

ROLE OF HEALTH EDUCATION IN PREVENTION OF DENTAL DISORDERS IN SCHOOL AGE

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Abstract

Education for oral health represents an important aspect of the health education, closely correlated with other aspects – personal hygiene, feeding, and addressability to medical services.

The importance of this segment of health education resides in the fact that the oral-dental health is essential in the maintenance of an optimum state of health. Having a major role in the good functioning of the digestive system, in speaking quality, in self image delimitation and appreciation, in social relationships, the oral health includes all the dimensions of the physical, psychical and social state of health. (Borzan C., Floarea Mocean, 2002)

The strategies and measures of promoting the oral health, of informing and educating, can reduce the morbidity through dental affections, trying to make the population aware and sensitizing it as regards this important aspect of health. Thus, the target group in the present study was represented by children with the age ranging from 7 to 11, coming from different environments, urban – rural, different family environments, at an age when habits and attitudes that are acquired are maintained during the whole lifetime.

Key words: education, hygiene, oral-dental, dentition, feeding, habits/skills

INTRODUCTION

The education for oral health is important to begin as soon as possible, at the age of the first childhood. The acquisition of the first notions regarding the teeth care will represent the basis on which the child builds and maintains the attitudes favorable for the maintenance of the oral state of health during his/her lifetime.

If the skills of oral-dental hygiene are acquired correctly, starting with the first years of life, they will become skills and habits for the whole lifetime, influencing positively the health of the child, the future adult. It is well-known the fact that the childhood period is the most favorable for the formation of skills for influencing the attitudes, for modeling behaviors, because the child's response is very good. (Căpâlna G., 1996)

For the maintenance and improvement of the oral state of health, all the factors that can contribute to it must take part to, that is: family, teaching staff

from the educational institutions, specialists in health services, companies that produce specific and non-specific oral-dental prevention and hygiene products, local authorities and mass-media. (Bonchiş E., 1998)

A preventive strategy is necessary to be elaborated that must have in view the target population and the usage of the most suitable information transmission channels necessary to meet the education need for oral health within the community.

For the implementation of an educational program for health, the knowledge of the priorities in the territory under study, detected as a consequence of defining a diagnosis of the community, is necessary.(Enăchescu D., Vlădescu C., Tesliuc C., 2004)

MATERIAL AND METHODS

The populational group under study was made up of the 1st and 4th class pupils, because their age is suitable for the mixed dentition; during this period, attitudes, habits and behaviors referring to the maintenance of the oral health, of the integrity of dental-maxillary apparatus, of the oral-dental hygiene are created, and because the education program for health in collectivity could be easier to be applied.

The study was developed in two schools in Bihor county – from the urban (55% pupils) and rural environment (45 pupils), schools in which the working team made up of students in dentistry addressed to the primary school teachers and to their pupils from the two schools mentioned above. The distribution of the pupils according to the class is the following: 1st class – 19.9%, 2nd class – 23.1%, 3rd class – 26.3% and the 4th class – 30.6%.

Selection criteria for schools: to be located in different areas of the county, children to come from families with different training, education levels, with different lifestyles, with different social positions. Within each school, one class of pupils for each education level have been taken into account (1st / 2nd / 3rd / 4th / - eight classes totally)

The working techniques consisted in: two types of questionnaires, examinations of the oral cavity for all the children in the lot, and the introduction, processing and computerized analysis of the data.

The applied questionnaires included both closed and opened questions. One questionnaire was addressed to children and it was administered to them individually through the method of interview, and the other questionnaire was addressed to their parents and it was self-administered at home. (Rotariu T., Iluș P., 1997)

The examination of the pupils in the lot took place in the dentistry offices of the two schools after the application of the questionnaire, and it had in view on one hand, according to the individual dental formula, the dental state and the degree of dental-maxillary development of the children, the presence and absence of the dental anomalies, and on the other hand the oral-dental hygiene state. (Bratu E., Schiller E., 1998)

RESULTS AND DISCUSSION

The dentition of the examined pupils was mostly mixed – 90% and only 10% already had all the temporary teeth replaced.

