Oral Health Status among Medical Students: A Comparative Study between Egyptian and Malaysian Students

Noha M. Elghazally[1*], Abdelaziz F. Aldeib[1], Shimaa M. Saied[1]
[1]Public Health and Community Medicine Department, Tanta Faculty of Medicine, Tanta University, Egypt

Abstract:
Background: Good oral health is a vital component of general health. Maintaining full oral hygiene via personal and specialized care is the best prevention for dental health problems. This study aimed to compare the oral health status and oral hygiene among Egyptian and Malaysian medical students at Tanta University, Egypt. **Methods:** A comparative cross-sectional study was conducted among Egyptian and Malaysian students at Tanta Faculty of Medicine using WHO self-administered questionnaires to collect data concerning oral health status and oral hygiene habits. **Results:** The study included 426 undergraduate medical students (202 Malaysian and 224 Egyptian), two thirds (66.4%) of Egyptian students had pain or discomfort in their teeth or mouth during the past twelve months compared to only 39.1% of Malaysian. One-third (33.7%) of Malaysian students reported the good condition of their teeth and gums compared to 37.5% of Egyptian students. Among Malaysian students, 65.8% reported daily brushing of their teeth twice or more, whereas only 28.1% of Egyptian students did, with statistically significant differences. **Conclusion:** Defective oral hygienic practice was especially noted among Egyptian students necessitating the implementation of oral health promoting programs for children and adolescents.

Keywords: Egypt, Malaysian, Medical Students, Oral Health, Oral Hygiene

Introduction:

Oral health is a status of being free from the chronic pain in the mouth or face, the absence of oral and throat cancers, oral sores, or birth malformations as cleft lip and palate, gum complaints, dental caries, and teeth losses. Risk factors for oral illnesses include harmful eating habits, tobacco smoke, harmful alcohol use, and poor oral cleanliness.(1) Oral health is known to be among the main factors which are responsible for general health as well as well-being. Good oral hygiene practice includes teeth brushing twice a day with fluoride toothpaste, cleaning between teeth once a day with floss or another interdental cleaner, replacing toothbrush every three or four months and by eating a balanced diet and limiting between-meal snacks. In addition, scheduled regular dental check-ups are of ultimate importance to keep good oral health status.(2)

Oral diseases represent a major public health problem as the majority (90%) of school children globally and most of the adults have experienced caries, with the disease being most prevalent in Asian and Latin American countries.(3) These could be attributed to several factors, mainly the lack of oral health awareness and overconsumption of refined carbohydrates.(4) In developing nations, the achievement of oral health, a fundamental component of universal health and well-being, is hampered by a diversity of barriers, including the cost, deficient access owing to staff shortage, and unequal distribution of the dental workers, unnecessary fear, worry and poor oral health literacy and inconsistent beliefs, negative attitudes, and bad oral health behaviors.(5,6) In

***Corresponding author:** nohaelghazally1@gmail.com

2014, the first Egyptian nationwide survey to collect comprehensive data on the oral health status among adults and children highlighted significant and substantial oral health disparities within the Egyptian population.[7]

Evidence has shown that satisfactory knowledge of oral health is linked to enhanced oral care practice and additional encouraging attitude concerning oral health; also, proper oral health education can assist the adoption of a healthy oral practice.[8,9]

Medical students are exposed to numerous stressors, such as a desire to succeed, an uncertain future, difficulties in integrating into the health system and in dealing with patients which might affect their oral health practices.[10] The medical students are expected to play a valuable role in health promotion and preventive information dissemination among their families, friends, patients, and their community as well. Therefore, their oral health status and hygienic practices should be perfect to set a role model for everyone. The objective of this study was to compare the oral health status and oral hygiene among Egyptian and Malaysian medical students at Tanta Faculty of Medicine.

Methods:

This cross-sectional study was conducted at Tanta Faculty of Medicine, a governmental faculty located in the Nile Delta. The study plan was composed of six academic grades (three pre-clinical for fundamental sciences and three for clinical study and practical training), followed by a one-year internship. Malaysian program has been founded in Tanta Faculty of Medicine since 2004. Students were divided in each academic grade into groups according to the schedule of the practical training. This study was conducted during the period from October to January 2017. The calculated sample size was 384 using Epi-Info software created by World Health Organization and Center for Disease Prevention and Control, Atlanta, Georgia, USA version 2003 with an assumed prevalence of 50% of good oral hygienic practices with a confidence interval of 95% with an error bound of 0.05. The sample was increased for better accuracy and to compensate for potential unresponsiveness and incompleteness; a total of 450 questionnaires were distributed, and 430 returned with response rate 95.55%, and four questionnaires were excluded because of incomplete data.

