

# A Study to Assess the Dental Anxiety among Adolescents Attending Selected Dental Clinics at Hassan in View to Develop Self Instruction Module

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**Abstract:-** Anxiety is a state of uneasiness and distress about future uncertainties. Fear is a feeling of alarm or disquiet caused by the expectation of danger, pain, disaster or the like. These anxieties or fears usually result from direct experience and conditioning, or vicariously through information. Non-experimental descriptive research design was used for the study. In the present study 80 adolescent samples were selected. Non-probability convenient sampling technique used. The data were collected by using structured interview questionnaire method- and dental anxiety scale. Data collected from that pre- test computed and interpreted by using descriptive and inferential statistics. In this present study shows that, where in, majority Age, 46.3% (37) were distributed in 14-17years Gender 59.0% (47) were distributed in Female. Religion 60% (48) were distributed in Hindu, Education Status 35% (28) were distributed in any Degree Type of Family 51.3% (41) were distributed in Joint Family Income 43.8% (35) were distributed in Rs 3000-6000 Bad Habits 31.3% (25) were distributed in None Source of information 35% (28) were distributed in TV/ Radio, Frequency of visiting 51.3% (41) were distributed in Often Dental status 42.5 % (34) .Overall dental anxiety scores among adolescent clients during their dental visits. They are having 62.62 percent of dental anxiety. It means more moderate dental anxiety among adolescents during their dental visits.

**Keywords:-** Adolescents, Dental Anxiety.

## I. INTRODUCTION

Dental anxiety and fears among both adults and children has for many years been recognized as a problem area in clinical dentistry. Only a small part of investigations has tried to depict epidemiologic public health factors related to dental fears approximately 10-20% of the adult population in the western industrialized world report high dental anxiety and also most often report this reaction as having been developed during childhood among children. Surveys from different areas of the world show that the prevalence of dental anxiety among children and adolescents varies extensively. In Northern Europe, the prevalence ranges between 3% and 21%), and in UK around 7%, while reports from Asia and

America has found 6% and up to 43% of children to be fearful. Anxiety Scale was used in this study, where the prevalence of high dental anxiety in those surveys ranged between 3.8% and 7.1%. As part of a sociological investigation of urban, adolescent.<sup>1</sup>

Dental anxiety is a common problem both for dental practitioners and afflicts a significant proportion of people of all ages from different social classes and often results in poor oral health by complete avoidance of dental treatment, irregular dental attendance or poor co-operation. Dental anxiety is based on several factors like family and social Environment, general fearfulness, pain and traumatic, unpleasant experiences. Patient perceptions of behaviors and attitudes of dentists can affect dental anxiety and could influence his or her decision to access dental care. It has been found that dentists' communicative styles as well as perceived technical competence were predictive of levels of dental anxiety during treatment.<sup>2</sup>

Prevalence of dental fear increased only marginally between the ages of 15 and 18 years. The physiological and psychological changes of puberty and the likelihood that older children receive more invasive treatments could be possible explanations of an increase in dental fear with increased age. Interestingly, adolescents were nine times more likely to be highly anxious of dental treatment if they thought that their dentist was unsympathetic. Avoidance of dental treatment can be a good indicator of dental fear. High levels of fear among children may also decrease seeking dental care. Reasons for avoiding dental treatment may be diverse. Regarding seeking dental treatment, in the case of young children, parental decision results in a young child's visit to the dentist rather than a decision on the part of the child.<sup>3</sup>

## II. OBJECTIVES

- To assess the level of dental anxiety among adolescents attending selected dental clinics.
- To identify association between selected demographic variables with the level of anxiety among adolescents.
- To develop self-instruction module regarding prevention of anxiety among adolescents.

## III. MATERIALS AND METHODS

In this research study, the investigator goal assesses the dental anxiety among adolescents. Non-experimental descriptive research design was used. The setting for the study was selected Dental Hospital. A nonprobability convenient sampling method was used to select the 80 samples. The researcher used two tools to collect the relevant data. They were demographic proforma 10 items, structured interview questionnaire 30 items on dental anxiety scale score was arbitrarily classified as Severe dental anxiety (86-124) Moderate dental anxiety (78-85) Mild dental anxiety (0- 77) Inadequate Knowledge (0–8), Moderately Adequate (9–16), and adequate knowledge (17–25). Reliability was estimated by using test and re-test methods. The reliability obtained was ( $r=0.89$ ). The investigator obtained written permission from the concerned hospital authority prior to the study. Reliability was estimated by using test and re-test methods. The reliability obtained was ( $r=0.89$ ). The investigator obtained written permission from the concerned hospital authority prior to the study. Reliability was estimated by using split-half test was found by using Karl Pearson Co-relation methods. The reliability obtained was ( $r=0.96$ ). The investigator obtained written permission from the concerned hospital authority prior to the study.

## IV. RESULTS

The data pertaining to demographic characteristics of adolescents are Age, Gender, Religion, Educational status, Type of Family, Family Income, Bad Habits, Source of Information, Frequency of Visiting, and Dental Status.

Table 1 distribution of socio-demographic variable of the adolescents. Adolescents majority of age, 46.3% (37) were distributed in 14-17 years gender 59.0% (47) were distributed in female. Religion 60% (48) were distributed in Hindu, education status 35% (28) were distributed in any degree type of family 51.3% (41) were distributed in joint family income 43.8% (35) were distributed in Rs 3000-6000 bad habits 31.3% (25) were distributed in none source of information 35% (28) were distributed in tv/ radio, frequency of visiting 51.3% (41) were distributed in often dental status 42.5 % (34).

