

Awareness on Prevention of Common Oral Diseases Among Non –Dental Undergraduate Students of University of Peradeniya

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Abstract: In Sri Lankan context, dental caries, periodontal diseases and oral cancers are the common oral diseases with a higher prevalence. Objective of this study was to assess the awareness on prevention of common oral diseases among non-dental undergraduate students of University of Peradeniya. A descriptive cross-sectional study was conducted among 489 non-dental undergraduate students in University of Peradeniya. A self-administered questionnaire was used to collect data in the study. Awareness of the participants was categorized into three groups according to the scores they have obtained ≥ 75 –High Awareness, 74-50 –Moderate Awareness, ≥ 50 –Low Awareness. (Data was analyzed using SPSS version 25 and 0.05 p value was considered as the level of significance. Out of 489 students, 243)49.7 (%were male and 246)50.3 (%were female. Majority of the participants)82.82 (%had lower awareness level on prevention of common oral diseases while only 0.2 %had high awareness. Students from faculty of Medicine were having the highest awareness and students from faculty of Management were having the lowest awareness. Statistically significant difference was observed in awareness levels between the health related and non-health related faculties) $p < 0.01$ (This study reveals that the non-dental undergraduates of University of Peradeniya have a low awareness on prevention of common oral diseases. Thus, it is suggested to make measures to improve awareness on common oral diseases among the university students ’

population which will be very effective in preventing oral diseases and building up a healthy population.

Keywords : Common oral diseases, Awareness on prevention, University undergraduates

Introduction:

In recent time, oral health has gained equal importance as general health in the world. Furthermore, knowledge regarding oral health has been introduced as an important factor that determines overall health. Various oral diseases such as Dental caries, Periodontal diseases and Oral cancers are considered to be major public health problems worldwide and they can be 100 %prevented)Vodanovic, 2013.(

Dental caries also called as tooth decay, is one of the most common and most preventable diseases. Dental caries is the localized destruction of susceptible dental hard tissues by acidic productions from bacterial fermentation of dietary carbohydrates) Selwitz, Ismail and Pitts, 2007. (Dental caries is still a major health problem in most industrialized countries as it affects 60 %– 90 %of school-aged children and the enormous majority of adults)Petersen *et al.*, 2005. (Periodontal or gum disease is an inflammatory condition of the gum, alveolar bone, connective tissue attachments and periodontal tissues surrounding the teeth)Loe, 1993. (This is said to be the most common chronic disorder of the humans)Williams, 1990. (There are two main categories of periodontal diseases, namely gingivitis and periodontitis. Mouth cancer or oral cancer can

be identified anywhere in the oral cavity, the surface of the tongue, on the lips, in the gums, inside the cheeks, in the tonsils and in the salivary glands .Tobacco, alcohol, betel and similar products are prominent risk factors for the mouth cancer)Scully and Porter, 2001 .(Oral cancer is the commonest cancer among males and 3rd commonest among females in Sri Lanka)‘International Congress on Oral Cancer, Smokeless Tobacco and Arecanut ICO’, no date .(The burden of common oral diseases is especially high for the disadvantaged and poor population groups in both developing and developed countries .Main reason is the arrangements for oral health care in developing countries, like Sri Lanka is limited due to inadequate dental manpower, financial resources, and lack of knowledge need for dental care among the people)Gunawardena et al, 2016.(

According to Global Burden of Disease study, unrelated tooth decay has become one of the most common disease conditions in 2010 .But it can be prevented through simple and cost-effective interventions .Reducing sugar consumption and promoting good delivery habits are the main preventive measures of the tooth decay . Exposure to fluoride and universal access to primary oral healthcare are most cost-effective preventive measures .Periodontal disease is a major public health problem that challenges health systems around the world . However, in prevention of periodontal disease, low exposure to risk factors such as alcohol or tobacco use, good personal oral hygiene, awareness and regular check-ups are important elements .Early detection and management are another important preventive measure for periodontal disease . Generally, death rates for oral cancer become increased .Early detection and timely

referral directly help to the treatment and prevention for the oral cancer) FDI, 2015(

Knowing the preventive methods for the common oral diseases would help the prevention and early detection of the diseases . University students come across a great number of people of different age groups from different backgrounds in their day to day course of study hence with proper knowledge and oral health behaviors they can act as role models for their family and community at large .Therefore, aim of this study was to identify the level of awareness on prevention of common oral disease amongst the non-dental students of University of Peradeniya .And to determine the awareness on prevention of common oral diseases according to gender and the studying faculty .

Methodology:

This study was designed as a descriptive cross-sectional study and 489 students were selected from eight faculties of University of Peradeniya, Sri Lanka .Since Dental students get to learn about the preventive methods of common oral diseases as a part of their curriculum, they were exempted from the study sample to avoid bias . Stratified random sampling method was used as the sampling technique. Data was collected using a pre-tested self-administered questionnaire .The questionnaire consisted of demographic information, open and closed ended questions related with prevention of common oral diseases .Awareness of the participants was categorized into three groups according to the scores they have obtained for the questionnaire) ≥ 75 –High Awareness, 74-50 –Moderate Awareness, ≥ 50 –Low Awareness.(Data analyze was done using SPSS version 25.0 .Categorical data was described using frequencies and percentages giving the 95 %confident intervals .Continuous scale data was described using mean values. Significances were assessed at the *p* value of 0.05.