Participants were randomly selected from second, third, and fourth academic grades (1st year was excluded due to very few numbers of Malaysian students in that grade, 5th and 6th grades could not be contacted at the time of the study due to their interrupted college attendance as they were performing their final examination and were taking vacation). One group of Egyptian students was chosen randomly from each academic grade with the inclusion of all Malaysian students in the selected grades due to their few numbers.

Inclusion Criteria were second, third and fourth grade medical students willing to give consent & complete the questionnaire. Exclusion Criteria were students not in the specified grades and those with apparent oral health problems. By the end of the study, 426 undergraduate medical students (202 Malaysian students and 224 Egyptian students) were included.

Data Collection and Instruments: A valid and reliable, self-administered structured, close-ended questionnaire was employed for data collection. It consisted of three sections: The first section included demographic data as gender, age, academic level, marital status, and economic level. The second section consisted of questions assessing oral health status and practice that was adapted from WHO questionnaire for collection of self-assessed data on oral health and risk factors in adults[(11)]; it included questions related to the status of teeth and gums, practice of cleaning teeth (Experience of pain/discomfort from teeth and mouth, self-assessment of status of teeth and gums, frequency of teeth cleaning, use of aids for oral hygiene, use of toothpaste containing fluoride, dental visits, reason for dental visits, experience of reduced quality of life due to oral problems, consumption of sugary foods and drinks, use of tobacco: type and frequency). The third section included questions regarding consumption of food or drinks that may affect teeth and gum health.

Ethical considerations: Participants' consents were obtained after a brief explanation of the purpose of the study, and personal data confidentiality were guaranteed. Tanta Faculty of Medicine Research Ethics Committee (REC) approved the study. The research was conducted in full accordance with the World Medical Association Declaration of Helsinki. In the covering letter of the questionnaire distributed to the students, it was stated that answering the written questions was on a voluntary basis, and on approving that, they consented for the anonymous use of the information given for research purposes only.

Analysis: Data were coded, entered, and then analyzed using Statistical Package for Social Sciences software, version 21.0 (SPSS Inc., Chicago, IL). Descriptive results were expressed as frequency, percentages, and mean ± S.D. *P*-values ≤0.05 were accepted as statistically significant. Pearson chi-square was used to test significant relationships between categorical variables. A difference in means between groups was carried out using independent sample t-test.

Results:

As shown in Table 1, the mean age of Malaysian students was 23.11+1.872 years and 19.52+1.637 years for Egyptians, and the difference was statistically significant. Most of the Malaysian students (82.2%) and more than a half of Egyptian ones (59.8%) were from urban areas, with a statistically significant difference.

About two thirds of Malaysian students (64.9%) and about half of Egyptian students (51.3%) reported that their income was enough with savings, and the difference was statistically significant.

Table 2 reveals that two thirds (66.4%) of Egyptian students had pain or discomfort in their teeth or mouth during the past twelve months compared to only 39.1% of Malaysian students, with a statistically significant difference. Nearly one third (33.7%) of Malaysian students described the condition of their teeth and gums as good, in comparison to 37.5% for Egyptian students with a statistically significant difference. Near two thirds of Malaysian students (65.8%) reported that they brushed their teeth daily twice or more, whereas only 28.1% of Egyptian students did, with a statistically significant difference. Toothbrush was reported to be the most common oral cleaning aid among the study participants. Malaysian students commonly used other cleaning aids like plastic toothpicks and dental threads more than Egyptian students, with a statistically significant difference. The toothpaste containing fluoride was used among most of the Malaysian students (96.0%) compared to 76.8% of Egyptian students, with a statistically significant difference. The most common cause of the dentist`s visit was routine checkups among 38.6% Malaysian students, whereas pain or trouble in teeth or gum was the commonest among Egyptian students (43.1%), with a statistically significant difference.

