessibility of information can become an independent part of the dental education, the main task of which is to protect the health of children and adolescents.

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