

Awareness, Attitude and Practice of keeping proper oral hygiene among the Medical and Dental students of Islamabad and Abbottabad, Pakistan

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ABSTRACT

Aim: To find out the perspective of awareness, attitude and practice of keeping good oral hygiene among the Medical and dental college students of Islamabad and Abbottabad.

Methods: This comparative cross-sectional questionnaire-based study was conducted in HBS and Federal Medical and Dental College Islamabad and Frontier Medical and Dental College Abbottabad from July to December 2021. A sample of 900 medical and dental students of 1st, 2nd and 3rd year MBBS and BDS, 300 from each college were selected randomly.

Result: Number of Female students was more than male students with an age range between 17-22 years in all three colleges. Majority of the students had insufficient awareness and knowledge about various available dental hygiene aids, their proper usage and impact on health status. Good practice, knowledge and attitude of dental hygiene was shown by less than 50% of students, majority students of Islamabad than Abbottabad.

Conclusion: Average level of AAP about oral hygiene was seen among the Medical and Dental students of all colleges. Organizing various counseling sessions, community work and seminars to highlight the importance of oral hygiene, various tools available and their proper usage was suggested.

Keywords: Awareness, Attitude and Practice (AAP), tools, Oral hygiene.

INTRODUCTION

Oral cavity is gateway to a healthy life. Clean teeth with healthy gums create beautiful smile. Oral health improves general health imposing a positive impact on quality of life and for this, maintenance of good oral hygiene is needed which being so important, is often neglected^{1,2,3}. Its association with physical health can be witnessed in oral cavity whenever any infections, nutritional deficiencies or others diseases affect a person and change normal physiology of tissues^{4,5}. Oral hygiene is a must for every one with no excuse to its maintenance⁷.

Having good oral hygiene is always associated with better understanding and proper actions for it. It may be not good enough without proper knowledge, desired approach and accurate timely actions to practice^{8,9}. Everybody should know the disadvantages of poor oral hygiene. Persons maintaining good oral hygiene can be considered as role model and have good social relationships⁷.

Various methods to maintain good oral hygiene are in practice including most commonly tooth brushing, keeping the bristles at an angle of 45° on the teeth and gingival tissue and moving back and forth in short strokes, tongue brushing to reduce the bacteria on the tongue and reduce oral malodor, Oral rinses, mouth washes specially fluoridated, dental floss and avoiding too much sugary food stuff are all very effective and useful tools to improve and maintain good oral hygiene thus reducing tooth decay and malodor^{9,10,11,12,13,14,17}. The perspective of knowledge, attitude and practice are all very significant in keeping good oral hygiene. The goal of this study was to assess the knowledge, attitude and

practice amongst the medical and dental college students of Islamabad.

METHODOLOGY

This comparative, cross-sectional study was conducted in HBS and Federal medical and dental college Islamabad and frontier medical and dental college Abbottabad from July 2021 to December 2021 using random sampling technique. 1100 data forms were distributed to the students and about 800 students returned filled forms, 400 from Islamabad and 400 from Abbottabad after taking their consent. The study was approved by the ethical board and questionnaire be validated. The data was collected by asking questions regarding knowledge, attitude and practice. SPSS version 24.0 was used to analyze the data. Permission was granted by Ethical Review Board.

RESULTS

Demographic data of Students in both cities is shown in Table 1. Awareness, attitude and practice among students regarding oral hygiene is shown in tables 2, 3 and 4 respectively.

Table 1: Demographic data of the students (n=450)

Students of Islamabad	n	%age	Students of Abbottabad	n	%age
Male	195	43.3	Male	215	47.8
Female	255	56.7	Female	235	52.2

Table 2: Awareness and knowledge of students about oral hygiene

Questions Asked	Islamabad (450)		Abbottabad (450)	
	Yes	No	Yes	No
Do you know about the oral hygiene?	335	115	265	185
Do you know about various methods to maintain oral hygiene?	190	260	185	265
Do you know about brushing techniques?	105	345	85	365
Do you know the lack of brushing and care can cause Malodor, tooth decay and oral diseases?	365	85	340	110
Do you know about use of floss and mouth wash ?	165	285	135	315
Average Awareness	51.5%	48.5%	44.8%	55.2%

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Table 3: Data about student's Attitude about oral hygiene

Questions asked	Islamabad (450)		Abbottabad (450)	
	Yes	No	Yes	No
Do you know about the importance of oral hygiene?	320	130	240	210
Do you regularly consult the physician or dentist for routine oral and dental check up?	105	345	95	355
Do you brush your teeth daily?	260	190	215	235
Do you use any method of oral hygiene other than brushing?	125	325	85	365
Average Attitude	45%	55%	35.3%	64.7%

Table 4: Evaluation of student's practice of oral hygiene

Questions asked	Islamabad (450)		Abbottabad (450)	
	Yes	No	Yes	No
Do you know about brushing time and duration?	230	220	180	270
Do you know how to do flossing?	150	300	75	375
Do you know for how much period a brush can be used?	230	220	205	245
Do you rinse your mouth with mouthwash?	210	240	170	280
Average Practice	45.5%	54.5%	39%	61%

DISCUSSION

Oral hygiene of a person is always associated to the attitude, practice to maintain it and proper knowledge that he or she has. It is seen that only knowledge, without attitude and effort to practice it, is unsatisfactory^{14,17}.

Our study compared the perspectives of knowledge, attitude and practice among the medical and dental college students of two cities of Pakistan. Good knowledge about oral hygiene was observed among the medical students of Islamabad compared to the Abbottabad and more in female than in males (Table 1). Similar findings were mentioned by other studies done by Astrom *et al*⁶, Peker *et al*⁶ and Rahman *et al*⁸.