From Table 3, it was clear that among Malaysian students, the daily consumption of biscuits, chewing gum containing sugar, sweets and candy, soft drinks and drinking sugared tea was less than Egyptians, and the difference was statistically significant.

Discussion:

Oral health is shown to be a crucial factor responsible for good general health and well-being. Among Malaysian students, about two thirds (65.8%) reported that they brush their teeth twice daily. Similar findings were reported by Kakkad et al. among engineering students in North Bangalore, and Pelzer, and Pengpid reported that average percentage of all studied students who brush their teeth twice daily was (67%) in 26 low, middle- and high-income countries.[12,13] However, it is slightly lower than the findings of a study excuted by Halawany et al.[14] in four Asian countries (Saudi Arabia, United Arab Emirates, Yemen, and India) as 71.8% of female students reported brushing their teeth twice a day. Another study in Turkey (2011), reported that 74% brush their teeth twice per day.[15] On the other hand, among Egyptian students, only 28.1% reported that they brush their teeth twice daily, which was slightly higher than the figure reported by Pelzer and Pengpid among Egyptian university students as 26.1%.[6] These findings were also in accordance with the results of the Egyptian national-based study in

2014 which reported that 77% of the examined individuals do not brush their teeth on a regular basis.[10] Other studies among university students enrolled in Zulfi female colleges of Majmaaha University, KSA, (in the academic year 2016-2017), and in India among medical undergraduate reported that 42.4% in KSA and 42% were using brush twice a day.[16,17] This defective practice of regular brushing could be attributed to the shortage of oral hygiene education in primary schools or negligence due to the busy study schedule.

The use of toothbrush was reported to be the most common cleaning aid for oral prophylaxis among the study population. Additionally, Malaysian students also used wooden toothpicks, plastic toothpicks, dental thread and Miwok in cleaning their teeth more commonly than Egyptians did. These findings agreed with Abidin et al. who reported toothbrushes, flossing, and toothpicks among the commonest methods of teeth cleaning among the studied Malaysian dental students.[18] Recently, Miswak chewing sticks or their extracts have a therapeutic effect on gingival diseases.[19]

Fluoride toothpaste was the most common type used by most of our study participants. This was higher than that reported by Doshi et al., in India, where 48.5% of engineering students and 58.7% of medical students used fluoridated toothpaste.[7] This indicates the adequate practice of the participants regarding the use of fluoride toothpaste as it has an effective role in reducing dental caries.[20]

About half of Malaysian students (48.0%) and 36.3% of Egyptian students had a visit to a dentist within the last twelve months. This was lower than that was found in a study carried out among first year dental students at the University Kebangsaan, Malaysia, where 60.3% of them visited a dentist within last 12 months and higher than the Egyptian nationwide survey which reported that nearly 20% of the studied demographic had not visited a dentist for more than two years, and another 20% had never been to a dentist.[10,18]

On the other hand, this result is higher than another study conducted by Andhare et al., at Dental and Medical Colleges in Maharashtra (India), 2017, who found that only 30% dental students and 22% medical students visited the dentist in 12 months.[16] This difference may be due to variation in cultures regarding oral health care and the availability of oral health services.

The most common cause of dentist visits among Malaysian students was routine checkups (38.6%) but it was only among 4.5% of Egyptian students. These results were higher than the findings of Abidin et al. who reported that 12.5% of her study participants had the habit of doing visits for routine dental check-ups.[18] However, a higher figure was reported by a study conducted at the Universiti Kebangsaan in Malaysia in which 79.2% of students reported visiting a dentist for a routine

checkup.[20] In Egypt, Peltzer and Pengpid reported that 13.7% of their studied population perform dental check – up twice per year, and 9.8% of them have a yearly dental check-up.[13] This difference may be attributed to cultural differences and more oriented dental students with dental care & hygiene. Among Egyptian students, the most common cause of visiting a dentist was pain or disease in teeth and gums (44.6%). However, the national study found that 40% of subjects reported that they experienced dental troubles at the time of the study but did not visit a dentist for seeking treatment.[10] Similar findings were concluded from a study conducted among Medical Students of Taibah University in Madinah, KSA, 45.4% of them reported pain as a cause to visit a dentist.[21] Also, Baseer et al., in King Fahad Medical City, Riyadh (2012), found that among 60% of medical students, tooth ache was the driving factor for their last visit to the dentist.[22] This reflects the poor awareness among our students regarding early diagnosis of dental caries and periodontal diseases. On the contrary, among the Malaysian students, the commonest reason for dental visits was routine check-up, this was an agreement with Abidin et al.[18] Nirmala et al. reported in his study in India (2014) among medical, dental, and paramedical students that higher percentage (91%) visited a dentist.[23] This indicates better awareness regards the importance of dental hygiene.

