



The Influence of Dental Caries on Young Adults from their Perspective.

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Abstract:

Aim : The aim is to identify the issues faced by the teenagers in their daily routine due to the effect of dental caries in their oral cavity.

Objective :

This study seeks to provide a voice for the young adults to describe the influence of caries. The delivery of the teenagers given ,has an important relevance for clinical practise and future research.

Background :

Dental caries is a common, evident issue among the teen-aged group of people in the society. Dental caries has multiple effects on the affected young individuals, they include psychological disturbances, unappealing aesthetic features and also restrictions on the accessibility of various kinds of food. A questionnaire based study on the young adults aged 10-19 can provide us with sufficient data for the study. Questionnaires are handed-out to teenagers with active dental caries or who had past experience of dental caries. The result is interpreted based on the experience of the affected individuals. The questionnaire based study is hence performed on a sum of 100 people.

Reason: The study hence aids us to highlight the problems faced by the teenagers and , paves a pathway for the betterment of the dental treatment promoting oral health related quality of life.

Keywords: dental carries, oral cavity, clinical practise, oral health related quality of life.

INTRODUCTION:

One of the factors crucial , for the maintenance of general and quality of life is Oral health. It is a state of being free from mouth and facial pain, oral and throat cancer, oral infection and sores, periodontal (gum) disease, tooth decay, tooth loss, and other diseases and disorders that limit an individual's capacity in biting, chewing, smiling, speaking, and psychosocial wellbeing ^[1]. Around the globe, nearly 60-90% of children and almost 100% of adults suffer from tooth decay ,pain and discomfort being the most common symptom among the others according to World Oral Health Report 2003.The circumstances that contribute to the formation of carries comprises of unhealthy diet, tobacco use and use of harmful levels of alcohol. Poor oral hygiene may also lead to the four main chronic disorders such as cancer, diabetes ,chronic respiratory diseases and cardiovascular diseases. The ubiquity of dental carries differs by geographical location ,availability and accessibility of oral health services. The incidence of dental carries prevalence is increasing its endurance among poor and disadvantaged population groups. For children 5 to 19 years of age, children from poor and racial or ethnic minority families have higher rates of untreated dental caries than do their peers from non-poor and nonminority families ^[2].

In the upcoming generations, teenagers are emerging to be increasingly afflicted by this disorder. Due to present case scenarios of inflating consumption of

saturated and unsaturated sugars, the incidence of carries at a very early age is on the rise. Preventive schemes for this multi-factorial chronic disease needs an encyclopaedic and a multi-index outlook on caries risk- assessment and discovering the impacts of dental caries in the affected person. There is no solitary test to assess the risk factors and receptiveness of the patient. However an eminent risk assessment can be performed for caries by paediatricians by highlighting the key risk components of caries attack namely diet, bacteria ,saliva and status of teeth. Dietary counselling and introduction of the person to measures of producing the required outcomes of oral hygiene ,are essential key factors to promote the elimination of a predicted caries attack. There is now a rising recreation in how caries influences the affected person .To date, the most popular line of enquiry into caries-related impacts has been through the use of oral health-related quality-of-life (OHRQoL) measures ^[3]. These are formatted in the form of questionnaires to answer queries related to function limitations ,oral manifestations ,physical and emotional well-being. The impacts of dental caries are numerous ,and prominently evident in the young adult generation ,due to their complicated lifestyle and habits. Hence it is efficient and ne3cessary to analyse the issue , therefore paving a the betterment of the dental treatment promoting oral health related quality of life.-

MATERIALS AND METHODS :

SAMPLING AND SURVEY INSTRUMENTS AND STATISTICAL ANALYSIS.

This study was done in teenagers in Chennai, Tamil Nadu state to assess and gain knowledge about the impacts and manifestations in teenagers in the Indian society. The survey was conducted online utilizing the website apps.surveypplanet.com. The randomised cross-sectional study was conducted among the teenage0l population of about 408 people. A questionnaire was prepared in English that enlisted 24 questions that primarily focussed on the influence of dental caries in their general lifestyle. The questionnaire consisting of 24 questions were handed out to the teen-aged participants.

