THE IMPACT OF ORAL HEALTH STATUS ON DAILY PERFORMANCE - A CROSS SECTIONAL STUDY

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Abstract

Objective: Oral health is bound to play a major role in imparting the quality of life. The present study was conducted to assess the relationship between clinical dental status and its impacts on daily performances among college students of Davangere.

Material and Methods: Descriptive cross-sectional study was conducted among students of all the non-professional 6 bachelor degree (Arts, Science, and Commerce) colleges of Davangere city. Around 6000 students were studying in these colleges, among them 10% of the total population of students were considered for study. Data was collected using OIDP (Oral Impacts on Daily Performance) scale; oral examination was done by using DMFT(S), CPI index, malocclusion status, oral mucosal condition etc. Group wise comparisons were made either by Z-test (for mean) or Mann-whitney- U test. Z-test and chi-square tests were used for proportions.

Results: Among 600 students 375 were males and 225 were females and the age ranged from 17-24 years. The prevalence of oral impacts on daily performance was 48.3%. 115(19.2%) had a problem during 'cleaning teeth', 113 (18.8%) felt discomfort during eating. Mean DMFT was 1.3±1.9, and students with periodontal inflammation was 398 (66.3%).

Conclusion: The findings of the study demonstrate that students attending non professional bachelor degree colleges had a fair clinical dental status and there was a strong and consistent relationship between dental status and perceived oral impacts.

Key words: OIDP, Oral condition; Oral health, Oral impacts on daily performance.

Introduction:

Oral health is bound to play a major role in imparting the quality of life and this measurement in health care and especially oral health care has gained widespread recognition. Subjective self-report measures of impacts of health conditions on quality of life have expanded rapidly in the medical literature over the past 20 years.[1] Though the social impact to measuring disease outcome has seen widespread application in medicine, oral health status has not generally been conceived in those terms. Studies of oral health status have been firmly grounded in the measurement of tissue pathology characterized by the use of numerous clinical indicators with minimal attention to the impact of this pathology on social and psychological function. The significant lack of and need for social indicators and a comprehensive approach to measuring the social and psychologic impacts of dental disease has been highlighted in several recent reports.[2,3] Quality of life is concerned with "the degree to which a person enjoys the important possibilities of life". A person's oral health status can affect them physically, psychologically and influence how people enjoy life; how they look, speak, chew, taste and enjoy food, socialize, self-esteem, self image and feelings of social well being.[4] Oral health related quality of life is now considered as an essential component of assessing oral health of individuals and populations as well as health care outcomes with emphasis on psycho-social impacts.[5] Most of the research on oral health related quality of life (OHRQoL) has been performed with adults in developed English-speaking countries.[5,6] Socio-dental indicators are measures of oral health-related quality of life and range from survival, through impairment, to function and perceptions. They measure the extent to which dental and oral disorders disrupt normal social functioning and bring about major changes in behaviour such as inability to work or attend school, or undertake parental or household duties. The Oral Impacts on Daily Performance (OIDP) is a newly developed indicator that attempts to measure oral impacts that seriously affect the person's daily life. It is based on the WHO conceptual framework for the International Classification of Impairments, Disabilities and Handicaps which was modified for dentistry by Locker in the year 1988.[4] Hence an attempt was made to measure the perceptions among students attending non-professional bachelor degree (Arts, Science and Commerce) colleges located in Davangere City, about the oral status impacts on daily performances by using OIDP scale. The objectives were to assess the clinical dental status, perceived oral health status, the relationship between clinical dental status and its impacts on Daily performance, and to know the feasibility of using OIDP scale in dravidian population and to check its psychometric properties.