Nearly one third of both Malaysian and Egyptian students (33.7% & 37.5%) reported that they had good teeth and gums. This was lower than another study conducted in Saudi Arabia, where 50% of the students were satisfied with the appearance of their teeth.[24]

Nearly half of Egyptian students had a habit of daily sweet snacking like biscuits, chewing gum containing sugar, sweets and candy, Coca Cola or other soft drinks and drinking tea with sugar (47.9%, 44.9%, 36.5%, 47.5%, and 47.5%, respectively). The consumption was higher than that of Malaysian students (24.4%, 11.3%, 20.3%, 9.4%, and 28.3%). This could be attributed to the availability of snacks in the college, long breaks between the classes, also the habit of most Egyptians students to go to college without breakfast. This was in consistent with the results from studies done by Kakkad et al. (49.60%).[12] On the other hand, Abidin et al. among reported that only 9.5% of Malaysian first year dental students had a daily consumption of sugars.[18] This difference may be attributed to more oriented dental students and cultural differences.

Limitations: The study was cross-sectional using a subjective scale. Also, the uses of self-administered questionnaires, where is a chance of bias from the respondents themselves. The inclusion of only three grades of one medical school may affect the generalizability of results.

Conclusion: Egyptian students' oral hygienic practice was deficient; particularly, in visiting a

dentist for a routine checkup and their usual daily concern towards teeth and gums. Also, habit of having a sugary snack between meals which affect adversely on oral health.

Recommendations: Oral health education should be included from the early school grades and continue through university life. Health educational sessions that inform the community about the brushing technique, teeth cleaning methods, and importance of the routine checkups should be held. Oral health promoting programs for children and adolescents should be enforced.

Acknowledgment: We are grateful to the participants who took part in this study.

Fund: The research was conducted with no fund.

Conflict of Interest: There was no conflict of interest.

References:

1. Fact sheet on oral health. WHO 2018. http://www.who.int/news-room/fact-sheets/detail/oral-health. Last accessed 1st 28 November 2018.
2. Oral health, general health, and quality of life. Bulletin of the World Health Organization.2005; 83 (5): 641–720.
3. Petersen PE, Bourgeois D, Ogawa H, Estupinan-Day S, Ndiaye C. The global burden of oral diseases and risks to oral health. Bulletin of the World Health Organization. 2005; 83:661-9.
4. Oral Health: Dental Disease Is a Chronic Problem Among Low-Income Populations. Washington, DC: US General Accounting Office; 2000. Publication GAO/HEHS-00-72.
5. Akhionbare O, Ojehanon PI, Ufomata DO, Jeboda SO. Periodontal treatment needs of urban and rural populations in Edo State, Nigeria. Nigerian Dental Journal. 2007; 15 (1):13-17.
6. Kandelman D, Arpin S, Baez RJ, Baehni PC, Petersen PE. Oral health care systems in developing and developed countries. Periodontology 2000. 2012 Oct; 60 (1):98–109.
7. WHO. EMRO. Events. Egypt releases results of epidemiological study on oral health status. 2014. Available at: http://www.emro.who.int/egy/egypt-events/results-of-epidemiological-study-on-oral-health-status-released.html. Accessed at 31-1-2019.
8. Ab Murat N, Watt RJ. Chief dentists' perceived strengths and weaknesses of oral health promotion activities in Malaysia. Annals of Dentistry University of Malaya. 2018; 30; 13 (1):1–5.
9. Smyth E, Caamaño F, Fernández-Riveiro P. Oral health knowledge, attitudes and practice in 12-year-old schoolchildren. Med Oral Patol Oral Cir Bucal. (Internet). 2007;12 (8):614-20.

