

RESEARCH ARTICLE

Oral Health Value among High School Female Students

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ABSTRACT

Background: Oral health is vital for beauty, feeling good, and general health. It has been related to sleeping disorders, as well as behavioural and developmental problems in children. Oral health is defined as a condition of oral and related tissue health that allows a person to eat, speak, and socialize without suffering from active disease, discomfort, or humiliation, and that contributes to overall health.

Objectives(s): The aim of this study is to predict the oral health value among high school female students.

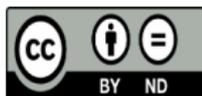
Methodology: This study guided by a descriptive correlational strategy. The predictive correlational design is used to predict the value of one variable based on the value of another (s) by determining the intensity and course of relationships between or among variables. This study conducted from September 20, 2021, to May 31, 2022. A non-probability convenience sample of (380) female high school students that are registered in the directorate of education. When subjects appear to be at the right place at the right time, they are used in convenience sampling research. Before the required sample size is met, researchers simply add relevant people to the study. A margin of error of 5%, a confidence level of 95%, a population size of 18.000, and a response distribution of 50% were used to establish the sample size. As a result, 377 people should be included in the sample. The total number of participants is 380.

Results: There is a statistically significant difference in oral health value among age groups (p -value = 0.042). There is no statistically significant difference in oral health value among grade groups, living arrangements groups, and socioeconomic class groups.

Conclusion: The older the students, the better the perceived oral health value. The better the family's socioeconomic status, the better the perceived oral health value. Students who age 17-18-years exhibited greater oral health values.

Recommendations: There is a pressing for the officials in the Ministry of Health, particularly the Public Health Department to establish health campaign that target underserved neighborhoods with goal of raising and their oral health awareness.

Keywords: Oral Health, High School, Female, Students.



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INTRODUCTION

The human body is a complicated system with many interconnected elements. One portion of the body can influence another. Our mouth can serve as a window into our overall health. Many things can go wrong when we use our teeth and mouths frequently. A healthy mouth can be quite beneficial. The periodontal ligament supports the teeth, which contain a crucial pulp. Our teeth serve a variety of purposes throughout our life. They assist us in chewing and digesting food, communicating with others, smiling, and giving shape to our faces. Given this, it is critical that we take the best possible care of our oral health (Sadiku et al., 2020).

Oral health is vital for beauty, feeling good, and general health. It has been related to sleeping disorders, as well as behavioural and developmental problems in children. Oral health is defined as a condition of oral and related tissue health that allows a person to eat, speak, and socialize without suffering from active disease, discomfort, or humiliation, and that contributes to overall health (Kamran et al., 2014).

Oral health is important for general health and well-being, according to the World Health Organization (WHO Regional Office for Europe, Copenhagen, 2016). It also has a substantial impact on quality of life. It is defined as a state of no pain in the mouth or face, as well as the absence of oral diseases and disorders that limit one's ability to bite, chew, smile, talk, and maintain psychosocial well-being (Levine, 2004).

Children's oral health is critical to their overall health, and appropriate oral hygiene habits must be instilled in them at a young age to ensure long-term dental health and hygiene. "Because oral health is an important component of overall health, ignoring it will have detrimental health and societal effects" (Kamran et al., 2014).

Microorganisms such as viruses, protozoa, fungus, archaea, and bacteria colonize the human mouth to a large extent. Unlike commensal bacteria present in other parts of the body, which normally coexist with the host, the normal microbiota of the mouth is responsible for two of the most frequent human diseases: Dental caries and periodontal disease (Wade, 2013).

Brushing (dental hygiene) and cleaning between the teeth to keep one's mouth clean and free of illness and other disorders is known as oral hygiene (such as foul breath). Oral hygiene should be maintained on a regular basis to prevent tooth decay and foul breath. Tooth decay (cavities, dental caries) and gum diseases,

such as gingivitis and periodontitis, are the most frequent types of dental disease (Dhage & Chougule, 2019).

METHOD

Study Design

This study will be guided by a descriptive correlational strategy. The predictive correlational design is used to predict the value of one variable based on the value of another (s) by determining the intensity and course of relationships between or among variables. This study conducted from September 20, 2021 to May 31, 2022

Setting of Study

The study was carried out at Baghdad / Al-Karkh second directorate of education.

Sample of the Study

A non-probability convenience sample of (380) female high school students that are registered in the directorate of education. When subjects appear to be at the right place at the right time, they are used in convenience sampling research. Before the required sample size is met, researchers simply add relevant people to the study. (Gray et al., 2017).