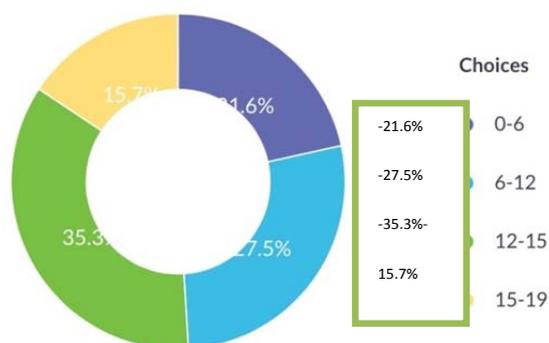
the sample of 408 students was a randomly selected group of individuals. They were selected after applying a multi-stage random sampling method for selection. They were previously asked questions before the actual questions in the questionnaire in order to avoid bias in our study. The sample group of 408 participants were divided into 4 different age groups when they were affected. The age group division was implemented in order to analyse the influence among the different age populations. The data have been collected through pre designed self administered questionnaire. The survey had utilised the Survey planet website app. Through the app the survey had been taken, the collected data were organised and analysed. The questionnaire consisting of 24 questions were given to 408 participants. The 408 participants were then required to answer all the questions. The questionnaires were then reviewed, analysed and evaluated. Data management and statistical analysis were performed using Statistical Package for Social Sciences (SPSS version 18.3; SPSS Inc., Chicago, IL, USA).

OBJECTIVE :

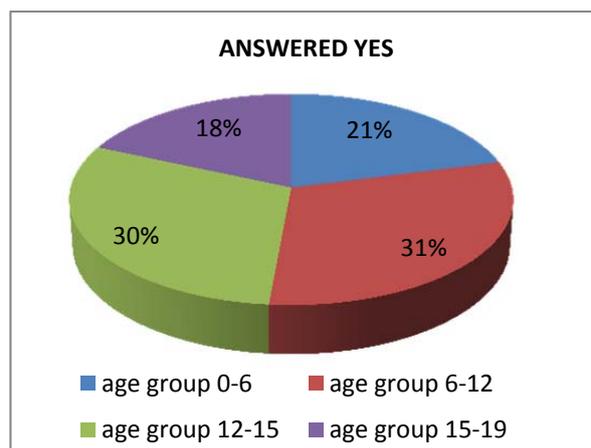
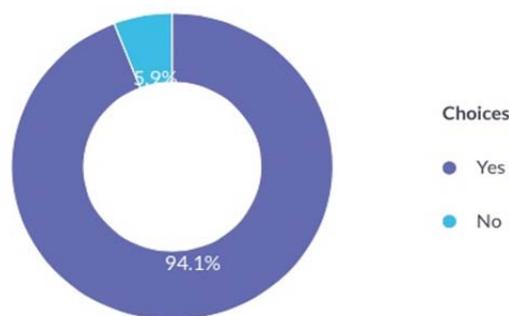
The questionnaire was mainly intended to ascertain the percentage of respondents in each affected age category ,who have been influenced by the disorder. The aim is to identify the issues faced by the teenagers in their daily routine due to the effect of dental caries in their oral cavity.

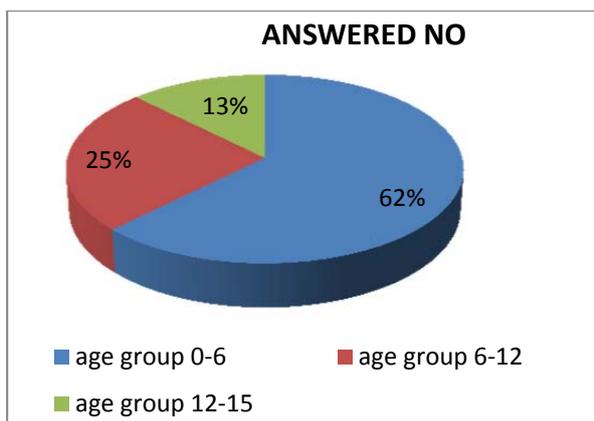
RESULT:

Only the completely filled questionnaires were selected for the study. The incomplete questionnaires were rejected to avoid confusion in deriving the results .The number of participants were different in all the four age groups.