Demographic variables		Number of Samples	%
Age	14-17 years	37	46.3%
	18-21years	23	28.8%
	22-25	20	25.0%
Gender	Male	33	41.0%
	Female	47	59.0%
Religion	Hindu	48	60.0%
	Muslim	15	18.8%
	Christian	17	21.3%
Educational status	1-10th Standard	14	17.5%
	PUC	21	26.3%
	Any degree	28	35.0%
	None	17	21.3%
Type of Family	Nuclear	18	22.5%
	Joint	41	51.3%
	Nuclear	18	22.5%
Family Income	Less than Rs 3000	23	28.8%
	Rs 3000-6000	35	43.8%
	Above Rs 6000	22	27.5%
Bad Habits	Smoking	19	23.8%
	Tobacco chewing	16	20.0%
	Others	20	25.0%
	None	25	31.3%
Source of Information	Magazine	19	23.8%
	News paper	23	28.8%
	TV/ Radio	28	35.0%
	Others	10	12.5%
Frequency of Visiting	More often	14	17.5%
	Often	41	51.3%
	Rare	13	16.3%
	First visit	12	15.0%
Dental Status	Good	13	16.3%
	Fair	33	41.3%
	Poor/Bad	34	42.5%

Table 1:- Distribution of Socio-Demographic Variable of the Adolescents

Table no. 2 shows that adolescents percentage of anxiety during their dental visit. They are having 62.9 percent of anxiety in the area of generalized anxiety and 62.57 percent of anxiety in the area of specific dental anxiety.

AREA OF QUESTIONNAIRE	PRETEST					
	Range	Min	Max	Mean		SD
				Score	%	
Items regarding generalized dental anxiety	11	7	18	12.58	62.9	2.876
Items regarding specific dental concerns/anxiety	49	33	82	65.08	62.57	10.553

Table 2:- Area Wise Dental Anxiety Scores

Table no. 3 shows the overall dental anxiety scores among adolescent clients during their dental visits. They are having 62.62 percent of dental anxiety. It means more moderate dental anxiety among adolescents during their dental visits.

Overall dental anxiety scores	Dental anxiety					
	Mean	Mean%	SD	Range	Min	Max
	77.65	62.62	10.834	52	44	96

Table 3:- Overall Dental Anxiety Scores

Table no.4 shows the distribution of subjects according to severity of dental anxiety out of 80 samples selected for the study. Out of 80 samples, 20% are having severe dental anxiety, 30% are having moderate dental anxiety, and 50% are having mild dental anxiety.

SEVERITY OF DENTAL ANXIETY	NUMBER	PERCENTAGE
Severe dental anxiety (86-124)	16	20.0
Moderate dental anxiety (78-85)	24	30.0
Mild dental anxiety (0- 77)	40	50.0
Total	80	100.0

Table 4:- Distribution of Subjects According to Severity of Dental Anxiety

Table 5: Shows the association between the selected Socio- demographic variables with the level of dental anxiety among adolescents. Out of 10 demographic variables 5 demographic variables are associated with the level of dental anxiety among adolescents. The age, gender, education status, frequency of dental visit, dental status was associated with dental anxiety. This association was statistically significant and it was confirmed using Pearson chi- square test.

socio-demographic variables		level of dental anxiety			
		severe anxiety	moderate anxiety	mild anxiety	$\chi^2$ value
age group	14-17 yrs	22	10	5	15.069 s
	18-21 yrs	6	9	8	
	22-25 yrs	3	7	10	
gender	male	8	11	14	12.408 s
	female	28	13	6	
religion	Hindu	7	16	25	2.3654 ns
	Muslim	4	4	7	
	Christian	5	4	8	
educational status	1-10 <sup>th</sup> std	3	1	10	8.424 s
	puc	2	9	10	
	any degree	8	7	13	
	none	3	7	7	
type of family	nuclear	4	4	10	1.132 ns
	joint	7	14	20	
	extended	5	6	10	
income	>Rs 3000	3	10	10	4.009 ns
	Rs 3000-6000	8	7	20	
	< Rs 6000	5	7	10	
bad habits	smoking	2	8	9	6.365 ns
	tobacco chewing	3	6	7	
	others	6	2	12	
	none	5	8	12	
source of information	magazine	4	8	7	3.788 ns
	news paper	3	6	14	
	tv/ radio	7	8	13	
	others	2	2	6	
frequency of visiting	more often	1	1	12	19.287 s
	often	6	10	25	
	rare	3	5	5	
	first visit	7	3	2	
dental status	good	1	3	9	9.109 s
	fair	7	15	11	
	poor/bad	8	6	20	

Table 5:- Association of Selected Socio- Demographic Variable with Dental Anxiety Scores

## V. CONCLUSION

The findings of the study has implications related to Nursing Administration, Nursing practice and Nursing research regarding the effect of dental anxiety and the dental anxiety management among adolescent clients attending the dental clinics. The essence of research is to build the body of knowledge in nursing as it is an evolving profession. The findings of the present study serve as a basis for the professionals and the students to conduct further studies.

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