Oral Health Knowledge, Attitude And Behaviour of Medical And Dental Students



Medical Science

KEYWORDS: oral health knowledge, attitude and behaviour, dental and medical students

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ABSTRACT

Objective: To compare the oral health knowledge, attitude and behaviour among preclinical dental and medical students.

Methodology: Pre-validated questionnaires consisting of 34 multiple choice questions were distributed among 200 preclinical dental and medical students to evaluate their oral health knowledge, attitude and behaviour. The students had to choose only one response from the provided list of options. The data collected from the filled questionnaires was subjected to statistical analysis. A p-value of <0.05 was considered statistically significant.

Result: The mean scores for oral health knowledge, attitude as well as behaviour were significantly higher in dental students compared to medical students.

Conclusion: Compared to the medical students, the dental students had better oral health related knowledge, attitude and behaviour. Medical students might benefit from inclusion of oral health education in their pre-clinical curriculum.

Introduction

Health is defined as a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity. (WHO, 1948)⁵. Oral health is an integral part of the general health of an individual. Presence of oral diseases and poor oral hygiene can have detrimental effect on the quality of life of an individual. Oral diseases can have negative impact on the social functioning of the individual as well as be a source of pain, anxiety and low self-esteem. (Kelly, 2000)³.

The health care professionals primarily aim to instil a positive oral health knowledge and practice in the society. Health care students, including medical and dental students, play an important role in oral health care promotion and preventive information dissemination. It is of paramount importance that their own knowledge pertaining to oral health is accurate and their oral hygiene practice conforms to the expectations of the community.

As today's students of dentistry and medicine will provide their services in the future and will be responsible for public oral health education, it is important to assess their knowledge and behavior towards oral health.

Objective:

The objective of the study was to compare the oral health knowledge, attitude and behaviour among preclinical dental and medical students of Melaka Manipal Medical College.

Methods:

After obtaining approval from the Institutional Ethics Committee, pre-validated questionnaires were distributed among 200 preclinical dental and medical students of Melaka Manipal Medical College. The questionnaires consisted of 34 multiple choice questions designed to evaluate the oral health knowledge, attitude and behaviour of participants. The participants had to choose only one response from the provided list of options. For oral health knowledge and behaviour, a score of 1 was given to each 'correct' answer and 0 was given for each 'wrong' or 'don't know'

For dental health attitude, a score of 0, 1 or 2 was given depending upon the appropriateness of the chosen answer. 0 represented 'non satisfactory', 1 represented 'relatively satisfactory and 2 represented 'very satisfactory' answers. The collected data was subjected to statistical analysis. Comparison between the dental and

medical students was done using Independent sample t-test. A p-value of <0.05 was considered statistically significant.

Results

The mean knowledge score as well as mean behaviour scores were significantly higher among dental students than medical students with a p value of less than 0.001. The mean attitude score was also significantly higher among dental students than medical students with a p value of 0.014. (Table 1).

83% of the dental students knew the meaning of the terms, "plaque" and "halitosis and had knowledge about the causes and effects of the same compared to 43% of medical students. (Graph 1). 80% of the dental students were aware of the causes, effect and prevention of dental caries whereas only 53% of the medical students had knowledge about the same. Other than that, though most of medical and dental students used fluoridated toothpastes, 90% dental students knew the effect of fluoride as against 70% medical students.

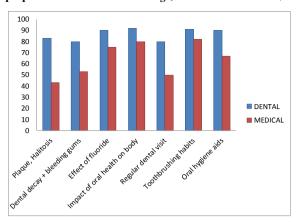
In terms of attitude towards dental health, the medical students fared poorly compared to dental students. (Graph 1). 80% of the dental students favoured regular dental visits for routine check-up. On the other hand, most of the medical students (50%) preferred to visit a dental clinic only if they required treatment for some existing problem or in case of pain.

In terms of oral health behaviour, the toothbrushing habits (frequency, time of toothbrushing etc.) of both the medical and dental students were found to be appropriate. However, only 67% of medical students used oral hygiene aids like mouthwash, floss etc. compared to nearly 90% of dental students. (Graph 1).

