

## **Determination of Dentists' Views on Children's Mouth and Dental Health**

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### **Abstract**

There is limited research on the causes of dental diseases in children. However, there is no interdisciplinary work at the regional level. A limited number of studies have all been conducted in the medical field. For this reason, it is important to determine the causes of dental diseases in children through dentists working at the provincial level, and the reasons are regionally and specifically at interdisciplinary level; Intervention programs regarding disease markers, management and intervention strategies, and preventive strategies should be established. Thanks to such activities to be carried out on health protection, it will facilitate the achievement of the goal of a healthy and well-being society. At the point of interdisciplinary studies, it is also thought that determining and interpreting the causes of dental diseases of children by integrating them with the field of child development will be a pioneer for future research. In this study it was aimed to examine the views of dentists, who work in Kırşehir center for mouth and dental health, about children's mouth and dental health. The study group was determined using one of the purposeful sampling methods; the criterion sampling. The study was carried out with 10 dentists working in the oral and dental health center in Kırşehir. The interview technique, which is one of the qualitative research methods, was used. The interview form developed by the researchers was employed in the study. The

form consisted of questions to determine the dentists' view about the reasons of impairment in mouth and dental health of the children who live where the dentists work. After the data collection process was completed, the doctors were coded as DH1, DH2, DH3...and so on. The dentists' responds to each of the questions were grouped according to their similarity, they were commented and some quotations were given from the striking responds. Descriptive analysis was used for the evaluation of the data. It is believed that the findings obtained from the study can be used as a source for interdisciplinary studies about the protection of children's mouth and dental health.

**Keywords:** tooth decay, disease, doctor, pediatrics, public health

## 1. Introduction

The growth and development of children physically and mentally is of great importance for the future of societies. For healthy growth and development, starting from fertilization, children's health and development should be monitored, their needs should be met, and they should be protected from many factors that cause diseases. Otherwise, diseases may occur as a result of abnormal changes in tissues and cells (Acar, 2017). The first symptoms of some diseases can be understood with oral and dental diseases. Disease in the oral cavity and teeth, which are a part of the body, negatively affects the child's health, development and quality of life. Therefore, it is an issue that should be emphasized in the health and development of the child (Akyıldız, 1999). Banu et al. (2018) emphasized that oral health cannot be separated from general health. Also, in the study conducted by Nemati et al. (2016), it was found that the oral and dental health of children significantly affect both children's and their parents' quality of life.

Dental caries, periodontal diseases and other oral diseases, if left untreated, can cause pain, infection and loss of function. These undesirable results negatively affect learning, communication, nutrition and other activities required for normal growth and development (American Academy of Pediatric Dentistry AAPD, 2011). It is necessary to carry out studies on the control and treatment of dental diseases with a holistic approach, in addition to curative services, dental education, administration and implementation of dental care programs for

groups, protective and preventive services should also be emphasized (Asnani, 2010; Büyük et al., 2018). The dentistry profession and other professionals dealing with child health should work to ensure that all children, regardless of their socioeconomic status, have access to essential dental care (Casamassimo, 2013). It is important to implement early preventive practices in oral and dental health, and the country-wide initiatives should be implemented immediately to reduce the risk of caries in children (Karabekiroğlu and Ünlü, 2017). In this sense, the causes of dental diseases in children should be determined with interdisciplinary studies at regional level. Since the examination of the causes of dental diseases at the regional level is a determination study, it will also facilitate training studies specific to that region.

In a limited number of regional studies, it was seen that the clinical evaluation results of children's oral and dental health (Kapdan et al., 2010, Öztürk and Sönmez, 2016; Pishkovtsi, Keretsman, and Palko, 2020; Kramer et al., 2016) were mentioned. In addition, studies in which oral and dental health information in children (Büyük et al., 2018), oral hygiene habits (Karaağaç and Küçükeşmen, 2018), and anxiety levels of children during dental treatment (Kırbaş and Özkan, 2014) was evaluated. There are also studies using data obtained from mothers for the dental health of children (Gharlipour et al., 2016; Khodadadi et al., 2016; Abduljalil and Abuaffan, 2016). In this sense, it is thought that it is necessary to approach the subject from a different angle and to examine the causes of dental diseases in depth with the perspective of dentists. Combining the subject with the field of child development and handling it with a holistic approach is thought to be a guide for interdisciplinary research and early intervention studies. Based on these thoughts, the study aimed to examine the views of dentists working in the oral and dental health center in Kırşehir about the oral and dental health of children.

