CORRELATION OF PARENTING STYLES WITH THE CHILDREN'S BEHAVIOR DURING DENTAL TREATMENT AT PAEDIATRIC DENTISTRY DEPARTMENT OF A TERTIARY CARE HOSPITAL IN PESHAWAR: A CROSS SECTIONAL STUDY

Omer Ali[1], Fazle Qadeem[1], Hasham Khan[1], Sajjad Ahmad[1], Nida Khalid[2], Saad Sardar Ali[3]

[1]Department of Paediatric Dentistry, Khyber College of Dentistry Peshawar
[2]Department of Oral and Maxillofacial Surgery, Khyber College of Dentistry Peshawar
[3]Private Practice, Ireland

ABSTRACT

Objectives: *To determine the correlation between parenting style and children's behavior during dental treatment, and to look the most effective parenting style in keeping the child most comfortable during dental treatment.*

Materials and Methods: *One hundred and ninety children and their parents were included in this study. Parenting styles were assessed using the Parenting style and dimension questionnaire, which was modified, validated by the senior faculty, and piloted. A sound eye-motor (SEM) scoring chart was used to record the child's comfort level during dental treatment.*

Results: *The findings revealed that SEM scoring and parental authoritative style had significant and negative relationships (p=0.008). Parental Authoritarian, parental permissive, and parental neglect styles had significant and positive relationships with the SEM scores (p=0.01, p=0.004, and p=0.001, respectively). The mean SEM score in male was 1.25±1.00, while in females it was 1.06±0.98(p=0.26). Of the four parenting styles, authoritative parenting was found to be the most relevant to the positive behavior of the children exhibited during dental treatment.*

Conclusion: *Authoritative parenting style had a significant but negative relationship with the SEM score. Authoritarian, Permissive and Neglectful parenting styles had significant but positive relationships with the SEM scores.*

Key words: *Parenting styles, SEM scoring Chart, Paedodontics, Paediatric patients, Peshawar*

INTRODUCTION

Parents play a crucial role in the rearing of their children. Parenting is defined as the process of raising children, ensuring their safety and well-being so that they can grow into healthy adults[1]. Parents have a great and direct influence on their children during the transition from infancy to adulthood. Infants and toddlers require intensive parenting, and in the first few years of life, children depend entirely on their caregivers. Parenting style is defined as "a constellation of parent's attitudes and behaviors toward children and an emotional climate in which the parent's behaviors are expressed."[2]

An American psychologist, Diana Baumrind and her fellow researchers, conducted research on parenting styles and focused their research on two important parameters: Responsiveness and Demandingness. Responsive parents are sensitive to their children's needs. Responsiveness also includes healthy communication, affection, warmth and giving attention to the child whenever he wants it. Parents with elevated demandingness monitor their children, set boundaries, enforce rules, and

Correspondence:
Sajjad Ahmad
Assistant Professor, Department of Paediatric Dentistry, Khyber college of Dentistry Peshawar
Cell: +923339101070
Email: drsajjadahmad@gmail.com

meet circumstantial demands. Combining these two dimensions together, creates four parenting styles.[3] These parenting styles are Authoritative, Authoritarian, Permissive and Neglectful. Parents with an authoritative approach will have high control and high warmth for their child, authoritarian parents will have low warmth and high control towards their children, permissive parents will have low control and high warmth, and neglectful parents will have low warmth and low control for their children[4]. There is no doubt that different parenting styles will result in different behavioral outcomes and personalities in children towards dental treatments.

Generally, according to studies, the best outcomes are shown by authoritative parents' children in various walks of life, such as success in academics, good socializing and peer skills, confidence, and higher self-image. This is generally true across different ethnicities, social strata, and cultures. However, children raised by neglectful parents show worse outcomes, such as substance abuse, socializing problems, and confidence issues[5].

A child's brain is in the developing stage until 6–7 years of age. According to previous studies, children develop their personality until seven years of age[6]. A large part of a child's personality is affected by the parent's behavior and actions[7]. Thus, parents play a vital role in developing their child's personality and making them more compliant with the dental environment and dental treatment.

All over the world children are the most susceptible in terms of being affected from dental problems[8]. Although there might be demographic variations, one cannot underestimate that children require checkups and dental treatment more frequently than other age groups.

There are scant data regarding the effects of different parenting styles on children with respect to their attitudes towards the acceptance of dental treatment and their cooperation during dental procedures in our region.

The present study aimed to determine the correlation between different parenting styles and the behavior of children during dental treatment.

MATERIALS AND METHODS

This cross-sectional study was conducted at Department of Paediatric Dentistry, Khyber College of Dentistry Peshawar. Parenting styles and dimensions were used to assess parenting styles[9]. The original questionnaire was modified by adding neglectful parenting style questions[10], and this modified questionnaire was validated by senior faculty members with teaching and research experience, and then piloted.

The parenting style questionnaire was filled by the parents of each child themselves or those who were not able to do so were helped by the investigator. Informed consent was obtained from each parent before data collection. A parent scoring the highest in a specific parenting style was considered the dominant parenting style of that parent; for example, a parent scoring the highest in the authoritative category would make him predominantly an authoritative parent. The same applies to authoritarian, permissive, and neglectful parenting styles.

To collect data about the child's response to dental treatment, an SEM scoring chart was used to score and measure the comfort level[11], that is, the behavior of the child during dental treatment. The investigator scored each patient for each parameter of the SEM chart[12], with scores ranging from to 0-3.

Using the WHO sample size calculator, the total sample size was calculated to be 169 by taking a 12.5% frequency of authoritarian parenting style and a 95% confidence interval and 5% margin of error[13]. A sample size of 190 was taken by adding a 10% non-response rate. Ethical Approval for this study was obtained from the ethical committee of Khyber College of Dentistry Peshawar vide Notification No. 3065/RRB/KCD. Informed consent was obtained from the parents of each participant.