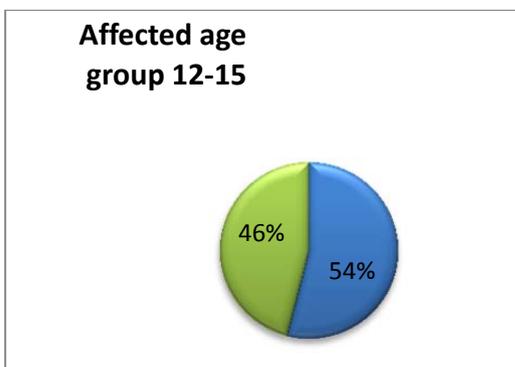
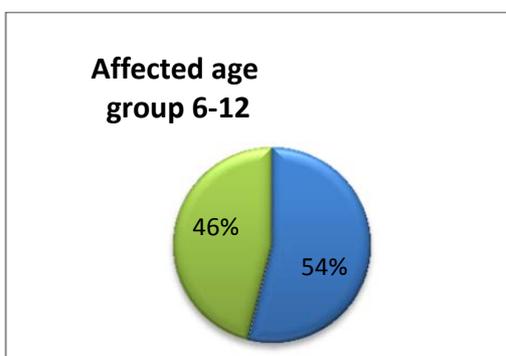
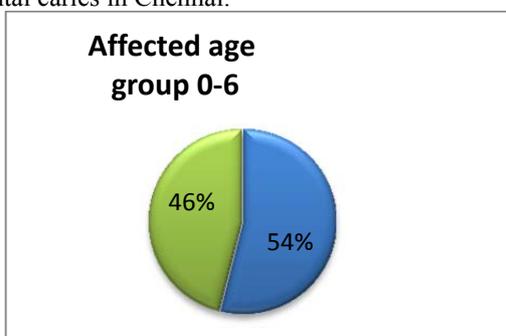


The demographic data of the participants were analysed. The age group division was to find out the awareness among the general population. Results for the four groups of participants were given in the tables below. Out of the total 408 , 88 belongs to age group 0-6 , 112 belongs to age group 6-12 ,144 belongs to age group 12-15 , 64 belongs to age group 15-19.

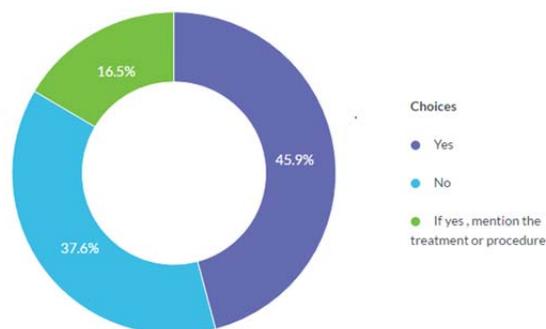




About 94.1% of participants knew about Dental Caries. Among the participants who knew dental caries, 21% are from age group 0 to 6, 31% are from age group 6 to 12, 30% from 12-15 age and 18% from 15-19 age group. Overall, almost only 5.9% in each age group answered No which shows almost 94.1% of people in every age group knew about the disorder dental caries in Chennai.

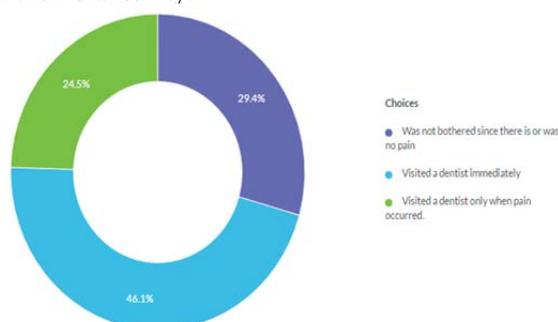


The maximum time the participants visit the dentist is only when there is tooth pain or any other dental problems is present. The second maximum is once a year being 28.4%. The next is once in every 6 months being 16.7%. The least is once in every two years being 13.7%. In all age groups maximum participants visit the dentist only when there is tooth pain or any other dental problems.