## **2. Method**

The method section of the research includes topics such as research model, study group, data collection tools, data collection and data analysis.

### **Research Model**

Qualitative research, which provides data collection through interviews, documents and observations to explain a social phenomenon, was conducted to determine the views of dentists about the oral and dental health of children. Such researches are carried out with a systematic and subjective approach in order to examine, explain and give appropriate meaning to daily life experiences (Burns and Grove, 2009).

### **Study Group**

Purposeful sampling method was used in the selection of the study group of the study. (Başkale, 2016). Accordingly, all of the dentists (n = 10) working in the Oral and Dental Hospital in Kırşehir city center and dealing with children's dental health were included in the study.

### **Data Collection Tools**

Interviews were conducted to collect data within the scope of this research. In order to conduct the interviews, a "Semi-Structured Interview Form" was created by the researchers. In order to determine the dentists' views about the oral and dental health of children, the following questions are included in the Semi-Structured Interview Form, which helps to conduct a conversation around a topic in a standard way, provides an opportunity for the emergence of relevant results, and was created in line with expert opinions (O'keeffe et al., 2015); "What are the causes of dental diseases of children who applied to the hospital?", "What complaints do children come to the hospital with?" "What issues do mothers need to know so that their children do not have problems with their teeth?", "What should mothers pay attention to so that their children do not have problems with dental diseases?", and "What are the rules that families should follow in the dental treatment process of their children?"

### **Data Collection**

Ethics committee approval was obtained before collecting the data (Protocol number: 07/12, Date: 01.09.2020). Afterwards, the managers of the hospital were interviewed and information was given about the purpose of the study and the method of implementation. The dentists working in the hospital included in the study were also informed about the research and were included in the study on a voluntary basis. Data were collected by face-to-face interviews with dentists in a suitable room of the hospital.

### **Data Analysis**

The analysis of the data obtained from the research was carried out by the descriptive analysis method. Descriptive analysis to transform raw data into a format that facilitates understanding and interpretation; it is the process of rearranging, sorting, and processing data to create descriptive information (Zikmund et al., 2003). In this process, data were interpreted and striking results were presented, while direct quotations were included (Karataş, 2015). While giving quotations, dentists are coded as DH1 ..... ..DH10 within the framework of research ethics. While reporting the research results, an expert opinion was received to contribute to validity (Yıldırım and Şimşek, 2008).

## **3. Findings**

The data obtained from the research were analyzed and the results were presented with the support of direct quotations.

It was observed that dentists showed that feeding problems (8 DH) and not brushing the teeth regularly (7 DH) were the most common causes of dental diseases in children. When the other answers given were examined, it was stated that the effects of not performing dental care controls, deficiencies caused by preventive medicine practice, structural dental disorders and other defects were effective in dental disease. Dentists have expressed their opinions about the causes of dental diseases as follows: DH2; “Dental problems can occur because the treatment of milk teeth is not done on time. In addition, with preventive medicine practice, it is not possible for children to have regular dental checks. The number of dentists who will

have regular dental checks on children is not enough ", DH6; "Since children drink too acidic drinks and consume junk food, it causes deformation in the gums and tooth structure.", DH7; "There may be toothaches due to infectious diseases and cone inflammation" and DH9; "Due to the congenital jaw and mouth structure, problems with the tooth structure and the arrangement of the teeth can cause children to experience dental problems.

Dentists indicate that reasons such as tooth decay (7 DH), tooth breakage or loss (4 DH) and dental control (2 DH) are effective in admitting children to the hospital for teeth. In this regard, DH1 expresses; "Children experience pain and swelling due to dental caries. That's why they come to the hospital "and DH8 explains; "They applied to the hospital because the teeth were broken due to accident or fall ".