10. Yusoff MS, Abdul Rahim AF, Baba AA, Ismail SB, Mat Pa MN, Esa AR. Prevalence and associated factors of stress, anxiety, and depression among prospective medical students.
Asian J Psychiatr. 2013; 6 (2):128–33.
11. World Health Organization. Oral health surveys: basic methods. World Health Organization; 2013. Annex (7); 111–114.
12. Kakkad DN, Murali R, Krishna M, Yadav S, Yalamalli M , Kumar AV. Assessment of oral hygiene knowledge, attitude and practices among engineering students in North Bangalore: a cross-sectional survey. Int J Sci Stud.2015; 3 (1):84–89.
13. Peltzer K, Pengpid S. Oral health behaviour and social and health factors in university students from 26 low, middle and high income countries. Int J Environ Res Public Health. 2014; 11 (12):12247-60.
14. Halawany HS, Abraham NB, Jacob V, Al-Maflehi N. The perceived concepts of oral health attitudes and behaviors of dental students from four Asian countries. Saudi J Dent Res. 2015; 1; 6 (2):79–85.
15. Yildiz S, Dogan B. Self-reported dental health attitudes and behaviour of dental students in Turkey. European journal of dentistry. 2011; 5 (3):253.
16. Andhare MG, Dhonge RP, Dhuldhwaj RM, Dede RA, Sayyad IF. A comparative evaluation of awareness regarding periodontal health and oral hygiene practices among dental and medical undergraduate students in Beed District of Maharashtra. Indian J Dent Scio.2017; 9:215–219.
17. Elsabagh HM, Elkader A. Oral hygiene knowledge, attitude, practice and self-perception of personal dental appearance among majmaah university female students, KSA. International Journal of Advanced Community Medicine. 2018; 1 (1):14–18.
18. Abidin ZH, Said SM, Samah IS, Yusoff MY. Oral Health Awareness and Status Among Universiti Kebangsaan Malaysia First Year Dental Students. Jurnal Sains Kesihatan Malaysia (Malaysian Journal of Health Sciences). 2005;30;3 (1):1–16.
19. Al-Obaida MI, Al-Essa MA, Asiri AA, Al-Rahla AA. Effectiveness of a 20% Miswak extract against a mixture of Candida albicans and Enterococcus faecalis. Saudi Med J. 2010; 31:640–643.
20. Elkhadem A, Wanees S. Limited evidence suggests standard fluoride toothpaste reduces caries potential in preschool children. Evidence-based dentistry. 2014; 15 (1):5.
21. Mullah R.O, Omar O.M. Assessment of oral Health Knowledge, Attitude and Practices among Medical Students of Taibah University in Madinah, KSA. British Journal of Medicine & Medical Research.2016; 18 (12): 1–10.
22. Baseer MA, Alenazy MS, AlAsqah M, AlGabbani M, Mehkari A. Oral health knowledge, attitude and practices among

health professionals in King Fahad Medical City, Riyadh. Dental Research Journal. 2012; 9 (4):386–92.

23. Nirmala SV, Quadhar MA, Veluru S, Tharay N, Kolli NKRl. Oral health behaviour among medical, dental and paramedical students - A cross sectional study. Caribbean J Sci Tech 2015;3:774-80.
24. Sharani I. Self-perception of personal dental appearance among students of King Khaled University Abha, Saudi Arabia. European J Gen Dent. 2014; 3 (3):181–84.

Table (1): Sociodemographic Features of Malaysian and Egyptian Students

Feature		Malaysian students (n=202)	Egyptian students (n=224)	Test of significance p
Sex	▪ Male	105 (52.0%)	34 (15.2%)	χ^2= 65.4 p=0.00*
	▪ Female	97 (48.0%)	190 (84.8%)	
Age	▪ Male	22.47±2.46		t=7.6 P=0.00*
	▪ Female	20.6±2.29		
Residence	▪ Urban	166 (82.2%)	134 (59.8%)	χ^2=25.8 p=0.00*
	▪ Rural	36 (17.8%)	89 (40.2%)	
Academic grade	▪ Second	56 (27.7%)	55 (24.5%)	χ^2=1.241 p=0.472
	▪ Third	84 (41.6%)	105 (46.9%)	
	▪ Fourth	62 (30.7%)	64 (28.6%)	
Income	▪ Not enough	8 (4.0%)	24 (10.8%)	χ^2=11.2 p=0.00*
	▪ Enough without saving	63 (31.1%)	(37.9%)	
	▪ Enough with savings	131 (64.9%)	115 (51.3%)	