MATERIAL AND METHODS

This Descriptive cross-sectional study was conducted among students attending the various non-professional bachelor degree colleges of Davangere city, Karnataka, India. Ethical clearance was obtained from the Ethical Committee of College of Dental Sciences, Davangere. An official permission was obtained from the respective Principal's of the concerned colleges and Informed consent was obtained from the students before the onset of study. A pilot study was conducted on a convenience sample of the representative population and sample size was determined by the formula n = z2 p q / d2, n = 4 x 48 x 52/ (4.8)2 = 520. The sample size was rounded to 600 to deal with any drop outs. The validity and reliability of the Oral Impacts on Daily Performance (OIDP) as well as the feasibility of study was assessed. The required modifications were done and the difficulties experienced were overcome by redesigning the proforma, which was later used for conducting the study. The stability of Oral Impact on Daily Performance scale was assessed by test-retest reliability. The first 10% of respondents who were interviewed and examined were again contacted after a week and undertook the same procedure. The level of agreement of the overall OIDP scores was good

(80%). All the non professional 6 bachelor degree (Arts, Science, and Commerce) colleges of Davangere city were considered accounting to 6000 student. From each college, students were selected based on proportionate sampling. Then stratified random sampling technique was used to draw samples from various strata (I st II nd and III rd year) of each college. Students with orthodontic bands and those suffering from any systemic diseases were excluded from this study. Students were interviewed first individually, in a separate room of the concerned

college. Later clinical examination was conducted with the students seated on an ordinary chair in a separate room to maintain privacy under natural day light by another investigator. Data was collected using a specially designed pretested proforma. Survey proforma was categorized into three parts; First part consisted of recording the general information including name, age, sex etc. second part consist of components of Oral impacts on daily performances and the third part consist of details of clinical dental status.

Development of OIDP

This scale measures the physical, psychological and social aspects of performances. Physical performance includes eating, drinking, cleaning teeth, speaking, and physical activities. Psychological performances includes sleeping, smiling, and emotional stability, Social performances includes major role activity (carrying out work) and contact with people. Before asking about effect on daily performances, global selfreport indicator of oral conditions was measured by the item: E.g.: How do you grade the present condition of your mouth and teeth? (1-Excellent,2-Good,3-Fair,4-Poor,5-Very poor). Then the respondents were asked about satisfaction with dental appearance. And it was assessed by the item: E.g.: Are you satisfied with appearance of your teeth? [0) No 1) Yes]. And perceived symptoms by subjects were recorded by nine items (Bleeding gums, Ulcers, Bad breath, Tooth ache, Tooth sensitivity, Food impaction, Stained tooth, Missing tooth

and Malpositioned teeth).[7-10,14] The diagnosis of dental caries was done using the WHO 1997 criteria[11]. Periodontal status and Loss of attachment was assessed by using Community Periodontal Index (CPI) [11] and Malocclusion status using WHO 1986 criteria[12]. Stained teeth were considered as present after proper clinical examination, either it may be intrinsic or extrinsic, regardless of the tooth surface covering. Sharp teeth, Fracture teeth, Tooth wear were considered as present after proper clinical examination and subject history. Oral mucosal condition was also assessed.

STATISTICAL ANALYSIS

The data was arranged systematically and descriptive analysis was done using SPSS version17 (Statistical Package for Social Sciences). Results were presented as Mean — SD for quantitative data as well as number and percentage for categorical data. Group wise comparisons were made either by Z-test (for mean) or Mann-whitney U-test which ever was appropriate. Z-test and chi-square test were used for proportions. For all the tests a p- ≤ 0.05 and a confidence of 95% was considered for statistical significance

RESULTS

A total of 600 students were included in this study, out of which 375 (62.5%) were males and 225 (37.5%) females. The age ranged from 17-24 years. 376 (226, 60% - males, 150, 40%- females) students were in the age group of 17-20 years and 224 (149, 66.5%- males, 75, 33.5% - females) in 21-24 year age group. The prevalence of oral impacts on daily performance was 48.3% (one or the other problem). None of the subjects rated their oral health as very poor. Very less number of subjects (41) graded their oral health as excellent when compared to good (382), fair (134) and poor (43). The oral health was rated better in males compared to females and was found to be statistically significant as shown in table I. 449 (74.85) subjects stated that they were satisfied with their appearance. However, the satisfaction of appearance in between gender (male -271, 72.3%, female - 178, 79.1%)

