

Original Research Article

Assessing the Pediatric Dental Anxiety Status in Children – A Questionnaire Survey

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Abstract: *Background and Rationale:* Children's behavior at the dental office is an area to be focused as a premier or primary priority which will simulate better behavioral patterns. Children's imagination has no limits or boundaries, thereby the Pediatric dentist needs to curtail their unforeseen imaginations and put them on the right track before they develop into mal adaptive behavior. *Aim:* The present study aims to assess the parents' perception in this grey area which will enable the child to instill a positive mindset towards dental care. This aspect can be enhanced by working on the emotional intelligence perspective. *Methodology:* Parents who visited the Out- Patient Department of SRM Dental College were selected and recruited as study participants according to the prescribed protocol by following the appropriate guidelines. Study design used was Questionnaire survey. They were approached at the dental operatory and asked to give their responses to a newly developed validated tool, by way of face-face personal interview manner. *Results:* The present study was undertaken to determine the parents' perception on the childrens' dental anxiety status. The sample size for the study was 364, out of which 182 (50%) were males and 182 (50%) were females. Age distribution was children below 14 years. *Conclusion:* Within the limits of the current study, it can be concluded that the behavior based PAQ was effective in acquiring knowledge, such that we can develop new skills to master those nuances in an effective manner towards the betterment of Pediatric community, which consecutively will pave the way for modified behavioral cognitions in future.

Keywords: Pediatric dentist, Children's behavior, dental care.

INTRODUCTION

Dental education encompasses behavior management training to be rendered to a Pediatric dentist to make him competent enough to handle a dental scenario, which is bombarded with children throwing temper tantrums. In order to highlight on this aspect, we need to have a thorough knowledge on the key issues faced by children so that we can serve as valuable service providers. The ideal way to gain access into the key areas can be attained by the use of a Psychological Assessment Questionnaire-PAQ.

Children's behavior at the dental office is an area to be focused as a premier or primary priority which will simulate a better behavioral pattern. Dental anxiety can be defined as a "state of unpleasantness with an associated fear of danger from within or a learned process of one's own environment."

Behavior management in children is complex and technique sensitive, they cannot be simply commemorated or condoned as miniature adults. It is our duty as a Pediatric dentist to enthrall this area in order to fulfill the expectations of children.

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Though many scales have been used in the past for this purpose like Corah’s DAS-1969,⁶ MDAS-1994⁶, Jeanette⁸, there is no set of assessment parameters available exclusively for Indian population. There is a dearth of evidence in the literature in this regard, hence we ventured out to develop a new tool.

Children envisaged by dental treatment needs are succumbed with a lot of stress promoting factors, which may be innate or acquired from their subordinates [2]. The child is tormented by mixed emotions, which may or may not add up to his existing mental image on the scenario [3]. Dental anxiety affects children globally with a 6-15% impact [1].

Children are encompassed with a feeling of helplessness. They acquire a feel that there is a loss of personal space. Children need to be enlightened about the importance of dental care from a very young age, in order to develop into good dental patients in future.

Subjective measures such as face-face interviews and self report measures can be employed as useful adjuncts to tackle the situation .Since parents serve as role models, their views can act as tools to reduce the dental anxiety status on a large scale. Such self report measures will also inculcate a good inter personal relationship among the triad of dentist, child and parent and ultimately aid in good rapport building in the dental journey.

METHODOLOGY

The study was designed as a Questionnaire based survey, using a newly developed tool. The Questionnaire was developed, keeping in mind the key issues such that it should be simple, specific, straight forward, unambiguous, relevant, sequential, logical and open ended. After a brief introduction of the Questionnaire, a total of 364 participants were recruited for the study. The participants were briefed about the study purpose and informed consent was obtained. It was initially pilot tested on a representative sample of 30 parents mainly to check if the level of understanding and comprehending the Questions correlated with the constructs. A focus group discussion was done to learn about how the selected participants received and interpreted the questionnaire. The underlying concept was also described, thus we could evaluate if the developed items had precise and accurate wordings. The validity was checked by ensuring its relevance. There were no major deviations, minor restructuring was done for a few questions.

A seven item questionnaire was developed with Likert based responses. It was constructed in both English and vernacular language. By way of a personal face-face, cognitive interview session the questionnaire was administered to all the participants. Participation in answering the questions was kept anonymous and confidential.

Responses were recorded and tabulated in MS Excel 2007 version. Data analyzed with SPSS, IBM Company, Armonk. NY, USA.