According to dentists, mothers should have information about healthy and regular nutrition (8 DH), oral and dental health practices (6 DH) and follow-up dental controls (3 DH) in order to prevent dental diseases in their children.

Regarding the subject, DH3 states that; "Mothers should have information about the nutrition of the child and follow what their children eat at school" and DH4 underlines that; "Mothers should have information about how to brush teeth for the protection of dental health, should know that their children should be examined by a dentist regularly, and they should be more selective about nutrition".

It is observed that dentists reported that mothers should follow their children's teeth brushing (6 DH), have regular dental check-ups for their children (3 DH), inform their children about dental hygiene and care (2 DH), and regulate their children's eating habits so that their children do not have problems with their teeth. In this regard, the dentists shared their views as such: DH1; "Regular dental check-ups are required every six months", DH6; "Raising the awareness of children for brushing teeth, should be a model when necessary" and DH10; "In order to ensure oral and dental hygiene, children should carefully choose the food they are fed".

Dentists mostly stated that during the dental treatment of their children, the teeth should be cleaned (6 DH) and tools and materials should not be touched (4 DH). When the

other responses were examined, it was stated by the dentists that parents should come to the appointment on time, there should be at most one person with the child during the treatment, the parents should not give false information to the child about the examination and the parents should inform the child in advance and comfort them. On this issue, dentists expressed their views as follows: DH2; “Children have to come to the examination without eating junk food. So when they arrive their teeth should be clean. They should come with their teeth brushed.”, DH6; “Parents should arrive on time for the appointment, and not give false information to the child about the examination. For example, they should not say that there will be no injection.”, DH9; “They should come early for their appointment. Children should not play with tools or materials ”

#### **4. Discussion**

In the study, the dentists’ responses about nutritional problems, tooth brushing, deficiencies in dental care controls, the need for preventive medicine practices, structural dental disorders and the effect of other diseases were included.

It is very important to know the factors that cause children to become ill in order to develop a strategy for the development of child health. Applying correct practices regarding care, monitoring disease symptoms, and timely access to health centers have an important place (Acar, 2017). This view is also valid for dental diseases.

Primordial protection, also used in dentistry; it is not specific to a particular disease, and covers precautions for many diseases and general life. By improving the society in terms of social, economic, cultural, knowledge and consciousness, it is aimed to reduce and eliminate the effects of the factors that play a role in diseases and to provide the easiest access of the patient to the physician. In primary prevention, the preparation and implementation of education plans and programs that inform the public about the causes of disease, spread and prevention methods are within the scope of this protection (Karabekiroğlu and Ünlü, 2017). At this point, cooperation with child developers who are health licensees is considered important for the protection and improvement of oral and dental health.

Dentists stated that children applied to hospitals with dental caries. Caries negatively affect the quality of life of children and are accepted as a symptom of future diseases (Sheiham,

2005; Hujoel and Lingström, 2017). Children experience pain, discomfort, deformity, acute and chronic infections, eating and sleeping disorders, and higher risk of hospitalization, treatment costs and consequently decrease in learning abilities due to dental caries, and loss of school days. Dental caries also affect nutrition, growth, and weight gain. Toothache and infection; it has been emphasized that three-year-old children with caries are approximately one kilogram lighter than children with healthy teeth, as it alters eating and sleeping habits, nutritional intake and metabolic processes (Sheiham, 2005). Dentists' emphasis on tooth fractures brings to mind childhood accidents. It is known that traumas cause tooth fractures besides many dangers (Çömez et al., 2018). Prevention of home accidents in children is thought to be an issue that needs to be studied. Besides, it has been stated by dentists that the rate of children coming to the hospital for dental control is very low. In the research of Karabekiroğlu and Ünlü (2017); it was stressed that there was no system of protecting the oral health services in Turkey, it was also stated that a service, which structured in line with the patients' wishes, consisted.

