



AWARENESS OF DENTISTS ABOUT ORAL HEALTH OF CHILDREN WITH DISABILITIES

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ABSTRACT

Introduction: Children with disabilities are a unique group with impaired ability to cater for their own oral health and are in greater need of procedures for the prevention of oral diseases, due to the higher risk of their occurrence than in their non-disabled peers. Treating such children is difficult, it requires specific conditions and is time-consuming.

Objective: The aim of our study was to evaluate the competence of dentists concerning the oral health and the specific treatment in children with disabilities.

Material and methods: The study included 150 randomly selected dentists from the Sofia region of Bulgarian Dental Association. Their knowledge was assessed via anonymous questionnaire consisting of 18 items.

Results: The results of the questionnaire revealed low level of competence on matters of children with disabilities, their special features and behavioral problems. These results raise the need of undertaking of emergency measures in creating step-by-step instruction programs aimed at all practicing dental medicine who have not undergone special training during their education.

Key words: children with disabilities, dentists, oral health, prophylaxis, dental treatment.

INTRODUCTION

Dental medicine specialists should emphasize on the preventive care, especially in children with disabilities. Oral health is important part of community health and needs special evaluation. Frequently dental care is underestimated in children with disabilities because of the lack of education, training or dental office equipment [1].

AIM:

The aim of our study was to evaluate the competence of dental medicine specialists concerning the dental health in children with disabilities and the dental treatment in this population of children.

MATERIALS AND METHODS:

150 randomly selected dentists from the city of Sofia were evaluated using anonymous 18-items questionnaire.

RESULTS

The knowledge of dentists concerning the oral health in children with special needs was evaluated using anonymous questionnaire consisting of 18 items. Figure 1 shows the distribution of the study subjects according to their length of service.

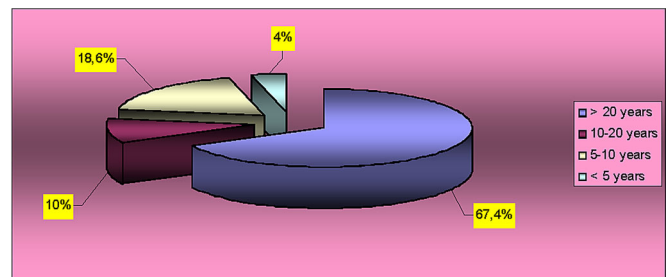


Fig. 1. Distribution of the study participants according to their length of service

This randomly selected population of dentists consists mainly of specialists with long years of professional experience – 67.4% have been working for > 20 years. This sub-group have graduated in a period of time when the dental problems in children with disabilities were not part of the university education. This raises the serious problem of ensuring dental care in children with special needs. Likewise, the practitioners with 10-20 (10%) and 5-10 years of professional experience have not received such education during the course of dental medicine university studies. Incomplete education have undergone the dentists with < 5 years of practice (4%). The age of the participants corresponds with their professional experience. The majority of the subjects are 35-44 years old (48%), 33.3% are aged 25-34 years and > 44 years are 18.7%. A total of 62.7% have the specialty of General dental medicine, 12% have Prosthetic stomatology and only 3.3% have Pediatric dental medicine. A total of 22% have no specialty.

Figure 2 shows the results of the questionnaires concerning the knowledge of dentists on dental medicine in children with disabilities.

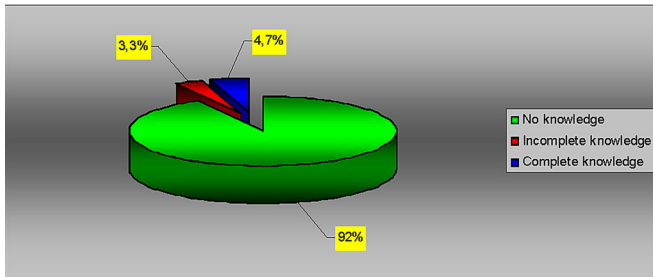


Fig. 2. Knowledge of dentists on dental medicine in children with disabilities

The majority of dentists have no knowledge on dental medicine in children with disabilities. Only 4.7% have knowledge on children with disabilities and 3.3% point out that their knowledge is insufficient. The majority of dentists (84%) have no information of the specific characteristics of these children. Only 16% (who have graduated within the past 10 years) have some information in this field. Internet (60.7%) and the mass media (39.3%) are the main sources of information on this topic.

Figure 3 shows the opinion of the studied group on where the information on the dental health of children with special needs should be taken from.

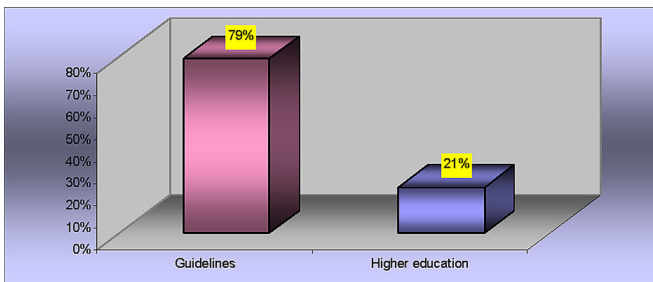


Fig. 3. Preferred sources of information concerning the dental health

Only 21% suggest that the information should be received during the higher education and 79% prefer the specialized guidelines in the field.

The participation of the subjects in the dental care for children with disabilities is shown on Figure 4.