was found to be statistically non significant (χ^2 =3.50,p=0.06,NS). Maximum number of subjects faced some or the other problem since last 6 months in mouth and teeth while cleaning the teeth (115) followed by eating (113), smiling (54), speaking (51) and drinking (45) as depicted in table II. Almost every day subjects had problem with eating (34), smiling (22), cleaning teeth (20) and speaking (16) in table III. The more perceived oral health deviation among subjects was malalignment of teeth (55.8%) followed by bleeding gums (22.7%) whereas the least perception was for missing teeth (2.5%) as shown in Graph 1. The mean DMFT was 1.3—1.9 (range- 0-9) and DMFS was 1.8— Graph 2 shows the distribution of other clinical findings of subjects. 388 (64.7%) students had malocclusion out of which 307 (51.2%) had 'slight malocclusion' and only 81 (13.5%) had 'moderate or severe malocclusion'. There was no significant

difference observed between males and females. (χ^2 = 4.53 p= 0.10 NS). Stains were observed in 189 (31.5%) subjects among which males had more (35.7%) stains when compared to females which was found to be significant (χ^2 = 8.305, p < 0.05, S). Sharp teeth were observed only in (3.3%) subjects and no difference was observed between males (3.5%) and females (3.1%) (χ^2 = 0.055, p = 0.81 NS). Very less number of subjects had fractured teeth (6.3%). Males had more fractured teeth than females (χ^2 = 4.83, p < 0.05 S). Tooth wear was present among (12.5%) subjects (χ^2 = 1.708, p = 0.19 NS). 31 (5.2%) subjects had an inflamed operculum where as only 1 case (0.2%) was detected with abscess when oral mucosal conditions were observed (Graph 3). There was a significant relation between the clinical dental status and perceived oral health status on daily performance (table V, VI).

TABLE I: Table showing distribution of study population according to the grade of their present condition of mouth.

Grade	Male		Female		Total	
	n	%	n	%	n	%
1- Excellent	34	9.1	7	3.1	41	6.8
2- Good	241	64.3	141	62.7	382	63.7
3- Fair	71	18.9	63	28.0	134	22.3
4-Poor	29	7.7	14	6.2	43	7.2
5-Very poor	0	0.0	0	0.0	0	0.0
Total	375	100	225	100	600	100
Male vs Female χ^2 = 13.0 p < 0.01 S						

TABLE II: Table showing distribution of study population according to how often they have problems with mouth and teeth in last 6 months

Performances	Difficulties			
	Yes		No	
	n	%	n	%
Eating	113	18.8	487	81.2
Drinking	45	7.5	555	92.5
Cleaning teeth	115	19.2	485	80.8
Speaking	51	8.5	549	91.5
Physical activities	6	1.0	594	99.0
Sleeping	21	3.5	579	96.5
Smiling	54	9.0	546	91.0
Emotional stability	9	1.5	591	98.5
Carrying out work	16	2.7	584	97.3
Social contact	17	2.8	583	97.2

TABLE III: Table showing Frequency of Oral Impact on Daily Performance

Daily performances	Frequency of difficulty with daily performances in last 6 months											
	1-Affected once a month		2- Twice a month		3-Once or twice a week		4- 3-4 times a week		5-Every or nearly every day		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Eating	1	0.9	31	27.5	31	27.5	16	14.1	34	30.0	113	100
Drinking	1	2.3	15	33.3	15	33.3	9	20.0	5	1.1	45	100
Cleaning teeth	1	0.8	18	15.7	60	52.2	16	13.9	20	17.4	115	100
Speaking	0	0	8	15.7	21	41.2	6	11.8	16	31.3	51	100
Physical activities	0	0	0	0	4	66.6	0	0	2	33.3	6	100
Sleeping	0	0	3	14.3	12	57.2	2	9.5	4	19.0	21	100
Smiling	1	1.8	6	11.1	19	35.2	6	11.1	22	40.8	54	100
Emotional stability	0	0	3	33.3	4	44.4	1	11.1	1	11.1	9	100
Carrying out work	0	0	1	6.2	11	68.8	1	6.2	3	18.8	16	100
Social contact	0	0	2	11.7	10	58.9	0	0	5	29.4	17	100

TABLE IV: Table showing Cross tabulation of distribution of samples according to their perceived oral symptoms and its impacts on daily performances.