It is observed that dentists emphasize healthy and regular nutrition so that children do not have problems related to dental diseases. Moynihan and Petersen (2004), in their research examining the relationship between nutrition, diet and dental diseases, emphasized that nutrition affects teeth during development and eating habits increase tooth decay, enamel and tooth erosion. There is also a relationship between sugar consumption and the amount and frequency of dental caries (Moynihan and Petersen, 2004; Hujoel and Lingström, 2017). The promotion of healthy eating practices is an important component of caries management, along with the use of fluoride and oral hygiene practices. Dental health professionals serve their patients and the public by providing comprehensive oral health care and promoting nutritional behaviors to improve oral and overall health during treatment (Mobley, 2003). It can be thought that the emphasis of physicians on healthy nutrition is related to the deficiencies in protective / preventive health practices. At this point, it is noteworthy that doctors expect mothers to be informed about oral and dental care practices and the importance of follow-up dental controls.

The importance given to health should begin before getting sick and should last a lifetime (Akyıldız, 1999). It is thought that families have an important effect on the protection of



children's dental health and that conscious families take their children to dentists. In the study conducted by Abduljalil and Abuaffan, (2016), it was found that mothers who have higher education have more knowledge and good practices about dental health. The study conducted by Khodadadi et al. (2016) also supports this view and it was found that children of parents with insufficient oral health literacy have more caries. In the same study, it was found that dental fillings were high in families living in urban areas and in children of parents with sufficient oral health literacy. For this reason, in-depth investigation of the information that mothers need to know from the perspective of doctors is considered important for family education studies and early interventions.

Dentists reported that mothers should follow their children's teeth brushing and children's dental checks should be done regularly. Many dental problems start from childhood. In this respect, the attitudes and behaviors of mothers about oral and dental health are important. In the study conducted by Gharlipour et al. (2016), a positive and significant relationship was found between the mother's oral-dental health behavior and children's behaviors on this issue. In the study conducted by Darwita et al. (2016); it was found that the training given to mothers during the education improved the mother's brushing behavior of her child, thus reducing the dental plaque index and improving the oral hygiene of the children. Abduljalil and Abuaffan (2016) also found that mothers' knowledge about the dental health of preschool children is relatively good, but this knowledge they have is not fully reflected in practices.

Some dentists stated that children should be educated about dental cleaning and care. In the research conducted by Darwita et al. (2017); After 21 days of training given to children between the ages of 5-8, it was determined that with the acquisition of tooth-brushing behavior, the dental plaque scores of all children aged 5-8 years were decreased and the scores of knowledge, attitude and behavior related to dental health increased.

The importance of interactions between the dentist and the parents or caregiver is also emphasized. The developmental characteristics of children differ from each other, the ages at which certain abilities develop vary. In order to provide quality healthcare to children, it is necessary to have some basic knowledge about child development and a dentist should work with a child in accordance with the developmental characteristics of the child. Children's

behavior in the dental hospital environment can vary. For example; under the age of two, the child has little understanding of dental procedures, and although effective communication may not be established, oral examination and some treatments can be performed without sedation. Therefore, child development should be known (Widmer et al., 2008). In the study conducted by Yuan et al. (2019), it was found that while interacting with children during preventive dentistry appointments, dentists show different communication styles within themselves, and they use communication patterns that differ with dental health nurses. In the same study, it was found that while doctors use more direct communication patterns, nurses use communication behaviors to maintain a balanced relationship with children. On the other hand, Şener and Özer (2018) emphasized the importance of lowering the age of children's meeting with dentists. At this point, it is once again prominent that professionals working with children should have knowledge about child development and communication with children, cooperate with child development specialists, and child development specialists should also work in dental hospitals.

## **5. Result and Suggestions**

The following can be suggested in line with the findings obtained from the study conducted to examine the views of dentists working in the oral and dental health center about children's oral and dental health.

- Regular and continuous training can be provided by child developers and dentists to mothers residing in Kırşehir within the scope of early intervention studies on healthy nutrition, oral and dental health at regional level.
- More research can be planned in which the oral and dental health of children is integrated with the field of child development.
- Employment of child developers with a health license can be provided in the child services of oral and dental health centers.
- Cooperation can be made with child developers who are competent in hospital preparatory education in all of the work to be done with children and families.

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