A margin of error of 5%, a confidence level of 95%, a population size of 18.000, and a response distribution of 50% were used to establish the sample size. As a result, 377 people should be included in the sample. The total number of participants is 380.

Ethical Considerations

The Department of Community Health Nursing Scientific Committee examined and approved the research proposal first. After getting approval from the College of Nursing, the researcher sought approval from the Ministry of Education and discussed the study's contents with them. The researcher explained the study's main purpose as well as how to complete the questionnaire. The researcher informed participants that their data would be kept private and secure throughout and after their participation in the study. The researcher also told study participants that their identities would be kept anonymous throughout the study's presentation, reporting, and/or final publication.

Data collection

The information was acquired through a direct interview with each of the study's student

participants, as well as the Oral Health Value and Self-Efficacy for Oral Health Behavior instrument.

The data collection process was done between January 26th and February 8th, 2022. Each respondent was given approximately 10 to 30 minutes to complete filling the questionnaire format.

Data Analyses

Data were analyzed using the statistical package for social science (SPSS) for windows Version 28 (Chicago, IL).

RESULTS

Table 3. Difference in oral health value among age groups

ANOVA					
Oral Health Value					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	345.686	2	172.843	3.192	.042
Within Groups	20412.090	377	54.143		
Total	20757.776	379			

df: Degree of freedom; F: F-Statistics; Sig.: Significance

There is a statistically significant difference in oral health value among age groups (p-value = 0.042).

Table 4. Difference in oral health value among grade groups

ANOVA					
Oral Health Value					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	79.369	2	39.684	.724	.486
Within Groups	20678.407	377	54.850		
Total	20757.776	379			

df: Degree of freedom; F: F-Statistics; Sig.: Significance

There is no statistically significant difference in oral health value among grade groups.

Table 5. Difference in oral health value among living arrangements groups

ANOVA					
Oral Health Value					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	287.664	4	71.916	1.317	.263
Within Groups	20470.112	375	54.587		
Total	20757.776	379			

df: Degree of freedom; F: F-Statistics; Sig.: Significance

There is no statistically significant difference in oral health value among living arrangements groups.

Table 6. Difference in oral health value among socioeconomic class groups

ANOVA					
Oral Health Value					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	360.790	4	90.197	1.658	.159
Within Groups	20396.987	375	54.392		
Total	20757.776	379			

df: Degree of freedom; F: F-Statistics; Sig.: Significance

There is no statistically significant difference in oral health value among socioeconomic class groups.

DISCUSSION

This descriptive correlational study aims mainly to identify the association between students' age, families' socioeconomic status, and teach of

oral health value and Self-Efficacy for oral health behavior.

There was a statistically significant positive correlation between students' age and their oral health value. Further post hoc analysis demonstrated that students who age 17-18-years had higher oral health value score than those

who age 19-20-years and those who age 15-16-years respectively. Further cross-tabulation analysis demonstrates that less than a half of students who age 17-18-years are of families of upper middle socioeconomic class. As such, better socioeconomic status can acquire those students the adequate oral health awareness which render them take better care of their mouth.

There was a statistically significant positive correlation between family's socioeconomic status and their oral health value. This finding implies that the better the socioeconomic status the family has, the greater the oral health value the students of these families enjoy. Young individuals from low socioeconomic origins are more prone to engage in unhealthy behaviors including cigarette smoking, poor eating, and physical inactivity, according to research (Hanson & Chen, 2007). Psychosocial factors (e.g., coping techniques), oral health attitudes, and social ties with family members and classmates may all influence adolescent health behaviors (Broadbent et al., 2016; Sajjadi et al., 2018). Furthermore, individuals' socioeconomic status during childhood during childhood may influence their adult health behaviors (e.g., toothbrushing frequency) where oral health beliefs during early adulthood can mediate such an influence (Broadbent et al., 2016).

Socioeconomic status and social systems are critical indicators of adolescent's psychosocial wellbeing, for case positive states of mind approximately wellbeing, more prominent self-esteem and Self-Efficacy and enrollment in peer bunches, which in turn advance the appropriation of solid behaviors (Sajjadi et al., 2018; Springer et al., 2006; Zambon et al., 2010). This finding is supported by that of Gomes et al., (2020) who concluded that there is a direct prediction of the better socioeconomic status for higher toothbrushing frequency.

