

# Deciphering the self-perceived dilemma of oral health among university students

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## Abstract

**Objective:** The aim of this study is to assess self-reported oral health knowledge and practices among academicians of province of Sindh, Pakistan

**Methodology:** A descriptive cross-sectional study was conducted with the help of a self-administered questionnaire, among students from all academic years of different colleges in province of Sindh, Pakistan. Sample size was calculated to be 647. The questionnaire inquired about demographic details of students which included students' age, gender and specialty. First part of questionnaire assessed knowledge of the students about their oral health care while the second part was based on practices. Results were defined using descriptive statistics.

**Results:** Results showed that students from all three departments participated equally in the study, while females were seen to be in majority among the sample. A huge number of respondents went to visit dentists only when needed. Tooth brush with tooth paste was found to be the commonest method of teeth cleaning. Most of the respondents believed that smoking has harmful effects on teeth and oral conditions cannot be isolated from systemic problems. Once daily brushing was reported among most of the students with frequent sugary food intake and habit of having snacks between meals. Major reason for delaying dental visit was cost factor.

**Conclusion:** Despite proximal access of dental services, most of the students did not have the habit of visiting dental clinic timely and lacked sufficient awareness about oral health care. It is therefore recommended that comprehensive awareness sessions be conducted for students.

## Introduction

Oral wellbeing is a straightforward and essential piece of undergrads' lives yet may regularly be ignored or undermined as a result of expanded feelings of anxiety and unfortunate propensities related with the school setting. Although quite difficult, school days might be a standout amongst other circumstances to build up long lasting solid habits, including oral wellbeing schedules [1]. Well maintained dental wellbeing not only elevates a person to look and feel good, it additionally helps in saving oral activities. Oral wellbeing is viewed as a vital piece of a person's general wellbeing [2].

The proceeding increment in the predominance of dental caries and periodontal infections in the developing nations makes it necessary to present essential oral health care in the educational modules of public wellbeing courses. The securing of proper information and identifying with oral wellbeing, oral maladies, anticipation and administration of dental issues is imperative [3,4,5].

As undergraduates and post graduates change from pre-adulthood into adults, their wellbeing propensities may influence their future health inclinations. Amid this progress, the individuals who have poor oral hygiene may acquire better habits in the event that they are given good counsel. Accordingly, it is fundamental and vital to look at students' wellbeing practices on the basis that these practices affect students' physical wellbeing and ways of life as they grow [6]. Studies have found that undergrads with better self-assessed wellbeing status or those studying in health sciences related fields are occupied with healthier practices and had more positive wellbeing related demeanors and propensities than different students had. For instance, medicinal school students hold fast to a more positive, healthy ways of life than non-health related students [7].

The association between awareness and behaviour has been discussed earlier too [8]: knowledge, behaviour, cognition and capabilities are predispositions to act. And this relation happens to be much significant in professionally qualified people when compared to general people [9,10].

Oral self-care practice is a successful preventive measure for keeping up great individual oral wellbeing which is a necessary piece of one's general wellbeing. For dental wellbeing experts, their health convictions and states of mind influence their oral self-care measures as well as conceivably impact their capacity to persuade patients to embrace preventive oral health care methods [11,12]. This thus affects peoples comprehension of preventive oral wellbeing measures [9]. It is in perspective of this vital connection that Kawamura *et al* [13], pushed for undergrad dental training to incorporate extensive projects in preventive care that enables dental practitioners to propel patients for oral self-care. Such instructive exertion should empower dental understudies create stable wellbeing practices [12] which are not impacts by individuals' qualities [10,14].