*Statistically significant

Table (2): Practices Concerning Oral Hygiene among Students

Questions [#]		Malaysian students (n=202)	Egyptian students (n=224)	χ^2 -P
Teeth or mouth cause any pain or discomfort over the past 12 months	▪ Yes	79 (39.1%)	145 (64.7%)	28.9 0.00*
	▪ No	123(60.9%)	79(35.3%)	
State of teeth and gums	▪ Excellent	1 (0.5%)	15 (6.7%)	37.8 0.00*
	▪ Very good	29 (14.4%)	61 (27.3%)	
	▪ Good	68 (33.7%)	84 (37.5%)	
	▪ Average	76 (37.6%)	52 (23.2%)	
	▪ Poor	26 (12.9%)	11 (4.9%)	
	▪ Very poor	2 (1%)	1 (0.4%)	
Frequency of cleaning teeth	▪ Never	6 (3.0%)	6 (2.7%)	69.6 0.00*
	▪ Once /month	1 (0.5%)	10 (4.5%)	
	▪ 2–3times/month	2 (1.0%)	9 (4.0%)	
	▪ Once/week	3 (1.5%)	17 (7.6%)	
	▪ Once/day	57 (28.2%)	114 (50.9%)	
	▪ Twice or more	133 (65.8%)	68 (30.3%)	
Use the following methods to clean teeth	▪ Toothbrush	200 (99.0%)	218 (97.3%)	1.6-0.13
	▪ Wooden toothpicks	50 (24.8%)	52 (23.2%)	0.13-.08
	▪ Plastic toothpicks	68 (33.7%)	20 (8.8%)	39.6-0.00*
	▪ Dental thread/ Miwok	92 (45.5%)	31 (13.7%)	51.9-0.00*
Use toothpaste to clean teeth	▪ Yes	202 (100%)	214 (95.5%)	9.02-0.002*
	▪ No	0 (0.0%)	10 (4.5%)	
Use a toothpaste containing fluoride	▪ Yes	194 (96.0%)	172 (76.8%)	23.2-0.00*
	▪ No	8 (4.0%)	52 (23.2%)	
Duration since last visit a dentist	▪ Less than 6 months	65 (32.2%)	52 (23.2%)	18.8-0.00*
	▪ 6–12 month	32 (15.8%)	28 (12.5%)	
	▪ 1- ≤ 2 years	54 (26.7%)	47 (20.9%)	
	▪ 2- ≤5 years	24 (11.9%)	34 (15.2%)	
	▪ ≥5 years	24 (11.9%)	40 (17.9%)	
	▪ Never	3 (1.5%)	23 (10.3%)	
Reason for last visit to the dentist	▪ Consultation/advise	28 (13.9%)	22 (9.8%)	84.3 0.00*
	▪ Pain or trouble with teeth, gums or mouth	49 (24.3%)	100 (44.6%)	
	▪ Treatment/ follow-up treatment	47 (23.3%)	92 (41.1%)	
	▪ Routine check-up/treatment	78 (38.5%)	10 (4.5%)	

*Statistically significant [#] Responses were not mutually exclusive.

Table (3): Dietary Habits Related to Oral Health of the Studied Malaysian and Egyptian Students