45.92% of the 408 participants, have undergone a dental procedure. Out of which, 16.5% of the population attempted to answer which treatment they underwent. Out of the 16.5%, that answered they had undergone orthodontic treatment and filling predominantly. The rest of the population i.e. 37.6% haven't undergone any dental procedure yet.

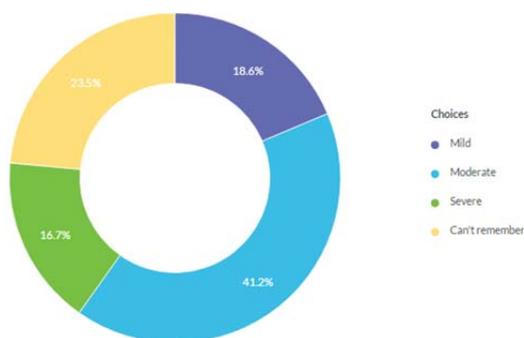
Predominantly the discovery of tooth decay or dental caries is by notice of discoloration of tooth which occurs at the initial stage of tooth decay. The next maximum method of discovery is the occurrence of tooth ache, followed by appearance of swollen gingiva and sensitivity to hold or cold food and beverages. Surprisingly 12.7% of the participants are not able to identify the moment of discovery of caries in their oral cavity.



Out of the total 408 participants, about 188 participants [46.1%] visited the dentist immediately, as soon as they informed their parents about the discoloration. About 29.5% of parents were not bothered, since tooth ache relating to the caries had not occurred. The rest of the participants that is 100 participants, decided to visit the dentist only when pain occurred.

The maximum number of participants, among the 408 experienced pain sometimes. They are 40.2%. Contradicting to this, about 33.3% portion of the

participants have never experienced pain. 24.5% of the population have experienced only once or twice. And about 2% of the population only have felt pain everyday or almost every day.

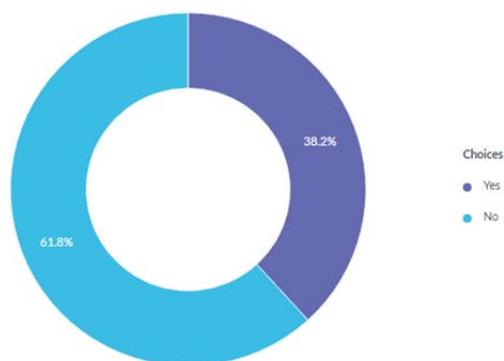


The maximum reply to the question is 'moderate' with a result of 41.2%. The next is 23.5%, stating that the participant cannot remember the severity of pain. Following is a scale of mild pain with a resultant of 18.6%. the least fraction of population, 16.7% felt severe pain.

About 44.1% of the population have answered positively on being questioned about sensitivity to hot and cold beverages. The other half of the population, that is the majority have answered negatively on being questioned on the same aspects.

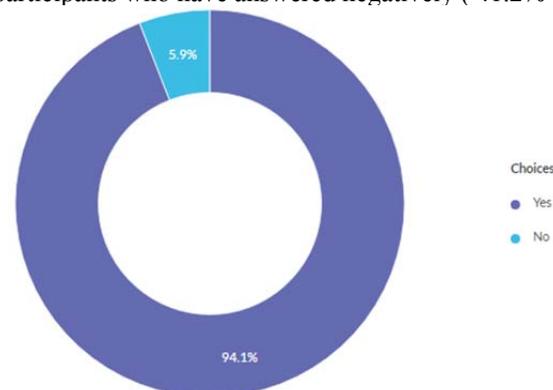
The majority of population of study have answered positively on being asked if they ever felt irritated or frustrated due to tooth pain. 61.8% of population answered 'yes'. The remaining of the population answered negatively with a resultant value of 38.2%. The majority of population have answered negatively to the question 'Did tooth pain disturb your sleep or other daily activities?'. The resulting value of negative responses is 60.8%. the minority have answered positively with a resulting value of 39.2%.