RESULTS

The present study was undertaken to determine the parents’ perception on the childrens’ dental anxiety status. The sample size for the study was 364, out of which 182 (50%) were males and 182 (50%) were females. Age distribution was children below 14 years. The methodology helps us to acquire knowledge about parents’ perceptions since they serve as role models in the children’s development and behavior.

Table-1: Distribution of study participants

| Total number of participants | Males | Females | Total |
|------------------------------|------------|------------|-------|
| 364 | 182 | 182 | |
| 0-5 years | 58 (62.7%) | 57 (63.8%) | 115 |
| 5-10 years | 60(60.6%) | 62 (58.7%) | 122 |
| 10-14 years | 64(56.8%) | 63(60.6%) | 127 |

Table-2: Distribution of study participants

| Total number of participants | Respondents who completed the Questionnaire | Response rate |
|------------------------------|---|---------------|
| 410 | 364 | 88.7 |

Table-3: Distribution of study population according to age and gender-Males

| Age group (years) | Males | N% |
|-------------------|-------|------|
| 0-5 | 58 | 62.7 |
| 5-10 | 60 | 60.6 |
| 10-14 | 64 | 56.8 |
| Total | 182 | |

Table-4: Distribution of study population according to age and gender –Females

| Age in years | Females | N% |
|--------------|---------|------|
| 0-5 | 57 | 63.8 |
| 5-10 | 62 | 58.7 |
| 10-14 | 63 | 60.6 |
| Total | 182 | |

DISCUSSION

In our study Table-1 illustrates that the study population comprised of 364 children of which there were 182 males and 182 females. Among them there were 58 (62.7%) males and 57 (female(63.8)s in the 0-5year age group, totaling to 115..60 males (60.6%) and 62(58.7) females in the 5-10 year age group totaling to 122 and 64(56.8%) males and 63(60.6) females totaling 127 to in the 10-14 year age group. This is in accordance with similar studies done by Kumar. G *et al.*, [1], Kakti *et al.*, [2], Reddy *et al.*, [3].

Table-2 illustrates the distribution of study participants. Questionnaire was employed to 410 participants and 364 respondents completed the Questionnaire, the response rate was 88.7%. The incomplete questionnaires were excluded from the study. This is in accordance with similar studies done by Kumar V *et al.*, [4], Dhanu G *et al.*, [5] and Dikshit *et al.*, [6].

Table-3 showed the distribution of the study population according to age and gender. There were 58 male parents with a percent of 62.7 in the children 0-5 year old age group, 60in the 5-10 year old age group with a percentage of 60.6 and 64 in the 10-14 year old age group with a percentage of 56.8. Total males who participated were 182. This is in accordance with similar studies done by Murali *et al.*, [7], Daly *et al.*, [8], Goettams *et al.*, [9, 11] and Tickle *et al.*, [10].

Table-4 showed the distribution of study population amongst the female parents. There were 57 in the 0-5 year age group with a percentage of 63.8, 62 with a percentage of 58.7 in the 5-10 year age group and 63 with a percentage of 60.6 in the 10-14 year age group. The total number of female participants were 182. This is in accordance with similar studies done by Warhekar *et al.*, [12], Shinde *et al.*, [13], and Pandiyan *et al.*, [14].

Children's behavior at the dental office is the foundation for developing good dental patients in future Pediatric dentist has to be competent enough to master behavior management techniques, the non-pharmacologic way initially to gain the confidence of the child. This kind of an approach helps the dentist to understand this grey area of behavior management in an exponential and empirical manner. Since it is a non-invasive and non-interventional method the dentist can gain the complete co-operation from the parents as well as children, both the parents and children readily agree to participate in the study.

Pediatric dentist has to acquire skill sets in behavior management before venturing into clinical practice. Behavior management is strenuous and tedious, for which employing such strategies can aid in the appraisal to a large extent. The results of our study highlighted the key focus areas that need to be concentrated.

Good dental health education, regular dental visits, good patient-dentist relationship, and effective communication with patients and parents may all contribute to the control of dental anxiety.

LIMITATIONS

Though the Questionnaire was a structured one and seemed to arouse the interests of the respondents, some of them may have simply ticked the Questionnaire without reading the contents completely.

CONCLUSION

Within the limitations, this methodology helps us to acquire knowledge about parents' perceptions since they serve as role models in the children's development and behavior. Though it is laudable by both parents and children further research has to be done in this area to find out more pressure causing aspects, such that we can alleviate these wards out of the fear provoking facts and make their dental experiences more pleasurable.

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