Perceived oral symptoms		Impacts on Daily Performances																			
		Eating		Drinking		Cleaning teeth		Speaking		Physical activities		Sleeping & Relaxing		Smiling		Emotional stability		Carrying out work		Social contact	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Bleeding gums	Y 136	43	31.6*	12	8.8	93	68.4*	7	5.1	1	0.7	5	3.7	12	8.8	3	2.2	5	3.7	7	5.1
	N 464	70	17.9*	33	7.1	22	4.7*	44	9.5	5	1.1	16	34.0	42	9.1	6	1.3	11	2.4	10	2.2
Ulcers	Y 30	11	36.7*	5	16.7*	8	26.7	3	10.0	0	0	1	3.3	7	23.3*	1	3.3	1	3.3	0	0
	N 570	102	17.9*	40	7.0*	107	18.8	48	8.4	6	1.1	20	3.5	47	8.2*	8	1.4	5	2.6	17	3.0
Bad breath	Y 68	20	29.4*	12	17.6*	18	26.5	11	16.2*	1	1.5	4	5.9	8	11.8	4	5.9*	2	2.9	4	5.9
	N 532	93	17.5*	33	6.2*	97	18.2	40	7.5*	5	0.9	17	3.2	46	8.6	5	0.9*	14	2.6	13	2.4
Tooth ache	Y 71	57	80.3*	20	28.2*	12	16.9	7	9.9	1	1.4	6	8.5*	8	11.3	4	5.6*	8	11.3*	2	2.8
	N 529	56	10.6*	25	4.7*	103	19.5	44	8.3	5	0.9	15	2.8*	46	8.7	5	0.9*	8	1.5*	15	2.8
Tooth sensitivity	Y 42	24	57.1*	30	71.4*	7	16.7	2	4.8	1	2.4	0	0	2	4.8	1	2.4	3	7.1	1	2.4
	N 558	89	15.9*	15	2.7*	108	19.4	49	8.8	5	0.9	21	3.8	52	9.3	8	1.4	13	2.3	16	2.9
Food impact	Y 24	9	37.5*	4	16.7	4	16.7	1	4.2	0	0	0	0	4	16.7	1	4.2	3	12.5*	0	0
	N 576	104	18.1*	41	7.1	111	19.3	50	8.7	6	1.0	21	3.6	50	8.7	8	1.4	13	2.3*	17	3.0
Stained teeth	Y 82	21	25.6*	9	11.0	22	26.8	12	14.6*	1	1.2	5	6.1	15	18.3*	1	1.2	1	1.2	5	6.1
	N 518	92	17.8	36	6.9	93	18.0	39	7.5*	5	1.0	16	3.1	39	7.5*	8	1.5	15	2.9	12	2.3
Missing tooth	Y 15	8	53.3*	1	6.7	1	6.7	2	13.3	0	0	3	20.0*	1	6.7	1	6.7	2	13.3	0	0
	N 585	105	17.9*	44	7.5	114	19.5	49	8.4	6	1.0	18	3.1*	53	9.1	8	1.4	14	2.4	17	2.9
Malaligned teeth	Y 335	59	17.6	22	6.6	62	18.5	33	9.9	3	0.9	12	3.6	37	11.0*	4	1.2	10	3.0	7	2.1
	N 265	54	20.4	23	8.7	53	20.0	18	6.8	3	1.1	9	3.4	17	6.4*	5	1.9	6	2.3	10	3.8

 * = p < 0.05   Y = yes,   N = no

TABLE V: Table showing distribution of subjects according to clinical dental status and its impacts on daily performances.

