
THE STUDY OF RISK FACTORS FOR THE DEVELOPMENT OF CARIES IN PUPILS OF THE FIRST GRADES IN SECONDARY SCHOOLS

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Abstract

Children's caries is a special form of pathology that has a complex, diverse, interacting multifactorial nature. This article examines the risk factors for caries among primary school children, provides the results of assessing the level of their theoretical knowledge on the issue under study, as well as data on the food habits and oral hygiene of respondents.

Keywords: Caries, oral hygiene, prevention, children, schoolchildren, school.

Introduction

Dental caries is still the most common chronic disease among children [1-4, 16]. World statistics show that a significant share in the structure of this pathology is occupied by caries of baby teeth in children under the age of six years [3, 11].

In recent years, there has been a rapid increase in the prevalence of caries in children of different ages [1, 5]. Often, adults do not attach much importance to carious lesions of baby teeth, considering them temporary, and therefore do not require proper attention. At the same time, it is known that early caries of temporary and permanent teeth can form the basis of dental problems in older age periods. The low level of sanological culture of parents is reflected in the results of the dental status of their children [2, 3]. The lack of proper oral hygiene skills in younger schoolchildren is one of the main factors contributing to the occurrence of dental diseases in them. In this regard, it is obvious that it is necessary to strengthen measures for the prevention of early caries by improving sanitary and hygienic knowledge, both among adults and children [4, 6-10, 12, 15, 17].

By data World Health Organization (WHO) The occurrence of tooth decay is increasing every day among both adults and primary school-age children worldwide. The prevalence of caries around the world varies widely. According to the results of epidemiological studies conducted in different countries of the world, dental caries is widespread among preschool children in both economically developed and developing countries. The prevalence of this disease in the world ranges from 25% to 72%. Among the child population of industrialized countries, there is a lower prevalence of caries than in developing countries. The lowest incidence is observed in such Western countries as Sweden, Italy and the United States. On the contrary, in the Middle East, Central and south-east Asia, there is a higher prevalence of the disease due to the fact that many countries are still experiencing economic difficulties, and the health system in them is at the stage of formation [2, 6, 16].

Purpose of the Study

Assessment of the level of theoretical knowledge of 1st grade pupils about calcium, their food habits and oral hygiene.

Materials and Methods of Research

Inclusion criteria: children of both sexes aged 7 to 8 years, absence of general somatic pathology, informed voluntary consent of parents to participate in the study. We conducted an anonymous survey of 50 students of the 1st grades of general education schools in the city of Termez. The questionnaire was divided into 2 blocks of questions. Block 1 included questions about the importance of calcium for humans, what foods contain it, and what foods first-graders eat out of school and how often. Questions of the 2nd block of the questionnaire concerned children's hygiene skills in oral care. The answers from the questionnaires were entered into an electronic database, the results were compared with the sample, after which the number of correct answers and their ratio to the total number of questions were determined for each respondent. The number of questions and their content were the same for each of the subjects. The results of the study were processed using the methods of applied statistics [6, 7].

Results and Discussion

A survey on the first set of questions in Termez city schools showed that 4 children (8%) out of 50 respondents know what calcium is. 1 child (2%) answered that they can talk about the effect of calcium on the human body. When asked which foods contain the most calcium, 45 children (90%) found it difficult to answer, 3 (6%) mentioned fruits, 2 people (4%) - dairy products.

When asked how often sweets are consumed, 15 children (30%) consume sweets daily, 25 children (50%) - several times a week. Those who do not eat them at all among the respondents were 10 first-grade students (20%).

When asked about the use of sugary carbonated drinks, 15 children (30%) answered that they drink sugary soda daily, 30 children (60%) - several times a week, 5 (10%) - do not drink it at all.

20% of children (40%) have a habit of snacking on sweets and rolls between main meals. 20 first-graders (40%) consume dairy products daily, 25 of the respondents (50%) – several times a week, 3 people (6%) - several times a month, 2 people (4%) do not use them at all.



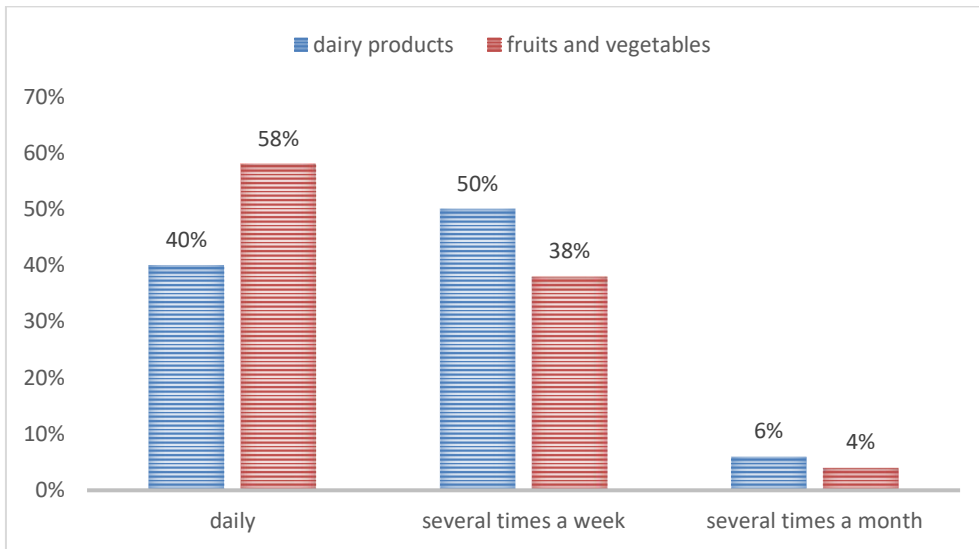


Figure 1. Frequency of consumption of dairy products and fresh fruit by children aged 7-8 years studying in Termez schools