For better oral care, tooth brush and use of tooth paste are common oral hygiene aids shown by several studies¹⁹. Majority of medical students were well aware that lack of brushing and oral care could be harmful to oral tissues. Their Knowledge of different oral hygiene aids, tools and their proper usage was limited such as they do know that brushing the teeth is one of the main thing for oral hygiene but had little knowledge about its technique and time required for proper brushing, highlighting their lack of correct learning attitude and faulty practices (Table 2,3,4). The relationship of oral and General health has been of great significance and demands serious efforts necessary for development of updated awareness, attitude and practical approach of students for better oral health as also mentioned in by Pattussi M P in 2006²⁰.

CONCLUSION

A limited awareness, attitude and practice of oral hygiene was noted among medical students of all three colleges. It is need of time that serious efforts should be carried out at institutional and community level to raise the Awareness, attitude and practice of oral hygiene.

Conflict of interest: Nil

REFERENCES

- Alwattban RR, Alkhudhayr LS, Al-Haj Ali SN, Farah RI. Oral Health-Related Quality-of-Life According to Dental Caries Severity, Body Mass Index and Sociodemographic Indicators in Children with Special Health Care Needs. *J Clin Med*. 2021; 10(21): 4811.
- Neves, É., Dutra, L., Gomes, M. C., Paiva, S. M., de Abreu, M., Ferreira, F. M., & Granville-Garcia, A. F. (2020). The impact of oral health literacy and family cohesion on dental caries in early adolescence. *Community dentistry and oral epidemiology* 2020; 48(3): 232–9.
- Pinheiro, S., Rodrigues, H. B., Santos, J., Granja, G. L., Lussi, A., Leal, S. C., & Diniz, M. B. Association of dental caries morbidity stages with oral health-related quality of life in children and adolescents. *International journal of paediatric dentistry*. 2020; 30(3): 293–302.

- Izhar, F., Nazir, M. A., Majeed, A., & Almas, K. A Study of Dentists about Their Knowledge and Practice of Dentine Hypersensitivity. *European journal of dentistry*. 2019; 13(4): 540–6.
- Ashi, H., Campus, G., Bertéus Forslund, H., Hafiz, W., Ahmed, N., & Lingström, P. The Influence of Sweet Taste Perception on Dietary Intake in Relation to Dental Caries and BMI in Saudi Arabian Schoolchildren. *International journal of dentistry*. 2017: 4262053.
- Astrøm AN. Stability of oral health-related behaviour in a Norwegian cohort between the ages of 15 and 23 years. *Community Dent Oral Epidemiol*. 2004;32:354–62
- Adeel M. et al. Knowledge, attitude and practice regarding dental hygiene in patients of Sialkot and multan Pakistan. *PJMHS*. 2022; 16(1): 167-8
- Cademartori, M. G., Custodio, N. B., Harter, A. L., & Goettems, M. L. Maternal perception about child oral health is associated to child dental caries and to maternal self-report about oral health. *Acta odontologica Scandinavica*. 2019; 77(5): 359–63.
- Selwitz, R. H., Ismail, A. I., & Pitts, N. B. (2007). Dental caries. *Lancet* (London, England). 2007; 369(9555): 51–9.
- Lotto, M., Strieder, A. P., Ayala Aguirre, P. E., Andrade Moreira Machado, M. A., Rios, D., Cruvinel, A., & Cruvinel, T. Parental perspectives on early childhood caries: A qualitative study. *International journal of paediatric dentistry*. 2020; 30(4): 451–8.
- Iqbal, Muhammad Z et al. "Knowledge, Attitude, and Practice of Oral Hygiene Among Students of a Private University." *Journal of pharmacy & bio-Allied sciences*. 2021; 13(1): 123-8.
- Yavagal, P. C., Dalvi, T. M., Benson, T., Lakshmi, S., Yann, T., & Gowda, T. Knowledge, Attitude and Practices Related to Oral Health Among Nursing Students in Davangere City: A Cross-Sectional Survey. *Oral health & preventive dentistry*. 2020; 18(1): 493–8.
- Jabeen C, Umbreen G. Oral Hygiene: Knowledge, Attitude and Practice among School Children, Lahore. *J Liaquat Uni Med Health Sci*. 2017; 16(03): 176-80.
- Soldani, Francesca A et al. "One-to-one oral hygiene advice provided in a dental setting for oral health." *The Cochrane database of systematic reviews*. 2018; 10(10) CD007447
- Soldani, F. A., Lamont, T., Jones, K., Young, L., Walsh, T., Lala, R., & Clarkson, J. E. One-to-one oral hygiene advice provided in a dental setting for oral health. *The Cochrane database of systematic reviews*. 2018;10(10): CD007447.
- Peker I, Alkurt MT. Oral health attitudes and behavior among a group of Turkish dental students. *Eur J Dent*. 2009; 3: 24–31.
- Neeraja R, Kayalvizhi G, Sangeetha P. Oral health attitudes and behavior among a group of dental students in Bangalore, India. *Eur J Dent*. 2011; 5: 163–7.
- Rahman B, Kawas SA. The relationship between dental health behavior, oral hygiene and gingival status of dental students in the United Arab Emirates. *Eur J Dent*. 2013; 7: 22–7
- Al-Khalifa, K. S., & Gaffar, B. O. Dental students' perception about using videos in teaching professionalism: A Saudi Arabian experience. *Journal of dental education*. 2021; 85(2): 197–207.
- Pattussi, M. P., Hardy, R., & Sheiham, A. The potential impact of neighborhood empowerment on dental caries among adolescents. *Community dentistry and oral epidemiology*. 2006; 34(5): 344–50.