

# Knowledge Attitude and Practice of General Dentist towards Pediatric Dentistry

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## ABSTRACT

**Introduction and Aim:** Every general dental practitioner is expected to diagnose and treat dental diseases of pediatric patients effectively with the acquired knowledge and skills during their professional education. Among all the services that are being performed by a Dental surgeon, Pediatric dentistry is considered to be the most neglected yet an important area to be considered. So, the aim of the present study is to assess the knowledge, attitude, and practice of general dentist towards pediatric dentistry.

**Material and Methods:** 452 general Dentist, both practitioners and academicians in Chennai and Coimbatore, were included in the questionnaire survey. The questions were based on the knowledge, attitude, and practice of pediatric dentistry among general dentist.

**Results:** Among the 452 dentists, 373 dentists (82.5%) feel that they are trained to treat children between the age group of 3-12 years, 161 dentists (35.8%) have a clinical practice set up with play area, pictures, and toys.

**Conclusion:** This study showed that a greater percentage of the general dental surgeons are not prepared to treat child patients, and they find it difficult to treat very young children.

**Key Words:** General dentist, Pediatric dentistry, Treating children.

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## INTRODUCTION

Dentistry is defined as the evaluation, diagnosis, prevention and/or treatment (nonsurgical, surgical or related procedures) of diseases, disorders and/or conditions of the oral cavity, maxillofacial area and/or the adjacent and associated structures and their impact on the human body; provided by a dentist, within the scope of his/her education, training and experience, in accordance with the ethics of the profession and applicable law. (As adopted by the 1997 ADA House of Delegates) (1). Children whose dental health care needs were unmet, are the ones who are more likely to experience physical development problems (2,3) a missing of school days, and having a restricted activity (4-6) and the ability to learn may shrink (7-10). It is the responsibility of the practitioner to make sure that every child receives the proper oral health care services that they need and also to ensure that they have good general health and a positive quality of life and can live up to their academic potential.

In Pediatric Dentistry, it is really important to consider the feelings of the child, which helps to gain confidence in the child, and in turn, receive a better co-operation from the child and perform the desired treatment. Pediatric dentist (PD) also plays a major role in contributing child's dental health in the future by modifying the attitude of the child and encourage the child for his behavior regarding dental care (11).

Dental surgeons may simply be reluctant to see children so young because they perceive them to be difficult to examine. Further, they may not know what to do if, during the examination, it is discovered that the child will require further treatment (12). Every general dental practitioners are expected to diagnose and treat dental diseases of pediatric patients effectively with the acquired knowledge and skills during their professional education. Modifying any child's behavior can be helpful in providing a safe and effective treatment that is required (13). Among all the services that are being performed by a Dental surgeon, Pediatric dentistry is considered to be the

most neglected an important area yet to be considered (14). So, the aim of this study was to assess the knowledge, attitude, and practice of general dentist towards pediatric dentistry.

## MATERIALS AND METHODS

The study protocol was approved and received ethical approval (STP/SDMDS15PED2d) from an institutional review board of Saveetha Dental College.

A questionnaire in English was framed and given to 20 dental academic practitioners within the institution. Face validation and content validation were done. The questionnaire was then modified based on the responses. The questionnaire was then finalized with 16 close-ended questions. This survey was undertaken among the general dentists both in Chennai and Coimbatore district, Tamil Nadu. The study was conducted March 2016 to May 2016. The questionnaires were personally handed over to 452 general Dentist both practitioners and academicians in both the districts by a postgraduate student from Saveetha Dental College and collected within a day or after a day. The questionnaire comprised a series of questions pertaining demographic details and years of practice; knowledge regarding treating pediatric patients; the attitude of the practitioner towards the managing pediatric patients; and practicing pediatric dentistry. The framed questions were obtained from the study done by Rich JP 201615.

The data was entered and analyzed for frequency and percentages by using Statistical Package for the Social Sciences (SPSS) version 19.0. Simple descriptive statistics were done using Chi-square ( $\chi^2$ ) test. The chosen level of significance was set at  $P < 0.05$ . Unanswered questions were treated as missing values.

## RESULTS

The demographic details are described in table 1. Out of 452 dentists, 230 were postgraduate practitioners, and 222 were undergraduate practitioners. 180 and 272 dentists were from Coimbatore and Chennai district respectively. Of the 452 questionnaires that was sent, the response was at a rate of 100%.