29 children (58%) eat fresh fruits and vegetables outside of school every day, 19 people (38%) eat them several times a week, and only 2 children eat them several times a month, which is 4% of the respondents (Figure 1).

The survey on the second set of questions showed that only 2 people (4%) out of 50 respondents visit the dentist every 6 months (2 times a year), 3 children (6 %) - 1 time a year. The majority of children - 45 people (90 %) - go to the dentist only when they have a toothache (Figure 2).

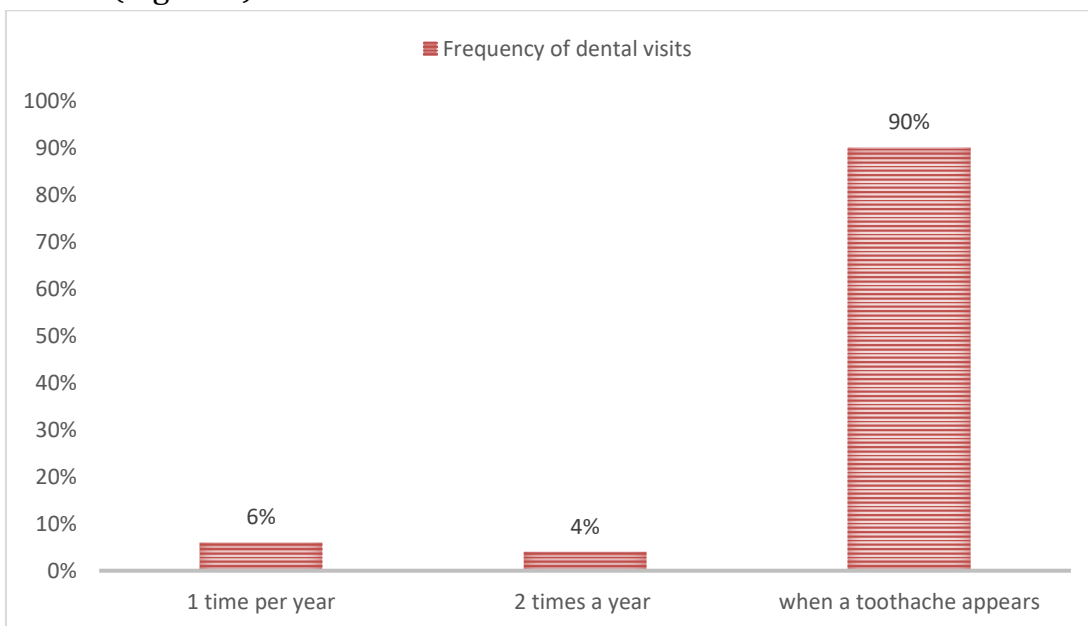


Figure 2. Visit to the dentist by schoolchildren aged 7-8 in Termez.

Individual oral hygiene (self-cleaning of teeth) is carried out 2 times a day by 32 first-grade students in Termez (64%), 1 time a day - by 17 children (34%), it is not carried out or is carried out on a case-by – case basis-by 1 child (2%). During the survey, it was revealed that 46 first-graders in Termez (92%) use manual (conventional) toothbrushes, and 4 children (8%) use electric ones. 2 respondents (4%) use mouthwashes, 48 people (96%) do not use mouthwashes. Dental floss is used by 1 child (2%), 49 children (98%) are not used. 21 children (42%) change their toothbrush 1 time a year, 8 children (16%) change their toothbrush 2 times a year, and 3 children (6%) change their toothbrush every 3 months. 18 respondents (36%) do this only when the bristles are erased. 18 children (36%) store their toothbrush correctly (in a cup with the head facing up). The duration of brushing in 30 children (60%) is 1-3 minutes, 5 children (10%) brush their teeth for more than 3 minutes, 15 children (30%) for less than 1 minute. Only 15 children (30%) out of 50 respondents use the correct technique of brushing their teeth.

Conclusion

Thus, the survey showed that most children do not have enough knowledge about what calcium is and its role in the body. Among the majority of first-graders surveyed, there is a violation of the principles of rational nutrition (preference is given to caries-causing products). Also, many children have an insufficient level of hygiene skills in oral care. The combination of these factors creates a significant threat to the development of caries among the majority of the surveyed schoolchildren.

The results obtained indicate an increased risk of developing caries among children aged 7-8 years and determine the need to improve the level of knowledge of first-graders on caries prevention.

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