Clinical dental status		Eating		Drinking		Cleaning teeth		Speaking		Physical activities		Sleeping & Relaxing		Smiling		Emotional stability		Carrying out work		Social contact	
		n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
DMFT	Pre 276	79	28.6*	29	10.5*	54	19.6	18	6.5	4	1.4	10	3.6	21	7.6	5	1.8	13	4.7*	5	1.8
	Abs 324	34	10.5*	16	4.9*	61	18.8	23	10.2	2	0.6	11	3.4	33	10.2	4	1.2	3	0.9*	12	3.7
CPI	Pre 398	83	20.9	36	9.0	106	20.6*	37	6.9	5	1.3	15	3.8	40	10.1	7	1.8	8	2.0	14	3.5
	Abs 202	30	14.9	9	4.5*	9	4.5*	14	9.3	1	0.5	6	3.0	14	6.9	2	1.0	8	4.0	3	1.5
L o A	Pre 263	74	22.0*	32	9.5*	102	30.3*	34	10.1	5	1.5	15	4.5	36	10.7	7	2.1	8	2.4	13	3.9
	Abs 337	39	14.8*	13	4.9*	13	4.9*	17	6.5	1	0.4	6	2.3	18	6.8	2	0.8	8	3.0	4	1.5
Mal occlusion	Pre 388	71	18.3	27	7.0	70	18.0	38	9.8	3	0.8	12	3.1	43	11.1*	5	1.3	10	2.6	9	2.3
	Abs 212	42	19.8	18	8.5	45	21.2	13	6.1	3	1.4	9	4.2	11	5.2*	4	1.9	6	2.8	8	3.8
Stained teeth	Pre 189	28	14.8	10	5.3	38	20.1	17	9.0	3	1.6	7	3.7	22	11.6	2	1.1	3	1.6	6	3.2
	Abs 411	85	20.7	35	8.5	77	18.7	34	8.3	3	0.7	14	3.4	32	7.8	7	1.7	13	3.2	11	2.7
Sharp teeth	Pre 20	1	5.0	0	0	1	5.0	3	15.0	0	0	0	0	3	15.0	0	0	0	0	2	2.6*
	Abs 580	112	19.3	45	7.8	114	19.7	48	8.3	6	1.0	21	3.6	51	8.8	9	1.6	16	2.8	15	10.0*
Fracture teeth	Pre 38	6	15.8*	2	5.3	3	7.9	5	13.2	0	0	4	10.5*	9	23.7*	0	0	16	2.8	2	5.3
	Abs 562	107	19.0*	43	7.7	112	19.9	46	8.2	6	1.1	17	3.0*	45	8.0*	9	1.6	0	0	15	2.7
Tooth wear	Pre 25	21	20.0*	18	24.0*	16	21.3	7	9.3	1	1.3	1	1.3	6	8.0	0	0	1	1.3	1	1.3
	Abs 575	92	17.5*	27	5.1*	99	18.9	44	8.4	5	1.0	20	3.8	48	9.1	9	1.7	15	2.9	16	3.0
Oral mucosal abnormality	Pre 37	15	40.5*	3	8.1	7	18.9	1	2.7	3	8.1*	3	8.1	2	5.4	2	5.4*	4	10.8*	2	5.4
	Abs 563	98	17.4*	42	7.5	108	19.2	50	8.9	3	0.5*	18	3.2	52	9.2	7	1.2*	12	2.1*	15	2.7

* = p < 0.05   Pre = present, Abs = absent
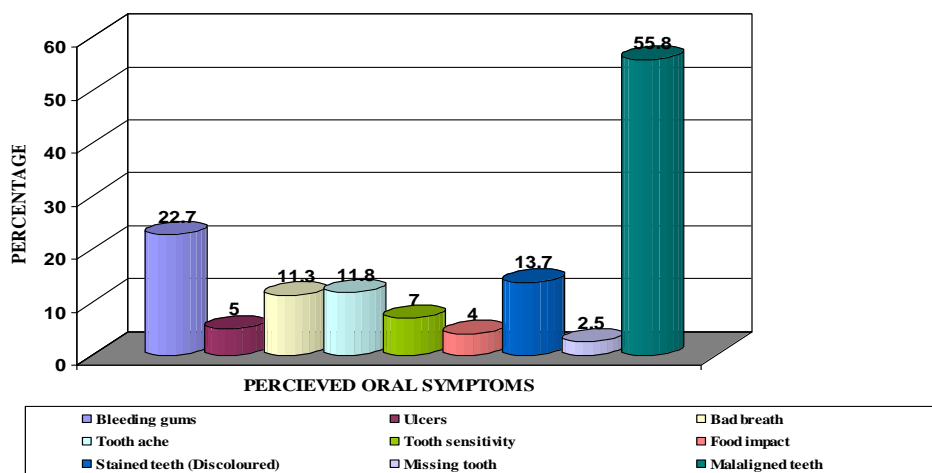
Graph I: Graph showing Distribution of study population by perceived oral symptoms
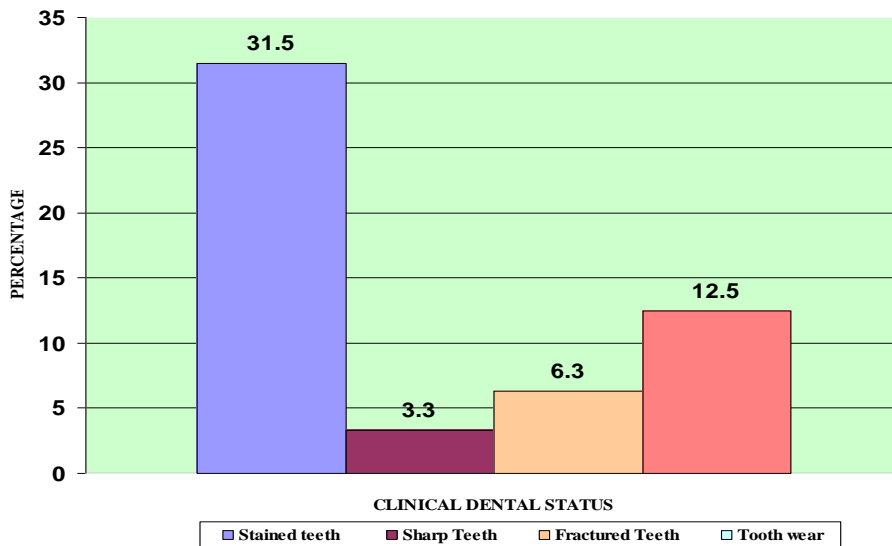
GRAPH II: Graph showing Distribution of study population by Stained teeth, Sharp teeth, Fracture teeth, and Tooth wear status