The majority of population have answered negatively to the question 'Have you ever for facial or gum swellings due to tooth infection?'. The resulting value of negative responses is 70.6%. the minority have answered positively with a resulting value of 29.4%.



The majority of population have answered negatively to the question 'Did you take any medication for pain from pharmacies without a doctor or dentists prescription?'. The resulting value of negative responses is 61.8%. the minority have answered positively with a resulting value of 38.2%.

The majority of population of study have answered positively on being asked if they ever felt irritated or frustrated due to tooth pain. 87.3% of population answered 'yes'. The remaining of the population answered negatively with a resultant value of 12.7%. Here, an almost equal result on both sides can be observed. The majority, although have answered positively with a result of 58.8%. Although, there are participants who have answered negatively (41.2%).



The majority of population of study have answered positively on being asked if they ever felt irritated or frustrated due to tooth pain. 94.1% of population answered 'yes'. The remaining of the population answered negatively with a resultant value of 5.9%. Here a complete majority is achieved over the negligible minority.

Awareness of dental carries	Affected age group 0-6	Affected age group 6-12	Affected age Group 12-15	Affected age Group 15-19	Total
Answered yes	73	106	141	64	384
Answered No	15	6	3	-	24
total	88	112	144	64	408

AFFECTED AGE	0-6	6-12	12-15	15-19	TOTAL
PARTICIPANTS	88	112	144	64	408

How often do you visit a dentist ?	Affected age group 0-6	Affected age group 6-12	Affected age Group 12-15	Affected age Group 15-19	Total	Percentage Of each
Once in every 6 months.	10	17	34	7	68	16.7%
Once a year.	29	34	34	19	116	28.4%
Once in every two years.	7	14	29	6	56	13.7%
Only when there is tooth pain or any other dental problems.	42	47	47	32	168	41.2%
Total	88	112	144	64	408	100%

When did you first discover the presence of carries in your oral cavity?	Affected age group 0-6	Affected age group 6-12	Affected age Group 12-15	Affected age Group 15-19	Total	Percentage Of each
Beginning, when it appeared as a discoloration.	34	37	39	26	136	33.3%
Sensitivity to hot or cold items.	9	23	31	1	64	15.7%
When the tooth started to pain.	22	22	29	15	88	21.6%
Don't know.	6	13	23	10	52	12.7%
Appearance of swollen gums.	17	17	22	12	68	16.7%
Total	88	112	144	64	408	100%

what did you and your parents do about it?	Affected age group 0-6	Affected age group 6-12	Affected age Group 12-15	Affected age Group 15-19	Total	Percentage Of each
Was not bothered since there is or was no pain	30	32	38	20	120	29.4%
Visited a dentist immediately	43	51	55	39	188	46.1%
Visited a dentist only when pain occurred.	15	29	51	5	100	24.5%
Total	88	112	144	64	408	100%

Did tooth pain disturb your sleep or other daily activities?	Affected age group 0-6	Affected age group 6-12	Affected age Group 12-15	Affected age Group 15-19	Total	Percentage Of each
Answered yes	25	20	62	53	160	39.2%
Answered No	63	92	82	11	248	60.8%
Total	88	112	144	64	408	100%

Have you ever for facial or gum swellings due to tooth infection ?	Affected age group 0-6	Affected age group 6-12	Affected age Group 12-15	Affected age Group 15-19	Total	Percentage Of each
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Answered yes	15	33	47	25	120	29.4%
Answered No	73	79	97	39	288	70.6%
Total	88	112	144	64	408	100%