Results and Discussion:

This study was conducted in University of Peradeniya using a sample of 489 students from eight faculties to determine the awareness on prevention of common oral diseases among non-dental undergraduate students of University of Peradeniya. These 489 participants who responded for the study were from both health related and non-health related faculties.

Total number of students in health-related faculties was 139)28.4 (%and number of students in non-health related faculties was 350)71.6 .(%As a whole there were 243)49.7 (%male and 246)50.3 (%female in the study conducted.

Table 1 :Distribution of the sample

		Gender		
		Male	Female	Total
Type of Faculty	Non-Health Related	Count 174	176	350
		%of35.6%	36.0%	71.6%
Total				
Health Related	Count	69	70	139
	%of	14.1%	14.3%	28.4%
Total				
Count		243	246	489
%of		49.7%	50.3%	100.0%
Total				

Out of the 489 participants, a majority of 405)82.8(% participants scored less than 50 marks which was considered as ‘Low Awareness’. Among the participants, 83 undergraduates) 17.0 (%scored between 74 and 50 for the questionnaire and they were at the level of ‘Moderate Awareness’. Only 1 participant) 0.2 (%obtained more than 75 marks and that undergraduate student was the only participant with ‘High Awareness’ level. Mean percentage score of male students was 37.36 and for female students it was 37.36. There was no significant difference in the mean scores of the students according to the gender.

Table 2: Awareness on prevention of common oral diseases

			Awareness of Prevention			Total
			Low Awareness	Moderate Awareness	High Awareness	
Gender	Male	Count	198	45	0	243
		% within Gender	81.5%	18.5%	0.0%	100.0%
	Female	Count	207	38	1	246
		% within Gender	84.1%	15.4%	0.4%	100.0%
Total		Count	405	83	1	489
		% within Gender	82.8%	17.0%	0.2%	100.0%

These results may be an indicating the low knowledge of the undergraduates’ lack of knowledge for day today health information. Because disregard of the gender, 82 %of the whole population are at low awareness levels for the undergraduate this level is not acceptable whether they are related to health field or not as they have the power to deliver information to the society.

Awareness level on the prevention of common oral diseases were assessed according to the faculty of the participants and the highest awareness level was observed in Medical Faculty with a moderate awareness level in 50 %of the participants. In contrast, faculty of Management displayed the lowest awareness level where the moderate awareness was 2.2. % The only participant who displayed a high awareness was from the faculty of Medicine. These results may be due to the reason that the medical students are getting knowledge regarding these disease conditions and students studying non health related subjects

are not getting that much of knowledge on oral diseases.

Following table displays the different types of awareness levels in different faculties.

Table 3 :Awareness on prevention of common oral diseases according to the faculty

Faculty of	Level of awareness			Total
	Low	Moderate	High	
Faculty of Agriculture	Count 52	12	0	64
	%of Total 81.3%	18.8%	0.0%	100.0%
Faculty of Allied Health Sciences	Count 28	17	0	45
	%of Total 62.2%	37.8%	0.0%	100.0%
Faculty of Arts	Count 75	5	0	80
	%of Total 93.8%	6.3%	0.0%	100.0%
Faculty of Engineering	Count 76	4	0	80
	%of Total 95.0%	5.0%	0.0%	100.0%
Faculty of Management	Count 44	1	0	45
	%of Total 97.8%	2.2%	0.0%	100.0%
Faculty of Medicine	Count 31	32	1	64
	%of Total 48.4%	50.0%	1.6%	100.0%
Faculty of Science	Count 77	4	0	81
	%of Total 95.1%	4.9%	0.0%	100.0%
Faculty of Veterinary Medicine and Animal Sciences	Count 22	8	0	30
	%of Total 73.3%	26.7%	0.0%	100.0%
Total	Count 405	83	1	489
	%of Total 82.8%	17.0%	0.2%	100.0%

When the faculties considered as health related and non-health related faculties, a statistically significant difference could be identified between the type of faculty and level of awareness according to the paired t-test $p < 0.001$.

Table 4 :Level of awareness according to the type of faculty

Type of Faculty	Count	Awareness Level of Prevention			Total
		Low	Moderate	High	
Non-Health Related	Count	324	26	0	350
	%within Type of Faculty	92.6%	7.4%	0.0%	100.0%
	Awareness of Prevention	80.0%	31.3%	0.0%	71.6%
Health Related	Count	81	57	1	139
	%within Type of Faculty	58.3%	41.0%	0.7%	100.0%
	Awareness of Prevention	20.0%	68.7%	100.0%	28.4%
Total	Count	405	83	1	489
	%within Type of Faculty	82.8%	17.0%	0.2%	100.0%
	Awareness of Prevention	100.0%	100.0%	100.0%	100.0%

Conclusion

This study reveals that the non-dental undergraduates of University of Peradeniya are having a low awareness on prevention of common oral diseases. Furthermore, level of awareness on prevention of common oral diseases among undergraduates from non-health related faculties is significantly lower than the undergraduates from health-related faculties, while male and female non-dental undergraduates show no significant difference on awareness levels. Thus, it is suggested to make measures to improve awareness of common oral disease among the university student population which will be very effective in prevention of oral diseases and building up a healthy population.

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