DISCUSSION

Quality of life (QoL) is increasingly acknowledged as a valid, appropriate and significant indicator of service need and intervention outcomes in contemporary public health research and practice. It is especially useful for evaluating efforts to prevent disabling chronic diseases and assessing their effectiveness.[13] There are 6 (Arts, Science, and Commerce) bachelor degree colleges in the Davangere city, India, where students from different types of socio-economic status and various cultural backgrounds are studying. In the present study, among 600 students it was observed that about 63.7% were perceived that their present condition of mouth was 'good' and only 22.3% and 7.2% perceived 'fair' and 'poor' respectively. It may seem somewhat surprising that younger people perceive oral health as having a greater impact on their life quality than older people. Indeed, many of the quality of life indicators in dentistry have focused primarily on older age groups, partly on the assumption that they will have had a lifetime's experience of oral ill health and thus are likely to perceive oral health as having a greater impact on their quality of life. OIDP was developed in the year 1996, before it was called as Dental Impacts on Daily Life (DIDL).[15] OIDP was used first among low dental disease Thai population in 1996[10] and in the year 2003 it was used among Tanzanian students[7]. In the present study the Oral Impacts on Daily Performances were mainly induced by pain, discomfort and appearance. The impact of oral status on 10 aspects of daily performances in this study were considerably, consistent with two other studies,[7,10] except these two studies used a scale of 8 and 9 respectively. In the present study 'drinking' was added to the previous scale as most of the subjects complained tooth sensitivity during drinking water in the pilot study.

The present study raised an issue towards unexpectedly high prevalence (48.3%) of young adults who reported that an oral problem had affected one daily performance in 6 months preceding the survey. Although the participants had relatively fair oral health, their quality of life was adversely affected by oral problems. Our study prevalence was in concurrence with other study report of Masalu JR et al (51%)[7] and was higher than that of studies conducted by Astrom AN et al (18.3%)[16] as well as Soe KK et al (15.8%)[17] However some studies showed a higher prevalence compared to ours (73.6%, 73%).[6,10] In the present study, it was observed that high frequency of impacts was on smiling, physical activities, speaking, eating, and social contact performances, where as sleeping,