Sensitivity on eating or drinking cold and hot beverages?	Affected age group 0-6	Affected age group 6-12	Affected age Group 12-15	Affected age Group 15-19	Total	Percentage Of each
Answered yes	25	34	70	51	180	44.1%
Answered No	63	78	74	13	228	55.9%
Total	88	112	144	64	408	100%

Occurrence of tooth pain due to decay	Affected age group 0-6	Affected age group 6-12	Affected age Group 12-15	Affected age Group 15-19	Total	Percentage Of each
Never	29	36	48	23	136	33.3%
Once or twice	18	25	43	14	100	24.5%
Sometimes	41	46	51	26	164	40.2%
Everyday / almost everyday	0	5	2	1	8	2%
Total	88	112	144	64	408	100%

Did you take any medication for pain from pharmacies without a doctor or dentists prescription ?	Affected age group 0-6	Affected age group 6-12	Affected age Group 12-15	Affected age Group 15-19	Total	Percentage Of each
Answered yes	36	20	36	64	156	38.2%
Answered No	52	92	108	-	252	61.8%
Total	88	112	144	64	408	100%

If yes , how do you rate your pain?	Affected age group 0-6	Affected age group 6-12	Affected age Group 12-15	Affected age Group 15-19	Total	Percentage Of each
Mild	12	21	24	19	76	18.6%
Moderate	40	49	52	27	168	41.2%
Severe	12	20	27	9	68	16.7%
Can't remember	24	22	41	9	96	23.5%
Total	88	112	144	64	408	100%

Are you concerned about your appearance / smile and what people may think about your teeth ?	Affected age group 0-6	Affected age group 6-12	Affected age Group 12-15	Affected age Group 15-19	Total	Percentage Of each
Answered yes	43	105	144	64	356	87.3%
Answered No	45	7	-	-	52	12.7%
Total	88	112	144	64	408	100%

Do you think that good oral health is important for general well being and plays an important role in overall health of an individual?	Affected age group 0-6	Affected age group 6-12	Affected age Group 12-15	Affected age Group 15-19	Total	Percentage Of each
Answered yes	67	109	144	64	384	94.1%
Answered no	21	3	-	-	24	5.9%
Total	88	112	144	64	408	100%

DISCUSSION :

Recently, Bratthall [2000] presented the so-called Significant Caries Index (SiC Index), which means that one third of the population with the highest caries scores should be analysed separately (as a risk group). In the present study, the $DFa \geq 4$ group corresponds to one third of the population and is thus in line with the SiC Index. In Scandinavia, the 10-15% of the population with the highest caries scores are usually regarded as a "risk group. Sheiham and Fejerskov [2003] discussed population contra high-risk preventive strategies and pointed out that even a small decrease in the average level of a "risk factor" in the population may result in a considerable reduction in the incidence of a health problem. The fact that two thirds of all 15-year-olds have approximal caries experience and that initial caries lesions were more uniformly distributed in this group highlights the need for public interventions and a population-based preventive strategy in order to prevent the development and progression of caries lesion in a large group of teenager {5}. Firstly, children's choice of words and descriptions for pain-related symptoms deserves further consideration. Previous studies that have explored children's perceptions of other diseases or health conditions have found them to be competent in discussing how they are affected[6]. In this study, most participants used the term 'hurts'. This was also found to be one of the most common words used by children in North America to describe pain[7]. The word 'hurt' was also found to be frequently used in a UK study where parents were asked about their child's use of pain words[8]. Older children were able to expand on their pain description by comparing it to another sensation: 'It felt like you wanted to itch it' 'It was like sharp' 'Like prodding'. There was, however, a lack of temporal terms, such as pulsing or throbbing, which concurs with findings from previous studies

RESULT:

From the present study we can conclude that pain is an important impact among the young adult's dental caries experience. It disrupts their daily social and academic level massively. We can also conclude that awareness of the importance of maintaining oral health and prevention of caries from the very young age has to be promoted. Due to the regional variations, variation in results may exist, and therefore it is the duty of every educated citizen to illuminate the rest about the impact of caries and hence, enlighten them towards better oral health.

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