	Students	Never	Several times/ month	Once/week	Several times/ week	Once/day	Several Times/day	χ^2 P
Biscuits, cakes	▪ Malaysian	0 (0.0%)	31 (15.3%)	38 (18.8%)	84 (41.6%)	36 (17.8%)	13 (6.4%)	35.8 0.00*
	▪ Egyptian	7 (3.1%)	20 (9.0%)	27 (12.1%)	62 (27.8%)	71 (31.8%)	36 (16.1%)	
Sweet pies	▪ Malaysian	11 (5.4%)	65 (32.2%)	36 (17.8)	74 (36.6%)	10 (5.0%)	6 (3.0%)	21.4 0.19
	▪ Egyptian	27 (12.2%)	50 (22.5%)	41 (18.5%)	62 (27.9%)	31 (14.0%)	11 (5.0%)	
Jam or honey	▪ Malaysian	15 (7.4%)	71 (35.1%)	50 (24.8%)	43 (21.3%)	17 (8.4%)	6 (3.0%)	23.7 0.12
	▪ Egyptian	39 (17.5%)	51 (22.9%)	38 (17.0%)	47 (21.1%)	33 (14.8%)	15 (6.7%)	
Chewing gum containing sugar	▪ Malaysian	24 (11.9%)	75 (37.1%)	34 (16.8%)	46 (22.8%)	11 (5.4%)	12 (5.9%)	68.5 0.00*
	▪ Egyptian	14 (6.3%)	32 (14.3%)	26 (11.7%)	51 (22.9%)	47 (21.1%)	53 (23.8%)	
Sweets/candy	▪ Malaysian	7 (3.5%)	41 (20.3%)	42 (20.8%)	71 (35.1%)	24 (11.9%)	17 (8.4%)	16.003 0.001*
	▪ Egyptian	9 (4.1%)	32 (14.4%)	32 (14.4%)	68 (30.6%)	39 (17.6%)	42 (18.9%)	
Coca Cola or other soft drinks	▪ Malaysian	20 (9.9%)	70 (34.7%)	42 (20.8%)	51 (25.2%)	17 (8.4%)	2 (1.0%)	103.2 0.00*
	▪ Egyptian	16 (7.2%)	22 (9.9%)	16 (7.2%)	62 (27.8%)	58 (26.0%)	49 (21.9%)	
Drink tea with sugar	▪ Malaysian	17 (8.4%)	26 (12.9%)	22 (10.9%)	68 (33.7%)	52 (25.7%)	17 (8.4%)	79.1 0.00*
	▪ Egyptian	62 (27.8%)	65 (29.1%)	9 (4.0%)	21 (9.4%)	35 (15.7%)	31 (13.9%)	

*Statistically significant

الملخص العربي

صحة و نظافة الفم لدى طلاب الطب: دراسة لمقارنة الوضع بين الطلاب المصريين والماليزيين

نهي محمد الغزالي - عبد العزيز فاروق الديب - شيماء محمد سعيد

الخلفية: صحة الفم الجيدة هي مكون حيوي و أساسي للصحة العامة. و لذلك فان الحفاظ على نظافة الفم الجيدة عن طريق الرعاية الشخصية المتخصصة هو أفضل طريق للوقاية من مشاكل صحة الأسنان. **الأهداف:** تهدف هذه الدراسة إلى مقارنة حالة صحة الفم والنظافة الفموية بين طلاب الطب المصريين والماليزيين الذين يدرسون في جامعة طنطا ، مصر.

الطريقة: أجريت دراسة مقطعية للمقارنة بين الطلاب المصريين والماليزيين في كلية الطب بطنطا باستخدام استبيانات صممت من قبل الباحثين لجمع البيانات المتعلقة بحالة صحة الفم وعادات نظافة الفم. **النتائج:** شملت الدراسة 426 من طلاب الطب الجامعيين (202 ماليزي و 224 مصري) ،و قد وجد أن ثلثي (66.4 ٪) من الطلاب المصريين قد عانوا من الألم أو الانزعاج في أسنانهم أو فمهم خلال الاثني عشر شهرا الماضية مقارنة بـ 39.1 ٪ فقط من الماليزيين. أفاد ثلث (33.7 ٪) من الطلاب الماليزيين بحالة جيدة من أسنانهم واللثة مقارنة مع 37.5 ٪ من الطلاب المصريين.و من بين الطلاب الماليزيين أفاد 65.8 ٪علي استخدام الفرشاة لغسيل لأسنانهم مرتين أو أكثريوميا ، في حين أن 28.1 ٪ فقط من الطلاب المصريين قاموا بذلك ، مع وجود فروق ذات دلالة إحصائية . **الاستنتاج و التوصيات** : لوحظ بشكل خاص ان هناك تقصير بين الطلاب المصريين في ممارساتهم اليومية لنظافة الفم و الأسنان مما يستلزم تنفيذ برامج تعزيز صحة الفم للأطفال والمراهقين.