



RESEARCH ARTICLE

CORRELATION BETWEEN MOTHERS EMOTIONAL INTELLIGENCE AND CHILDREN'S ANXIETY IN PEDIATRIC DENTISTRY- AN OBSERVATIONAL STUDY

Nidhi Agarwal, Ashish Anand, Sruthy Sreenivasan, Aakansha Sharma and Varun K.

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Abstract

Aim: To assess the correlation between emotional intelligence of mother and the anxiety level of their children in a dental clinic.

Methods: The study was done on a sample size of 80 mothers and their children aged 3-7 years. A self-reported validated questionnaire, the Schutte Emotional Intelligence scale, was given to mothers to evaluate their emotional intelligence and the children were assessed during the dental treatment procedure using Frankl Behavior Rating Scale and Venham's Anxiety Rating Scale.

Results: A statistically significant moderate positive correlation was found between mother's EQ and Frankl scale $r = 0.468$, ($p = 0.000$). A statistically significant moderate negative correlation was found between mother's EQ and Venham scale $r = 0.450$, ($p = 0.000$).

Conclusion: The findings of this study imply that mothers with higher emotional intelligence have children with lower dental anxiety levels during dental treatment.

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Introduction:-

Dental anxiety, the fifth most common fear¹ is a prevalent psychological disorder triggered by threatening stimuli and is a major reason for avoiding dental care. It affects a large number of children and adults worldwide and poses a significant challenge in patient management in dental clinics.

Children are often accompanied by their parents to the dental clinic, where parents play a crucial role in shaping their children's attitudes toward dental care. Research indicates that the mothers typically have a stronger influence on their children due to their closer relationship.^(2,3)

The behavior of infant tends to develop patterns based on their relationship with their mother.^[4,5] Consequently, mother's dental anxiety affects not only their own oral health but also contributes significantly to the development of dental anxiety in their children.

Salovey and Mayer introduced the term Emotional Intelligence in 1990⁶ defining it as a set of skills for accurately appraising and expressing emotions, effectively regulating emotions, and using emotions to motivate, plan, and achieve goals. Assessing maternal emotional intelligence and children's anxiety and behavior is crucial, as a mother's emotional intelligence significantly influences the development of her child's behavior and anxiety levels.⁷ Parents with high emotional intelligence are better at managing their emotions in stressful situations, serving as role models from whom their children can learn emotional intelligence as stated by Aminabadi NA, Adhami ZE et al.⁸

Given these associations this study aimed to explore the possible correlations between maternal emotional intelligence and child's behaviour and anxiety levels during the first dental visit .

Materials and Methods:-

The study was conducted on 80 mothers and their children aged 3-7 years who reported to the Department of Pediatric and Preventive Dentistry. The study's purpose and methodology were explained to the mothers and written informed consent was obtained. The sample size was estimated using nMaster software. The participants were selected on basis of certain eligibility criteria as follows:

Inclusion Criteria

- Mothers must have atleast a high school education.
- Mothers having single child only.
- Mother and child with complete physical and mental health with no confounding medical history.
- Children aged 3-7 year .
- First dental visit of the child.

Exclusion Criteria

- Mothers who were not willing to participate in the study.

Assessment Method-

The Schutte Emotional Intelligence Scale questionnaire¹¹ was used for assessment of emotional intelligence of mothers. The questionnaire consisted of 33 questions both in Hindi and English language and was given to the mothers to complete it in the waiting room according to their language preference. The scoring was noted for each question answered. This scale was used for assessing emotional intelligence of mother.

The scale used 4 sub-scales: Emotion Perception, Utilizing Emotions, Managing Self Relevant Emotions and Managing Other's Emotion. Scoring was done on a 5- point scale ranging from 1 (strongly disagree) to 5 (strongly agree) with higher scores indicating higher emotional intelligence of mother.

Frankl Behaviour Rating Scale and Venham's Anxiety Rating Scale¹³ were used during intraoral examination at the first dental visit to assess Dental behaviour and anxiety of the child

Statistical Analysis

The data was collected, compiled, organized and analysed using Microsoft Office Excel version 10 and IBM SPSS STATISTICS, windows version 23.0 Armonk, NY : IBM Corp software. The data was analysed using Spearman's rho analysis for the correlation between Mother's emotional intelligence, Frankl behavior rating and Venham's anxiety rating scale.

Results:-

Participants included 80 mothers and their children (39 girls and 41 boys) aged 3-7 years. The analysis Table (1.a) revealed that out of 80 mothers about 35 mothers were highly emotionally intelligent, 27 had average emotional intelligence and remaining 18 mothers had low emotional intelligence. Table (1.b) shows the correlation between mothers emotional intelligence and Venham's anxiety scale.

Table 2 displays the correlation between mother's emotional intelligence and Frankl behavior rating scale and Venham's anxiety rating scale. There was a statistically significant moderate positive correlation found between mother's EQ and Frankl scale $r = 0.468$, ($p = 0.000$). A statistically significant moderate negative correlation was found between mother's EQ and Venham anxiety scale $r = 0.450$, ($p = 0.000$)

Legends

Table 1a : shows correlation between mothers emotional intelligence and Frankl's scale.