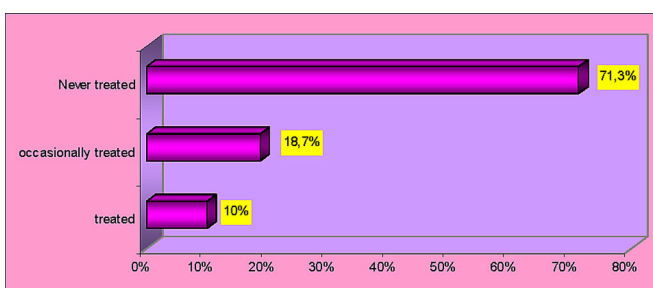


Fig. 4. Dental care for children with disabilities

The results of our study show that only 10% of the dental specialists have ever had patients with special needs and only 18.7% have ever given dental help to such patients.

A total of 71.3% have never worked with special needs children. The most frequently treated dental pediatric dental patients with disabilities had: mental retardation, followed by children with impaired hearing and/or sight. The participants rarely have treated children with autism and/or physical disabilities.

Figure 5 shows the most frequent procedures in children with special needs.

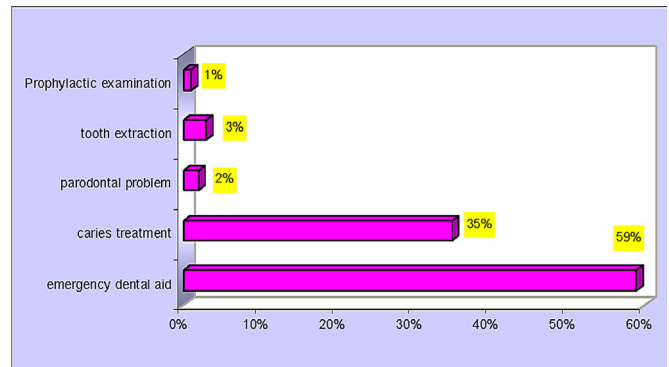


Fig. 5. Most frequent procedures in children with disabilities

According to the answers of the studied dentists, the most frequently performed procedures were: “emergency dental aid” (58%), followed by caries treatment (27%), periodontal problems (9%) and tooth extraction (5%). Prophylactic examinations were rare (1%). This clearly shows that children with disabilities seek dental health only in the presence of complications with pain and rarely visit the dentist for prevention.

The most frequently stated difficulties in the work with special needs children are: negative attitude and behavior (89%), autoaggression (7%) and aggressive behavior against the dentist and the dental team (4%).

The most frequent reactions of the children with disabilities were: unusual fear (22%), followed by severe anxiety (18%) for the upcoming treatment and refusal to be examined and treated (8%).

Local anaesthesia was needed in 47% of the cases, tranquilizers for premedication were used in 11%, 30% of the children with special needs required general anaesthesia and 12% needed neuroleptanalgesia. Children with autism and/or mental retardation showed marked sensitivity to light (19%) and touching on the face and mouth (81%).

DISCUSSION

Children with disabilities have poor dental health and this represents a serious medical problem that could lead to severe deterioration of the general health, quality of life and life expectancy [2]. Oral problems could trigger systemic diseases and conditions and lead to severe affection of other parts of the body, requiring expensive emergency measures, hospital treatment and medication. The consequences of poor oral health go beyond the medical effects. The untreated oral problems could increase the medical expenses of the community as a whole [2]. The dental help is the most

frequently found unfulfilled medical need in children. The children of low socio-economic status and minority origin or with disabilities are in greater risk of oral health problems, with poorer chance of dental help and have poorer access to dental aid [3]. The dentists have moral responsibility for the society and the parents. The academic dental centers have special responsibility for the children's dental needs [2, 3]. The measures for improvement of oral health in young children should include improvement of the community education in oral health, early start and dynamic follow-up of oral health evaluation and primary prevention [4].

The Academy of children's stomatology recommends increasing of the awareness of dentists and dynamic dialogue between the professional organizations and practicing dentists in relation to the future steps in this field [5].

The results of our study show that the practicing dentists are not prepared to work with children with disabilities. Due to the lack of adequate professional information these children are not managed well. Our data reveals that the majority of children with special needs do not seek dental help and the procedures performed are quite limited. The apparent reason for this is the difficulties in the care of these children that lead to reluctance among dentists. Yet, the pain in cases of emergency makes the children with special needs and their parents makes them seek dental aid. No activities are undertaken in the field of dental prevention and this negligence leads to further deterioration of dental problems.

Our results comply with the conclusions of Oredugba (2006) showing that only a few dentists are familiar with the dental treatment of children with disabilities, independent of

the age, gender and location of the dental practice. Although the majority of the studied dentists define the behavior of these children as "problematic", the specialists clearly state their willingness to treat such children [6].

Another study, performed by Pomarico in 2006, evaluates the knowledge and attitude of a small group of 67 specialists (teachers, service personnel and healthcare professionals) caring for children with disabilities [7]. The author reports unsatisfactory results and concludes that the attitude towards oral health shows no correlation with the specialists' knowledge [7].

The results of our study clearly suggests the need for change in the attitude of dental specialists towards children with disabilities and the need for improvement of their professional qualification.

CONCLUSION

The inadequate information concerning the dental health in children with disabilities, their special characteristics and behavioral problems requires the development of guidelines for therapeutic approach in such patients because many dentists have not received such training during their higher education. On the other hand, dental faculties should introduce such education and further develop the existing programs in relation to the treatment and prevention in such children. This approach could improve the oral pathology in this group and could improve the quality of life of children with disabilities. Practical studies are also needed in order to show the dental medicine students the actual problems of children with special needs and the existing preventive, diagnostic and therapeutic approaches.

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