CONCLUSIONS

The older the students, the better the perceived oral health value. The better the family's socioeconomic status, the better the perceived oral health value. Students who age 17-18-years exhibited greater oral health values.

RECOMMENDATIONS

There is a pressing for the officials in the Ministry of Health, particularly the Public Health Department to establish health campaign that target underserved neighborhoods with goal of raising and their oral health awareness. There is a need to replicate this study for as many schools as possible. It is vital to incorporate the adequate materials into the curricula of

different levels of education that shed the light on the oral health care.

ETHICAL CONSIDERATIONS COMPLIANCE WITH ETHICAL GUIDELINES

This study was completed following obtaining consent from the University of Baghdad.

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AUTHOR'S CONTRIBUTIONS

Study concept, Writing, Reviewing the final edition by all authors.

DISCLOSURE STATEMENT:

The authors report no conflict of interest.

REFERENCES

- Broadbent, J. M., Zeng, J., Foster Page, L. A., Baker, S. R., Ramrakha,
- Broadbent, J. M., Zeng, J., Foster Page, L. A., Baker, S. R., Ramrakha,
- Dhage, V. S., & Chougule, P. (2019). Importance of oral hygiene in oro-dental diseases : A review study. *International Journal of Research and Review*, 6(12), 69-74.
- Gomes, A. C., Rebelo, M. A. B., de Queiroz, A. C., de Queiroz Herkrath, A. P. C., Herkrath, F. J., Rebelo Vieira, J. M., Pereira, J. V., & Vettore, M. V. (2020). Socioeconomic status, social support, oral health beliefs, psychosocial factors, health behaviours and health-related quality of life in adolescents. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care & Rehabilitation*, 29(1), 141-151. <https://doi-org.ezproxy.okcu.edu/10.1007/s11136-019-02279-6>
- Hanson, M. D., & Chen, E. (2007). Socioeconomic status and health behaviors in adolescence: A review of the literature. *Journal*
- Kamran, A., Bakhteyar, K., Heydari, H., Lotfi, A., & Heydari, Z. (2014). Survey of oral hygiene behaviors, knowledge and attitude among school children: A cross-sectional study from Iran. *International Journal of Health Sciences*, 2(2), 2372-5079.
- Kamran, A., Bakhteyar, K., Heydari, H., Lotfi, A., & Heydari, Z. (2014). Survey of oral hygiene behaviors, knowledge and attitude among school children: A cross-sectional study from Iran. *International Journal of Health Sciences*, 2(2), 2372-5079.

Levine, R. (2004). The scientific basis of oral health education. *Community Dental Health*, 21(2), 131-133.

of Behavioral Medicine, 30(3), 263.

S., & Thomson, W. M. (2016). Oral health-related beliefs, behaviours, and outcomes through the life course. *Journal of Dental Research*, 95(7), 808-813.

S., & Thomson, W. M. (2016). Oral health-related beliefs, behaviours, and outcomes through the life course. *Journal of Dental Research*, 95(7), 808-813.

Sadiku, M. N. O., Ashaolu, T. J., & Musa, S. M. (2020). *ORAL HEALTH : A PRIMER*. 1(2), 96-99.

Sajjadi, H., Jorjoran Shushtari, Z., Mahboubi, S., Rafiey, H., & Salimi, Y. (2018). Effect of socio-economic status, family smoking and mental health through social network on the substance use potential in adolescents: A mediation analysis. *Public Health*, 157,14-19.

Sajjadi, H., Jorjoran Shushtari, Z., Mahboubi, S., Rafiey, H., & Salimi, Y. (2018). Effect of socio-economic status, family smoking and mental health through social network on the substance use potential in adolescents: A mediation analysis. *Public Health*, 157,14-19.

social relationships and adolescent health risk behavior among secondary school students in El Salvador. *Social Science and Medicine*, 62(7), 1628-1640.

Springer, A., Parcel, G., Baumler, E., & Ross, M. (2006). Supportive

Wade, W. G. (2013). The oral microbiome in health and disease. *Pharmacological Research*, 69(1), 137-143.
<https://doi.org/10.1016/j.phrs.2012.11.006>

Zamboni, A., Morgan, A., Vereecken, C., Colombini, S., Boyce, W., Mazur, J., et al. (2010). The contribution of club participation to adolescent health: Evidence from six countries. *Journal of Epidemiology and Community Health*, 64(01), 89-95.