Only 5% of the children were caries-free – a very reduced percent that motivates the bases of this study and explains the necessity of applying a prevention program for this population category.

The affectionation through simple caries of the temporary teeth has the following evolution – from 85% for the seven years old children increases up to the 90% for the eight years old children, after which with the years, it decreases to 55% for the eleven years old children, but this decrease can be due to the replacement of the temporary teeth and not to the reduction of morbidity through caries;

Ten percent of the children presented treated temporary teeth, most of them with an obturation, followed by the cases with two or three obturations; according to the literature data, in our study the most affected tooth proved to be the permanent primary molar, its absence being signaled only to a seven year old boy. At a different seven year old pupil, through inspection, it was noticed only the presence of a six year molar. The affectionation of this tooth was noticed for 80% in the examined pupils. (Ilie C., Diaconescu G., Hrubaru N., 2002)

The presence of the dental anomalies and the association or not with the feeding vicious habits and with the oral-dental hygiene was noticed in 25% of the examined children.

Starting from the idea that 80% of the examined pupils presented the alteration of the permanent primary molar, we wanted the approach of this problem to be made in detail (on one hand the vulnerability of this tooth to caries, and on the other hand the importance of its preservation on the dental arch) .

The study of the permanent primary molar intensity affectionation reported according to sex and age has detected that starting with eight years old, the affectionation of more permanent primary molars appears frequently at one child,

and for all the eleven years old pupils or older, regardless their sex, it was noticed that more than two molar of six years were affected.

Within the evaluation process of the knowledge level of pupils and their parents as regards the six-year molar and the prevention methods of the dental caries, we noticed that in the case of children, although less as number, the correct numbers are significantly equal with the wrong ones, being observed a prevalence of the answers of type “I don’t know”, in 60% in the case of the parents the highest share is for erroneous answers – 40%, followed by the answers of type “I don’t know”, in 30% correct answers representing only 20%.

Other issue covered in the applied questionnaires was the evaluation of the knowledge about the prevention of dental caries, starting from the evaluation of the children’s feeding type, the toothpaste used for cleaning the teeth, as well as, the knowledge of the specific methods of dental caries prevention. (Marcu Aurelia și colab., 2002)

The mixed feeding is the predominant one; both the answers offered by children – 77% and those offered by their parents 71% (no significant differences in the answers of the children and parents), the balance being rather inclined towards a caries-preventive feeding and not towards the consumption of sweets.

By correlating the answers that state the consumption of sweets with the intensity of caries phenomenon for the respective children, it is noticed that multiple caries and obturations are present to both milk teeth and permanent teeth.

Both children and their parents declare that for cleaning their teeth, children use fluorized toothpastes. A quite important share – 15% states that even starting with the age of 7-11 (the age group under study) haven’t ever been to a dentist. One third of the subjects state that attend periodically a dentistry office. Half of the children of the lot get to the dentist only in cases of emergencies.

The main reason that the person interviewed invoked in the reasoning of this low availability to the dentist and especially for the lack of a periodical examination, comes from the frequency of 30% of the answers of type “he/she didn’t have problems/or the need for a treatment/I don’t think that his/her dental problems are seriously enough to go to the dentist, to which 45% are non-answers for this question in the questionnaire.

Unpleasant memories related to the dentist and fear are the next reasons as frequency that motivate the low addressability at the dentistry – 24.2% of the children’s answers and 21.4% of the parents’.

The decreased addressability in the above answers are not due to the access to the dentist services, answers of type “the dentistry office is too far” or “I couldn’t afford it” being just a few – 6 cases (2.4%), respectively 9 cases (3.6%).

It is noticed that theoretically, parents’ attitudes are generally positive and evaluating the addressability for dentist only for the answers given at question no. 16, we could have state that it is all right, but making a comparison to those that were previously detailed and to the increased morbidity through caries, noticed due to the oral examination of children, we can suggest the following aspect: - although the parents know the correct attitude and the necessary behavior, in practice most of them don’t act accordingly, taking the child to the dentist only in emergency situations. (Căpâlna G., 1996)

The degree offered by the parents, that is the appreciation degree of their children’s oral state of health and oral hygiene is “very high”, 80% of them choosing the qualifications: - good 74%, very good – 6% and only bad 18% and very bad 2%.