The children included in the study received inferior alveolar nerve block anesthesia for different procedures. The ages of the patients ranged from to 4-8 years. An introductory appointment was scheduled for each child for behavioral guidance before the actual treatment appointment. The second appointment was scheduled after one week for each patient, and the treatment was performed by the same dentist. Application of the topical anesthetic agent i.e., benzocaine gel 20% was followed by block anesthesia using a 27gauge needle. The child's behavior during the treatment, from start to end, was scored using an SEM chart.

Data were entered into a computer and analyzed using SPSS version 23. Quantitative data are presented as the mean and standard deviation. The Pearson

Correlation Coefficient was used to examine the correlation between SEM and parental style, while one-way analysis of variance (ANOVA) between groups was used to determine if the SEM mean values were different between genders.

RESULT

A total of 190 pediatric patients and their parents participated in this study. Of the 190 patients, 45.26% were females and 54.74% were males. The means and standard deviations for age, SEM score, and all four parenting styles are shown in Table-1.

Table - 1: Descriptive Statistics and Correlation between Parenting Styles and SEM

Descriptive Statistics		
Variables	**Mean**	**Std. Deviation**
SEM Scoring	3.50	2.98
Parental authoritative Style	4.83	0.64
Parental Authoritarian Style	3.58	0.98
Parental Permissive Style	3.24	01.19
Parental Neglectful Style	2.55	0.89
Age	6.45	1.30
Pierson Correlation of Different Parenting Styles with SEM		
Variable	Pearson correlation Coefficient (r)	P Value
Parental authoritative	-0.19	0.008
Parental Authoritarian	0.18	0.01
Parental Permissive	0.20	0.004
Parental Neglectful	0.32	0.001
Person correlation between SEM & Age	-0.23	0.001

The correlation between parenting style and SEM scores was evaluated using Pearson's coefficient correlation analysis. The findings showed that SEM scores and parental authoritative style had a significant and negative relationship (p=0.008). All the other three parenting styles (authoritarian, permissive, and neglectful) showed significant but positive relationships with the SEM behavior scores (p=0.01, 0.004, and 0.001, respectively). The results also showed that SEM behavior scoring and children's age had a negative relationship (p=0.001).

An independent sample T test was used to determine the differences between the means of male and female participants for all variables (shown in Table-2). In Table 2, we used an independent sample T test to determine the mean differences between sexes.

DISCUSSION

Previous studies have shown that a child's personality, habits, and interests are not linked to the external environment surrounding him rather, they are closely related to how the child interacts with the network of social relationships that the child is part of. The immediate family or microsystem into which parents introduce their own social and cultural values constitutes the majority of this social environment[14,15].

This study was carried out on 109 children and their parents to determine the correlation between parenting style and children's behavior during dental treatment. The results of our study revealed that

Table – 2: Gender-wise Correlation between Parenting styles and SEM scoring

SEM scoring and parenting styles	**Gender**	**N**	**Mean**	**Std. Deviation**	**95% Confidence Interval**		**P value**
					lower	upper	
Sound Eye Motor	Male	104	1.25	1.00	-0.10	0.46	0.26
	Female	86	1.06	0.98			
Parental Authoritative	Male	104	4.76	0.70	-0.33	0.03	0.11
	Female	86	4.91	0.57			
Parental Authoritarian	Male	104	3.67	0.99	-0.07	0.48	0.14
	Female	86	3.46	0.95			
Parental Permissive	Male	104	3.25	1.24	-0.32	0.36	0.91
	Female	86	3.23	1.13			
Parental Neglectful	Male	104	2.59	0.93	-0.17	0.34	0.52
	female	86	2.51	0.85			

parenting style and age were significantly associated with children's behavior during dental treatment. The sex of the child showed no significant relationship with the SEM score.

Literature on this topic is scarce because different authors have used different indices for scoring parenting styles and children's behavior. Only a few studies have been related to our study. Naser Asl Aminabadi and Ramin Mostafi Zadeh Farahan carried out a study to find out the relation between parenting styles and children's behavior during dental visits. They used the SEM scoring chart to determine the children's comfort level during dental treatment, and to evaluate the parenting style they used the primary caregivers' practices report (PCPR). Their results showed that the children of authoritative parents had significantly lower mean SEM than the children of authoritarian and permissive parents. These results are consistent with those of the present study. However, in their study, there was no statistically significant difference between the mean SEM scores of children with permissive parents and those with authoritarian parents.[16]

To determine the association between parenting style and child behavior during the first dentist appointment, Jeff Howenstein et al. conducted a study using the Parenting Styles and Dimensions Questionnaire (PSDQ) to measure parenting style and the Frankle Scale to evaluate child behavior. This study found a link between authoritative parenting and better behavior at the first dentist appointment[17]. These findings are also in agreement with those of the present study.

Krikken and Veerkamp carried out a study in Amsterdam using child Rearing Practices Report (CRPR) and Child Fear Survey Schedule (CFSS) indices to evaluate the parenting styles and children behavior during dental treatment. According to their results, no significant relationship existed between parents' parenting style and dental anxiety or behavior of the child during dental treatment[18]. These results disagree with those of the present study. The reason for this might be the different tools used. Another reason may be the social and cultural value of the region.

CONCLUSION

The results of this study revealed that when parenting style is authoritative, children have a negative inclination towards SEM score, and when parenting style is authoritarian, permissive, and neglectful, their children have a positive inclination towards SEM score during dental treatment. Age had a significant negative relationship with SEM scores, and gender showed no significant relationship with children's behavior during dental treatment.

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