

ASSESSMENT OF DENTAL ANXIETY AMONG 12-15 YEARS OLD SCHOOL CHILDREN- A SURVEY

Dr. Arshiya Shehenaz

Saveetha Dental College and Hospitals, Chennai

Abstract: Dental fear (also called dental phobia, odontophobia, dentophobia, dentist phobia, and dental anxiety) is the fear of dentistry and of receiving dental care. It exists in a considerable proportion of children and adolescents and is a major dilemma in pediatric dental practice. This study will involve the assessment of dental anxiety in 12 to 15 year old adolescents in a private school with permission from higher authorities. Dental anxiety will be assessed using a structured questionnaire containing the Corah Dental Anxiety Scale (CDAS). The reason for conducting this study is to help understand the dental anxiety in children at an early age and will help to take measures to reduce the associated fear.

Keywords: Dental, anxiety, fear, children

Introduction:

Fear is defined as an individual's response to a real threatening event or dangerous situation to protect his or her life [1]. Dental fear has also been ranked fourth among the other common fears [2]. The intensity of dental fear varies between nervousness and anxiety to dental phobia. Dental fear has been reported to be one of the most important reasons for aversion and negligence of regular dental care [3]. Avoiding dental care may lead to a vicious circle with the patient's dental problems mounting and leading to more unpleasant dental visits [4]. Anxious individuals are mostly uncooperative during dental visits, cancelling more dental appointments and therefore develop lower pain threshold [4]. Adolescents who are less or not anxious have been reported to have lower caries severity and incidence [5].

Several studies indicate that dental anxiety in children is significantly associated with parental anxiety. It has also been said that women tend to report more dental fear than men [7] and younger people are more dentally fearful than older individuals [7,8]. It has been found out that at least 16% of school-aged children are afraid of dentists and may consequently avoid attending for dental care [9]. The assessment of dental fear is hence a very useful tool to dentists to customize behavioral management techniques for their patients [7,10].

Materials and methods:

The study was approved by the Deanship of Scientific Research, Saveetha Dental College, Chennai. The participation of each student is was voluntary. The study was conducted during the month of April 2015 at a private school in Chennai and involved the students between 12 and 15 years of age.

Dental anxiety was measured in the students using the Dental Anxiety scale (DAS), also known as the Norman Corah scale which was developed in 1969. Participants answered four questions with each having five multiple choice options. The questions asked were about different situations or procedures which can be encountered at the dental office. The multiple choice items were scored as A=1, B=2, C=3, D=4, E=5; with (A) representing feeling of no anxiety or tension and (E) representing the maximum level of anxiety possibly felt towards a specific dental situation or procedure. The total score for the Norman Corah scale ranges from 4 to 20 and anxiety ratings are classified as: 4 to 8 = no anxiety, 9 to 12 = moderate anxiety, 13 to 14 = high anxiety and 15 to 20 = severe anxiety.

Results:

The sample contained a total of 100 children aged 12 to 15 years; 49 males (49%) and 51 females (51%). After the analysis of the obtained data, the results show that nearly 34% of participating children suffered from high and severe dental anxiety.

Female children demonstrated significantly a greater dental anxiety score compared to males. More females scored severe and high dental anxiety score compared to males.(Table1)

GENDER

NORMAN CORAH'S SCALE	FEMALE n(%)	MALE n(%)
4-8 (NO ANXIETY)	12 (12)	24 (24)
9-12 (MODERATE ANXIETY)	16 (16)	14 (14)
13-14 (HIGH ANXIETY)	8 (8)	3 (3)
15-20 (SEVERE ANXIETY)	15 (15)	8 (8)

TABLE1**Discussion:**

This study shows that a significant percentage (34%) of middle school children suffered from high and severe dental anxiety. There is lack of association between the child's age and dental anxiety because participating children were relatively close in age.

The results of this study show that females have more dental anxiety which has also been found by other studies [11,12,13,14]. This may be due to the fact that females tend to have higher levels of neuroticism and anxiety is positively associated with neuroticism [15,16,17].

Conclusion:

This study supports the need for more dental training on the management of dental anxiety in patients especially children. Anxious patients need special attention and using tools, such as the Norman Corah's dental anxiety scale may help the clinician decide if the patient's needs can be met in the dental practice or if he or she might need further management techniques such as sedation or even hospitalization.

References:

- [1] Bay EJ, Algase DL (1999). Fear and anxiety: a simultaneous concept analysis. *Nurs. Diagn.*, 10:103-111.
- [2] Milgrom P, Weinstein P (1993). Dental fears in General Practice: New guidelines for assessment and treatment. *Int. Dent. J.*, 43:288-293.
- [3] Chellappah NK, Vignehsa H, Milgrom P (1990). Prevalence of dental anxiety and fear in children in Singapore. *Community. Dent. Oral Epidemiol.*, 18:269-271.
- [4] Ingersoll BD (1982). *Behavioral Aspects in Dentistry*. CT: Appleton- Century-Crofts. pp. 47-48.
- [5] Kruger E, Thomson WM, Poulton R, Davies S, Brown RH, Silva PA (1998). Dental caries and changes in dental anxiety in late adolescence. *Community. Dent. Oral Epidemiol.*, 26:355-359.
- [6] Wigen TI, Skaret E, Wang NJ (2009). Dental avoidance behavior in parent and child as risk indicators for caries in 5-year-old children. *Int. J. Paediatr. Dent.*, 19:431-437.
- [7] Ter Horst G, DE Wit CA (1993). Review of behavioral research in dentistry 1987-1992: Dental anxiety, dentist-patient relationship, compliance and attendance. *Int. Dent. J.*, 43:265-278.
- [8] Rowe MM (2005). Dental fear: Comparisons between younger and older adults. *Am. J. Health Stud.* Available at <http://findarticles.com>. Accessed January 1st, 2011.
- [9] Kent CG. *The Psychology of Dental Care*. Bristol: Wright, 1991: 43±65.
- [10] Corah NL (1969). Development of a dental anxiety scale. *J. Dent. Res.*, 48:596.
- [11] Weinstein P, Smith TA, Bartlett RC (1973). A study of the dental student-patient relationship. *J. Dent. Res.*, 52:1287-1292.
- [12] Al-Madi EM, AbdelLatif H (2002). Assessment of dental fear and anxiety among adolescent females in Riyadh, Saudi Arabia. *Saudi Dent. J.*, 14:77-81.
- [13] Humphris GM, Morrison T, Lindsay SJ (1995). The modified dental anxiety scale: validation and United Kingdom norms. *Community. Dent. Health*, 12:143-150.
- [14] Taani DQ (2002). Dental attendance and anxiety among public and private school children in Jordan. *Int. Dent. J.*, 52:25-29.
- [15] Stecher T (2004). Well-being in an academic environment. *Med. Educ.*, 38:465-478.
- [16] Freeman R (1998). A psychodynamic theory for dental phobia. *Br. Dent. J.*, 184:170-172.
- [17] Freeman R (1999). Communicating effectively: some practical suggestions. *Br. Dent. J.*, 187:240-244.