Aim of current investigation is to get to self-revealed oral wellbeing practices, demeanors and way of life among Students of Sindh, Pakistan

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## Program wise distribution of sample

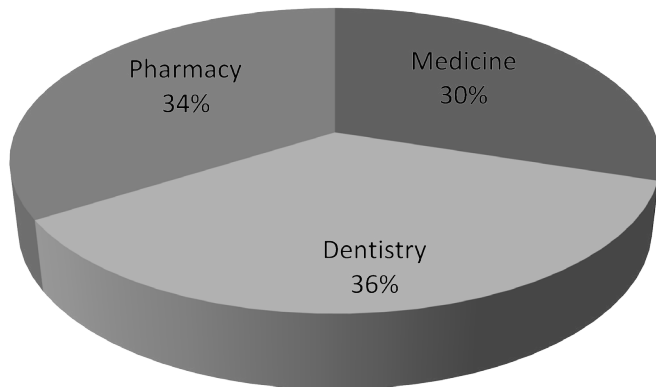


Figure 1. Program wise distribution of sample

## Gender wise distribution of sample

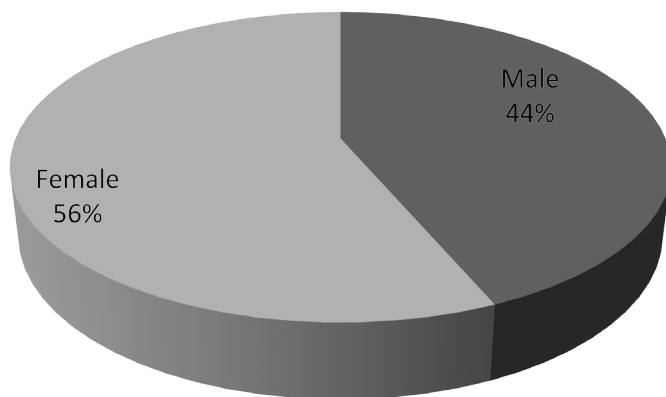


Figure 2. Gender wise distribution of sample

## Objectives

To assess oral hygiene practices, problems, awareness and habits among students of Sindh colleges, Pakistan.

## Methodology

Data was collected in person and also via online form distributes among students undergoing graduates and postgraduate studies in different colleges of province of Sindh, Pakistan. It is a cross sectional descriptive study. Sample size was 647. Among them number of respondents who were as students undergoing severe stress or depression and absent at the time of survey were excluded, as depression can lead to false positive reporting of results. Consent was taken prior to filling of questionnaire from all students. Data from these students was collected using a structured self-administered questionnaire. The questionnaire comprised of demographic details as age, gender and specialty of the student, however anonymity was assured by not recording the name of the respondents. First part of the questionnaire comprised of questions about knowledge related to oral health which included dental visits information, usage of several cleaning equipment and methods, and effects of smoking and dietary habits. Second part of the questionnaire comprised of behavior and practices about oral health care. The questions included were about frequencies of meals and brushing. Also questions regarding delaying dental visits were included.

## Results

Among reasons for visiting the dentist, dental pain or emergency was the most reported reason according to students (69.40%). Esthetics was the second main reason (22.72%). Reasons for delaying the visit cost (39.88%), time shortage (27.67%) and fear of dental procedures (20.40%). Frequency of teeth brushing only once daily was found among majority of students (41.58%). Most of the students (72.49%) believed that smoking is the causative of agent of oral cancer and majority (70.02%) believed that oral health and general health is inter-related.

## Discussion

Patients must be well informed regarding correct practices and increase awareness of oral diseases by their health care providers. The fact that these students are future health care takers of nation, they must inherit proper oral health care measures, behavior and attitude during their study course, so they can guide patients in a proper manner. In Pakistan students are exposed to patients in their third years during their clinical and hospital rotations. Although studies had been conducted in different parts of the globe accessing oral hygiene perception among students [13,14,15]. In Pakistan very few studies have given serious consideration in this regard.