Table 1b : shows correlation between mothers emotional intelligence and Venham's anxiety scale.

Table 2: shows correlation between mothers emotional intelligence, Frankl behavior rating scale and Venham's anxiety scale.

Table 1.a:- Correlation of Mothers Eq-I And Franklbehavior Rating Scale.

| CORRELATIONS | | | | |
|--------------------|--------------------|---------------------------------|---------|-----|
| Frankl Behavior | | Mother's Emotional intelligence | | |
| Rating | Number of children | High | Average | Low |
| Definetly negative | 10 | 2 | 7 | 1 |
| negative | 20 | 3 | 6 | 11 |
| positive | 30 | 20 | 7 | 3 |
| Definetly positive | 20 | 10 | 7 | 3 |

Table 1.b:- Correlation of Mothers EQ-I and Venhams Anxiety Scale.

| CORRELATIONS | | | | |
|-----------------------|--------------------|---------------------------------|---------|-----|
| Venhams anxiety scale | | Mother's Emotional intelligence | | |
| Rating | Number of children | High | Average | Low |
| 0 | 9 | 7 | 2 | 0 |
| 1 | 46 | 24 | 17 | 5 |
| 2 | 7 | 1 | 2 | 4 |
| 3 | 11 | 2 | 2 | 7 |
| 4 | 7 | 1 | 4 | 2 |
| 5 | 0 | 0 | 0 | 0 |

Table 2:- Correlation between mother's EQ, Frankl and Venham's scale.

| CORRELATIONS | | | | | |
|--|--------------------------------|------------------------|-----------|--------------|--------------|
| | | | Mother_EQ | Venham_scale | Frankl_scale |
| Spearman's rho | Mothers emotional intelligence | CorrelationCoefficient | 1.000 | -.450 ** | .468 ** |
| | | Sig. (2-tailed) | . | .000 | .000 |
| | | N | 80 | 80 | 80 |
| **Correlation is significant at the 0.01 level (2-tailed). | | | | | |

Discussion:-

The present study was designed to explore the relationship between mothers emotional intelligence with their child anxiety and behavior in a dental setting. The results showed that there is a positive correlation and it is a positive predictor for child's behavior assessment. This implies that children tend to show more flexible behavior whose mothers are more emotionally intelligent. Parents with high emotional intelligence are adept at effectively managing stressful situations and thus their children may develop their emotional intelligence by observing and learning from them.⁶

Research conducted by Iluna maria et al has stated that Emotional intelligence has four empirical subscales including intrapersonal, interpersonal, stress management and adaptability¹. Intrapersonal emotional intelligence represents the ability to be in touch with one's own feelings and understand one's feelings and emotional experiences whereas Interpersonal emotional intelligence involves ability to understand and interact well with others. Goleman asserts that there are five key elements to EI: self-awareness, self-regulation, motivation, empathy, and social skills. Studies^[8,9] by Aminabadi NA et al have proposed a substantial role of parents in the development of their children's emotional competences that provide children the ability to respond to stressful life events in a resilient way. Similarly the findings of the present study also prove that children of emotionally intelligent mothers tend to manage their emotions effectively in stressful situations, such as during dental visits.

Studies by Aminabadi NA⁷ et al show that mothers with higher levels of EI are more receptive to their child's needs, spend more time with their children, and give more importance and attention to positive parenting. Wood, Jeffrey et al¹² and Negreiros, J. & Miller, L.D¹³ conducted studies on parenting and its relation to child anxiety and have found a positive correlation between them.

Therefore it is evident that children who perceive their parents as warm and less controlling have shown better coping skills. EI is an emotional characteristic that helps regulate emotions and impulses and increases interaction

and empathy with others, including the mother/child dyad.⁹ Mother's emotional intelligence affects how she nurtures and interacts with their child. Resources can help mother's develop her emotional intelligence over time which can lead to better support for her child in future medical or dental settings. High emotional intelligence helps maintain a level of clarity that allows parents to respond to their child behavior in a positive and encouraging manner.⁸ In the first visit, it will be useful if we get to know mothers emotional intelligence initially so that dental professional can tailor a more child friendly approach and behavior modification to reduce the child anxiety in the first dental visit.

There is a dearth of literature correlating the emotional intelligence of mothers with the anxiety level of children and therefore this study provides an insightful introspect into an important correlation between a child and a mother.

Conclusion:-

The findings of this study imply that mothers with higher emotional intelligence have children with lower dental anxiety levels during initial dental visit. Mothers with high emotional intelligence have high self-esteem with a positive attitude towards life and are flexible in stressful situations. The findings of the current study enhance our knowledge about a very important predictor which shows the importance of mother's emotional intelligence and its association towards child's dental anxiety. These insights underscore the importance of developing behavior management strategies tailored to the child behavior in dental setting.

Conflict Of Interest

No conflict of interest.

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