carrying out work, cleaning teeth, emotional stability, drinking water were with a low frequency, consistent with the study conducted among Thai population.[10] Apart from methodological differences such as the variations in the measures of oral health related quality of life that has been used, there are several reasons as to why the prevalence of oral impacts could vary between populations. First, as the prevalence and severity of oral conditions vary among populations in different countries, they may also experience oral impacts related to different aspects of their lives in varying frequencies. Secondly, people of different social, cultural and ethnic groups differ in their perception of what aspects of their oral health will affect their quality of life. Thirdly, values and attitudes towards oral health could strongly influence the reporting of impacts. Individuals who place little value on their teeth are probably less likely to report being self conscious or emotionally disturbed due to their oral health. Fourthly, the phenomenon of "internalization" or "adaptation" by which an individual learns to live with the symptoms could influence the reporting of impacts. For example an individual who had experienced tooth loss could adapt to such a condition and may respond by learning to live with the symptoms such as difficulty in chewing. As a consequence the symptoms may not have an impact on the individual.[5] In the present study the prevalence of individual impact items was evident that the most commonly experienced impact item 'Cleaning teeth' was 19.2%. The reason behind this might be gingival or periodontal condition, as observed by CPI and LOA findings also or may be malocclusion. Various studies showed differing impact in cleaning teeth (20.8%, 17%, 31.9%).[6,7,10]

Similarly positive CPI score findings (66.3 %) was a most prominent clinical condition in these students. Even though the maximum percentage (74.8%) of subject's perceived satisfaction with appearance of their teeth, but the clinical finding showed that slight, moderate or severe malocclusion status was 64.7%, which was almost similar to 65.7%, found in the study conducted on Thai population.[10] Other studies showed a fair periodontal status when compared to our study. Difficulty in 'Eating' was found to be 18.8% which was a second most affected performance in our study; this may be due to tooth decay or missing teeth. Our results were very low compared to other studies (40%, 49.7%, 43.5%) [6,7,10,] and the reasons were varying from tooth ache, decay to eruption of teeth. Even oral impacts assessed by using Oral Health Impact Profile (OHIP) shows the most commonly experienced impact item was "uncomfortable to eat" in a study conducted in Srilanka.[5] The oral impacts from missing teeth had affected their daily performances and even same was observed in the study conducted by others.[8,18] The impact of oral health problems on the quality of life reduces with increasing age, which is independent from the effect of tooth loss. Before assuming that this is entirely age-related trend, it is important to put this observation into context. As the data are cross-sectional, it is feasible that some of these age- related effects are cohort dependent.[18]

Stained teeth was one of the clinical condition found in 31.5% of the population in our study and this was high compared to study of Locker D (17.4%).[19] This may be due to consumption of high fluoride water, among rural population in Davangere.[20] Only 6.3% of our study subjects had fractured teeth and this was lesser than that of previous studies.[19,21] The students with fractured teeth were having a high impact on functions like smiling and speaking. Tooth wear was less prevalent (12.5%) in this study but it significantly affected the drinking performance as perceived by the subjects. Sharp teeth prevalence was very less (3.3%) in this study and did not affect any daily performances. Oral soft tissue lesions (6.2%) were observed in study subjects, and were lower when compared to study conducted by Locker D (13.5%).[19] In the present study, there was a significant association between perceived oral symptoms and clinical dental status. Those who perceived the impacts on daily performance had one or more clinical findings. It was interesting to note that some performances had

very less impact (social contact, carrying out work, emotional stability and physical activities) which is in contrast to a study. Study conducted by Slade GD et al [22] showed that even if clinical levels of disease were held constant, the stratum differences will continue in levels of social impact. This is consistent with clinical experience, whereby two patients with similar clinical conditions can have very different reactions to those conditions. These observations confirm with the well-established distinctions that medical sociologists have made between the concepts of disease, which is defined by the people who experience an episode of disease. It highlights the need for oral health to be considered in the same way that general health is seen, not simply as the absence of disease but rather as a positive resource for life. Such concepts are particularly important for developing health policy, and they are becoming critical issues as the dental profession seeks to become more accountable to community and consumer needs.[22-28] In future, similar studies including different age groups, different type of scales, socio economic status and with blinding in study designs could be done. To conclude, this study revealed that students attending degree colleges had a fair clinical dental status and there was a strong and consistent relationship between dental status and perceived impacts. 48.3% were affected daily by at least one or the other problems. Oral health often appears to be a low priority issue for Government and health policy makers. Considering the above points it is recommended to introduce compulsory oral health education for college students in clinics as well as in community and educational institutes so as to bring down the existing oral health needs. A stress on comprehensive treatment care should be planned and executed[22,32].

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