

**Research Article,**

## **Evaluating Knowledge and Approach of Medical Practitioners towards Pediatric Dentistry in Hafar Al Batin**

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### **Abstract:**

#### **Aim:**

To raise awareness, regarding the scope of practice in Pediatric Dentistry, among medical practitioners working in the Pediatrics Department.

#### **Material and Methods:**

Members of the Office of Director of Dentistry in Hafar Al Batin visited all the hospitals and conducted a paper-based survey. Pediatricians and resident doctors working in the pediatric department were asked to fill a questionnaire. The questionnaire elicited information regarding personal details, knowledge, approach and awareness towards pediatric oral health. A total of 122 responses were collected, and their results analyzed.

#### **Results:**

A total of 122 responses were collected of which 62 were pediatricians and 60 were physicians. The average age was 41 years. Most Pediatricians knew about Pediatric dentistry as a separate specialty in dentistry whereas most physicians were unaware of it. The scope of practice of pediatric dentists, especially in handling patients with special needs were not known to many of them. The overall response was unsatisfactory.

#### **Conclusion:**

Most of the consultants and specialists Pediatricians were aware of Pediatric Dentistry as a distinct specialty. The survey found out that a significant number of doctors were oblivious of the scope of practice, especially in the management of patients with special needs, under general anesthesia. A dedicated CME program was conducted to spread awareness among the concerned doctors, and suggestions made to improve the services.

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### **Introduction:**

The Director of Dentistry in the Ministry of Health, are consistently focused on improving the dental services in Hafar Al Batin. Various steps were taken to develop and improve the services. It

includes providing dental treatments to patients with special needs, under general anesthesia. Since it's a new addition to the services being provided by the Department of Pediatric Dentistry, a survey based research was planned to evaluate the

knowledge of Pediatrician and physicians regarding Pediatric dentistry.

Parents are less concerned about the oral health and dental issues of children, thus the importance of routine visits for dental checkups is often disregarded. Parents do visit Pediatricians several times during the child's early life. So, Pediatricians are considered to be the most reliable source for oral health evaluation and referrals to Pediatric Dentists. A closer liaison between Pediatricians and Pediatric Dentist can enhance the quality of services provided to pediatric patients and patients with special needs.

#### Material and Methods:

A list of Pediatricians and Physicians working in this field was obtained through various government and private hospitals under the Directorate of Hafr Al Batin. A comprehensive questionnaire was prepared based on studies done by Yahya and Solmaz, Rangeeth Bollam Nammalwar et al, Giuseppe et al(6,2,7). A paper-based survey was conducted by members of the office of the Director of Dentistry in Hafr Al Batin. A total of 122 responses were received.

The questionnaire was divided into the following four sections;

1. Individual details including Name, age, sex, medical background
2. The approach of the practitioner towards pediatric dentistry and factors affecting it.
3. Their knowledge about the age at which Pediatric oral healthcare should begin, maternal considerations, preventive methods, and various common treatment methods. Importance regarding identification of early childhood caries (ECC) has been included in this part of the questionnaire along with the cariogenic potential of medicated syrups.
4. Previous training on oral health received by the practitioners was recorded and their willingness to receive training if given a chance.

#### Results:

A total of 122 responses were collected of which 62 were Pediatricians and 60 were Physicians. The average age was 41 years.

**Table 1: Questions evaluating the approach towards Pediatric dentistry**

Questions	Response (Yes)	Response (No)
Do you know there is an exclusive specialty of dentistry called as pediatric dentistry?	110 (90.16%)	12 (9.8%)
Do you know that we have four specialist pediatric dentists in our specialized dental center?	5 (4.10%)	117 (95.90%)
Do you know the importance of primary teeth?	70 (57.37%)	52 (42.63%)
Do you know how to examine primary teeth?	30 (24.5%)	92 (75.4%)
Do you know Importance of referral to specialist pediatric dentist in cases of early childhood caries and special care needs pediatric dental patients?	28 (22.95%)	94 (77.04%)
Do the Parents not prefer referral?	84 (68.85%)	38 (31.1%)

**Table2: Pediatric dental patient who comes with acute condition**

Question	Pediatric Dentist	On call Maxillofacial surgeon	General Dentist	Do not Refer
When a pediatric dental patient comes with acute condition who do you refer or call?	10 (8.19%)	52 (42.62%)	34 (27.86%)	26 (21.31%)