The results demonstrated majority of the students had concern regarding their oral health status. This is in line with study conducted among Turkish students. Previous researches have also depicted that dental hygiene practices are defined by gender and female members

Table 1. Knowledge about oral health

		N= 647
Appropriate age for first dental visit	during first year of life	142 (21.95%)
	after eruption of all primary teeth	52 (08.03%)
	unless needed	453 (70.02%)
Best teeth cleaning aid	tooth brush only	12 (01.85%)
	tooth paste with finger	3 (00.46%)
	tooth brush with tooth paste	255 (39.41%)
	dental floss	35 (05.41%)
	chlorehexidine mouthwash	102 (15.77%)
	brushing and flossing	240 (37.09%)
Is flouride beneficial for teeth	yes	387 (59.81%)
	no	260 (40.19%)
Tooth paste is chosen because of	flavour	116 (17.93%)
	price	110 (17.00%)
	effectiveness	158 (24.42%)
	brand	263 (40.65%)
Knowledge about diet	sugar is harmful for teeth	139 (21.48%)
	fresh fruits are good for teeth	189 (29.21%)
	flavoured juices are good for teeth	56 (08.66%)
	soft drinks are erosive	263 (40.65%)
Smoking habit and its effect on health	smoking causes oral cancer	496 (72.49%)
	smoking causes staining of teeth	138 (21.33%)
	smoking has no effect on teeth	13 (02.01%)
Influence of oral health upon general health	oral health has an impact	453 (70.02%)
	oral health has no impact	194 (29.98%)

**Table 2.** Oral health Practices

Oral health Practices		N=647
Frequency of tooth brushing	once daily	269 (41.58%)
	twice daily	122 (18.86%)
	once weekly	119 (18.39%)
	do not brush regularly	137 (21.17%)
Frequency of sugar intake	once daily	263 (40.65%)
	more than once daily	250 (38.64%)
	once or twice weekly	97 (14.99%)
	do not take sugars	37 (05.72%)
Last dental visit	last month	67 (10.36%)
	last year	287 (44.36%)
	more than a year ago	164 (25.35%)
	don't remember	129 (19.94%)
Reason for visiting the dentist	dental pain	449 (69.40%)
	esthetics	147 (22.72%)
	routine check up	51 (07.88%)
Reason for delaying dental visit	fear	132 (20.40%)
	cost	258 (39.88%)
	distance	78 (12.06%)
	time constraints	179 (27.67%)
Frequency of meals per day	two	38 (05.87%)
	three	153 (23.65%)
	more than three with snack between meals	456 (70.48%)

of the society have shown to be in a position of better maintaining their dental health [16,17]. The fact that in Pakistan, ratio of Females in medical school is much high than males can be one of the reasons, for this increased concern regarding their aesthetics. This increased concern is also found in a similar study [19].

The oral hygiene habits of this sample were different from previous studies as 41.58% reported only once daily brushing and alarmingly 21.17% said that they do not brush regularly. Tooth brushing and flossing habits have been studied previously too, wherein it has been reported that most of the respondents brush twice daily or more, however, the usage of dental floss continues to stay low [20, 21, 22, 23]. Just like a study conducted in Turkey showed that 67.6% and another one conducted in Italy showed that 92.1% of university students had a habit of brushing their teeth twice or even more daily, although dental flossing was only seen in 14.9% of Italian students and 3% of Turkish students [24,23].

A study by Baseer MA et al reported concern among dental students regarding their oral hygiene, overall these reported students had poor oral health awareness which was contrary to our findings where Students were well aware of their dental hygiene. This can be a clear indication of increase awareness programs among dental students in Pakistan regarding Oral Hygiene than in students of Middle East.

The relatively frequent use of sugary foods intake by students may be because of their dependence and easy access to dental facility when need be. Although this aspect has to be investigated even more. Studies done in past have shown that instead of free and easy availability of dental care, dental visits were not seen among a large number of students [25, 26, 27]. A study in Jordan showed that 80% of the sample visited their dentists only for emergency treatments [24].

Overall, the habits of university students towards maintaining their oral hygiene was much lower than should have been among health

sciences students. Programmed dental health education sessions may be incorporated in all specialties of health sciences to promote good dental hygiene maintenance [24].

## Conclusion

Confounding factors in present study was unequal ratio of gender due to increase female students, perception of students from different socioeconomic backgrounds have variations in their course fees and cultural differences. Further studies taking into consideration these factors and on a larger scale can reveal more interesting findings.

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