CONCLUSIONS

The need for applying a prevention program for the age group taken into account is supported by the low percent of 5% of the children in the lot under study that were not affected by caries, of the high incidence of the caries within the temporary teeth in children with the age of 7, respectively eight years old, of the percent of 10% of children with treated temporary teeth with an obturation and with the affectionation of the permanent primary molar in a ratio of 80% of the examined children.

25% of the examined children presented associations of the present dental anomalies and the feeding habits, and the vicious oral-dental hygiene. As regards the knowledge of the pupils and parents about the prevention of dental caries, 20% gave erroneous answers.

As prevention methods for the dental caries, both children and parents state that feeding is 71-77% mixed, with a low consumption of sweets, the usage of a fluorized toothpaste and the attendance of the dentistry offices in cases of emergencies in half of the cases.

The present study discovered the deficit of information/education of the children in the age group 7-11 and of their parents as regards the fundamental aspects of oral health, the importance of maintaining this segment of the state of health, as well as the training of the teaching staff in the primary schools to accomplish this information/education within his/her class, respectively with

the parents of the pupils in the class. The results achieved will assess the opportunity and possibility of extending the promotion program of the oral health in other schools in Bihor county.

As a consequence of synthesizing the data during the period under study, the accomplishment of some programs focused on the amelioration of the oral health, morbidity through dental affections, of some concrete regional or national actions and programs of preventing the oral-dental affections are necessary.

REFERENCES

1. Beers M.H. et al. - Craniofacial abnormalities. Merck Manual of Diagnosis and Therapy, 18th ed., pp. 2422–2424. Whitehouse Station, NJ: Merck Research Laboratories, 2006.
2. Behrman R.E., Kliegman R., Jenson H.B. – Nelson Textbook of Pediatrics. 16th Ed. Philadelphia: Saunders, 2000; 2062-2064.
3. Borzan C., Floarea Mocean - Sănătate Publică, Editura Medicală Universitară “Iuliu Hațieganu”, Cluj Napoca, 2002: 16-18, 38-43, 121-137, 191-250.
4. Bonchiș E. - Copilul și copilăria - o abordare psiho - pedagogică, Oradea, Editura Imprimeriei de Vest, 1998.
5. Bratu E., Schiller E., - Practică pedodontică, ediția a – II - a , Timișoara, Editura HELICON Banat, 1998.
6. Căpâlna G. - Igiena buco - dentară a școlarului. Program de promovare a sănătății orale în școlile generale, București, Editura medicală, 1996.
7. Ciobanu V., Ancușă M. - Probleme de sănătate publică, Editura Mirton, Timișoara, 1998: 42-78.
8. Enăchescu D., Vlădescu C., Tesliuc C. - Health and Health Services in Romania. Projects, Realities, and Dilemmas. Jurnal de Medicina Preventiva, 2004, 4, 4, 5-15.
9. Georgescu Gabriela, Cristina Dascălu - Informatică Medicală și Biostatistică – Ed. Stef, Iași, 2003.
10. Ghassibe M., Bayet B., Revencu N., et al. - Orofacial clefting: update on the role of genetics. B-ENT. 2006 ; 2 Suppl 4:20-4.
11. Ilie C., Diaconescu G., Hrubaru N. - Un nou concept privind patologia malformativă a capului și gâtului, la dispoziția medicinei prenatale, Rev Neonatologia, vol I, nr.3, 2002: 13-15.
12. Marcu Aurelia și colab. - Metode utilizate în monitorizarea stării de sănătate publică, Institutul de Sănătate Publică, București, 2002, 108-133, 156-187.
13. Ronald S. – The development of the infant young child, Ed. Chuschild Livingstone London, 1985.
14. Rotariu T., Iluș P. - Ancheta sociologică și sondajul de opinie. Teorie și practică ,Iași, Editura Polirom, 1997.
15. Severineanu V. - Odontologie și parodontologie, București, Editura Didactică și Pedagogică, 1977.