**Table 3: Questions evaluating the knowledge regarding the oral health issues and their management**

Questions	Response (Yes)	Response (No)
Do the parents feel primary teeth are not important?	28 (22.95%)	94 (77.04%)
Do you know what should be the age for first dental visit?	10 (8.19%)	112 (91.80%)
Do you know about preventive care with regard to dental caries?	22(18.03%)	100 (81.96%)
Do you have knowledge about Early Childhood Caries?	26 (21.32%)	96 (78.68%)
Do you know that it is important to teach the parents regarding cleaning teeth and oral cavity right from breast feeding or bottle feeding age?	122 (100%)	0 (0%)
Do you know the age of early intervention to orthodontics in case of malposed teeth?	0 (0%)	122 (100%)
Do you know about the management protocol of cleft lip cleft palate patients?	92 (75.40%)	30(24.59%)
Do you know about the impact of Systemic Diseases on oral health?	112 (91.8%)	10 (8.19%)
Do you know that most of the medicated syrups are Cariogenic so it's important to clean the oral cavity after consumption of syrups?	62 (50.81%)	60 (49.81%)
Do you know that Pediatric Dentists are trained to handle deferentially abled or special needs children?	27 (22.13%)	95 (77.86%)

**Table 4: Question regarding training in Oral Health**

Question	Response (Yes)	Response (No)
Have you attended any training in pediatric oral health management?	55 (45.08%)	67 (54.91%)
Do you wish to attend if given a chance?	118 (96.72%)	4 (3.27%)

## **Discussion:**

Management of Dental problems of patients with special needs, and uncooperative children under general anesthesia, under the Department of Pediatric Dentistry is one among many steps embarked upon by the office of Director of Dentistry in Hafar Al Batin to improve services.

Pediatricians are the mainstay when it comes to screening patients. Parents usually don't pay the required attention to the oral health of the child, but in contrast, they visit the pediatrician more often. So the role of Pediatricians in screening the oral health of the children and prompt referral to Pediatric Dentists can help in improving the overall oral health issues in children.

This survey was planned to raise awareness among Pediatricians and Physicians working in pediatric hospitals, regarding the availability of Pediatric Dentistry Department in their area. It evaluates the knowledge and understanding of these doctors regarding the scope of practice of Pediatric Dentistry. This will facilitate successful functioning of our new project for the management of Dental problems of patients with special needs and uncooperative children under general anesthesia.

Table (1) shows that most of the doctors 90.16% knew about Pediatric Dentistry as a separate specialty in Dentistry, whereas other studies showed a lesser percentage (1,2,6,7). It also shows that most of the parents 68.8% posed barriers in referral for the dental problems. They instead insisted on pain management from the Pediatrician. In table (2) when asked about the referral most 42.62% of the doctors refer the children with acute dental problems to on call Maxillofacial Surgeons. 27.86% refers to General Dentists whereas 21.31% preferred just pain management and discharge rather than a proper referral. Only 8.19% referred to Pediatric Dentists. This finding was an eye-opener for the Director of Dentistry office as it leads to delays in the management of most of the dental problems. Thus a simple dental caries which could have been restored becomes non-salvageable by the time it reaches a Pediatric Dentist.

In table (3) all the doctors agreed upon the importance of breastfeeding. During breastfeeding, the infants' oral muscles are exercised strenuously in suckling, an important influence on the thrust and growth of the mandible, in addition to imparting maternal immunological components. These healthy practices should be promoted by Physicians. Our study also revealed that most

parents 77.04% feel that primary teeth are not important. Most of the doctors did not know the age for the first dental visit (only 8.19% knew), early childhood caries ECC (only 21% knew) (8). Most of the doctors 75.40% knew the management protocol of Cleft Lip and Cleft Palate (12). Most of them 91.8% acknowledged the impact of systemic diseases on oral health (10). Only few doctors 18.03% knew about preventive methods like fluoride application for dental caries. 50% recognized cariogenic properties of most of the syrups with artificial sweeteners added for the acceptable taste of child. They also recognized the importance of cleaning the oral cavity after giving the syrups. Only 22.13% of doctors knew that pediatricians are trained in handling the dental problems in patients with special needs.

Table (4) show that 45% doctors had some sort of training during their graduation or post-graduation or through CME programs regarding pediatric oral health. Whereas 96.72% showed willingness to learn about oral health management, given a chance.

Depending on the findings of the survey the Office of Director of Dentistry in Hafar Al Batin decided to conduct a CME program for awareness regarding Pediatric Dentistry and its scope of practice among these doctors. The outcome of this program was satisfactory and it was instrumental in elevating the level of services provided.

## **Conclusion:**

Most of the consultants and specialists Pediatricians were aware of Pediatric Dentistry as a separate specialty. They were not well informed about the scope of practice, especially in the management of patients with special needs under general anesthesia. A dedicated CME program conducted by Office of Director of Dentistry in Hafar Al Batin was very helpful in spreading awareness among the concerned doctors.

Further improvements can be made by providing regular training to the health practitioners to identify oral health issues among children at an early stage.

Medical schools can include a training program in their curriculum for Pediatricians and family physicians to recognize the oral health issues among children.

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