Table 1: Mean Oral health Knowledge (K), Attitude (A) and Behaviour (B) scores of dental and medical students.

	GROUP	S			
	DENTAL		MEDICAL		n value
	Mean	SD	Mean	SD	p-value
K	18.51	2.22	12.17	1.61	<0.001
A	4.48	0.64	4.24	0.73	0.014
В	12.75	2.01	11.10	1.36	<0.001

Graph 1- Percentage of medical & dental students with appropriate dental health knowledge, attitude & behaviour $\mid s \mid$



Discussion:

The results of our study showed that the mean scores for oral health knowledge, attitude as well as behaviour were significantly higher in dental students compared to medical students.

Our results are in agreement with the results of a similar study in which dental students were shown to have better oral health knowledge compared to medical and paramedical students. (Rong, Wang, Yip, 2006)⁶.

Similar findings were reported in a study wherein the dental students showed higher knowledge and better oral health practices among the various disciplines studied. (Al-Batayneh, Owais, Khader, 2014)².

Results of a study conducted to assess the dental health knowledge and oral-health related behavior of dental and medical students at the Sharjah University had reached a similar conclusion. (Al Kawas S, Fakhruddin KS, Ur Rehman B, 2010)¹.

The better oral health knowledge among the dental students in this study could be due to the fact that oral health is an important topic that is taught to them during their professional course. Dental students also receive oral health related information routinely and this further helps to instil positive oral health behavior and attitudes in them. (Nirmala, Quadhar, Veluru, Tharay, Kolli, 2015)⁴

The reason for the poor oral health knowledge of medical students could be attributed to the fact that oral health education does not form a significant part of their curriculum. Hence medical students might benefit from inclusion of oral health education in their pre-clinical curriculum.

The undergraduate medical and dental students of today are the ones who will provide dental services in future and will be responsible for public oral health education. Hence it is essential that these undergraduate students acquire appropriate oral health related knowledge and attitudes during their initial training period. These future doctors and dentists should be able to apply this knowledge and attitude to their own dental care and should be capable of motivating their patients to adopt good oral hygiene by setting a good example.

Conclusion

Based on our study, we found that the oral health related knowledge, attitude and behaviour of dental students were better compared to the medical students.

In conclusion, there is room for improvement in the oral health knowledge, attitude and behaviour of both the dental and medical student groups, in particular the latter group. Greater emphasis on oral health care education during the undergraduate training could enhance the oral health-related knowledge and improve oral self-care behaviors of both medical and dental students so that they can act as role models for oral health education at individual and community levels.

References:

- Al Kawas, S., Fakhruddin, K.S., Ur Rehman, B. (2010). A comparative study of oral health attitudes and behavior between dental and medical students; the impact of dental education in United Arab Emirates. J Int Dent Med Res, 3, 6-10.
- Al-Batayneh, O.B., Owais, A.I., Khader, Y.S. (2014). Oral Health Knowledge and Practices among Diverse University Students with Access to Free Dental Care: A Cross-Sectional Study. Open Journal of Stomatology, 4, 135-142.
- Kelly, M., Steele, J., Nuttall, N., Bradnock, G., Morris, J., Nunn, J. (2000). Adult dental health survey: oral health in the United Kingdom 1998, London. The Stationery Office.
- Nirmala, S.V.S.G., Quadhar, M.A., Veluru, S., Tharay, N., Kolli, N.K.R. (2015). Oral health behavior among medical, dental and paramedical students – a cross sectional study. *Carib.J.Sci.Tech.*, 3, 774-780.
- Park, K. Park's textbook of preventive and social medicine: Concept of health and disease. 19th edition. Jabalpur (M/s Banarasidas Bhanot publishers, 2005, 12-13
- Rong, W.S., Wang, W.J., Yip, H.K. (2006). Attitudes of dental and medical students in their first and final years of undergraduate study to oral health behavior. Eur J Dent Edu. 10(3), 178-181.