The series of questions based on knowledge regarding treating pediatric patients were 373 dentists (82.5%) feel that they are trained to treat children between the age group of 3-12 years. 291 dentists

(64.4%) think children cannot tolerate treatment in a general dental office while 161 dentists (35.6%) think children can tolerate treatment in a general dental office. 161 dentists (35.8%) have a clinical practice set up with play area, pictures and toys whereas 290 dentists (64.2%) of them don't have a play area for children. 336 dentists (74.3%) sure that their clinical staff is not comfortable treating children and only 116 dentists (25.7%) think that their clinical staff is comfortable in treating children. 213 dentists (47.1%) think that their clinical staffs are knowledgeable in treating children and 239 dentists (52.9%) are sure that their clinical staffs are not knowledgeable in treating children. 218 dentists (48.2%) like treating children <6 years and 374 dentists (82.7%) like to treat children >6years.

Among general dentist who practices pediatric dentistry, 13 dentists (2.9%) use fluoride, 124 dentists (27.4%) gives oral hygiene instruction, 133 dentists (29.4%) administer pit and fissure sealants, and 182 dentists (40.3%) use all the above mentioned as a part of preventive dentistry. 357 dentists (79%) use communication, 25 dentists (5.5%) use oral sedation, 13 dentists (2.9%) use physical restraints and 57 dentists (12.6%) use all the above behavior management techniques. 49 dentists (10.8%) use amalgam, 37 dentists (8.2%) use composite resin restoration, 342 dentists (75.7%) glass ionomer cement, 24 dentists (5.3%) uses\ all the above for restoration of primary teeth. Only 126 dentists (27.9%) use rubber dam while 326 dentists (72.1%) do not use a rubber dam. 309 dentists (68.4%) use local anesthesia for dental treatment in children while 143 dentists (31.6%) do not use. 279 dentists (61.7%) perform extraction for most of the pediatric patients over pulp therapy, which was carried out in private practice by 135 dentists (29.9%). 166 dentists (36.7%) do pulpectomy, pulpotomy, indirect pulp capping in clinical practice.

The questions based on the attitude of the practitioner towards pediatric dentistry include, 287 dentists (63.5%) think treating children are financially inadequate while 165 dentists (36.5%) think treating children is financially adequate. 353 dentists (78.1%) think treating children are time-consuming where 99 dentists (21.9%) think it is not time-consuming.

## DISCUSSION

The study was carried out to assess the knowledge of the dentist about treating child patients, closed-ended questionnaire was considered more effective. 452 general dentists were included in the study.

373 dentists (82.5%) feel that they are trained to treat children between the age group of 3-12 years. Seale and Casamassimo, 2003 reported that more than 90% of dental surgeons provide treatment for children younger than 4 years of age<sup>16</sup> while Rich *et al.*, 2006 reported that only 33.4% of general dentists indicated that their clinical experiences during dental school had prepared them well to treat children under the age of 6 years (15).

357 dentists (79%) use communication as the behavior management techniques while treating children which was similar to a study reported by McKnight-Hanes C, 1993 where 213(93%) dental surgeons stated that the most popular technique for managing children was tell-show-do (17).

In the present study, 116 dentists (25.7%) and 213 dentists (47.1%) think that their clinical staff are comfortable and knowledgeable in treating children which was reported by Rich *et al.*, 2006 that dentists with more positive educational experiences in pediatric dentistry were more likely to report that their staff was comfortable and knowledgeable about treating children (15).

In the present study, 279 dentists (61.7%) perform extraction for most of the pediatric patients over pulp therapy. Hussain *et al.* reported 40% of dentists perform extraction in primary teeth (18).

In the present study, 287 dentists (63.5%) think treating children is financially inadequate. Rich *et al.*, 2006 stated that financial compensation for treating children was judged as more inadequate by dentists who felt less well prepared by their dental school programs than by those respondents who felt better prepared (15).

## CONCLUSION

This study showed that a greater percentage of the general dental surgeons are not prepared to treat child patients, and they find it difficult to treat very

**Table 1: Demographic details**

| Characteristics                | Respondents | Percentage |
|--------------------------------|-------------|------------|
| Total No. of respondents – 452 |             |            |
| <b>Gender</b>                  |             |            |
| Male                           | 311         | 68.8%      |
| Female                         | 141         | 31.2%      |
| <b>Degree</b>                  |             |            |
| Post Graduate practitioners    | 230         | 51%        |
| Undergraduate practitioners    | 222         | 49%        |
| <b>Years of Experience</b>     |             |            |
| Post Graduate practitioners    |             |            |
| < 3 years                      | 90          | 39%        |
| 3-6 years                      | 140         | 61%        |
| Undergraduate practitioners    |             |            |
| < 3 years                      | 62          | 28%        |
| 3-6 years                      | 160         | 72%        |

young children. All the dental professionals must be aware of treating child patients to meet children's needs. The dental curriculum should include guidelines and techniques to train the upcoming dentists for excellent practice in pediatric dentistry.

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