

## Oral Health Related Knowledge, Attitude And Practice Among Nursing Students Of Rohilkhand Medical College And Hospital: A Study

### Abstract

**Aim:** The study was conducted to investigate the oral health knowledge, attitude and practice amongst nursing students of Rohilkhand medical college and hospital.

**Materials and Methods:** The study was conducted among 111 nursing students of Rohilkhand hospital who had an easy access to the dental services within the premises of hospital itself. A self-administered structured questionnaire consisting of 32 questions on demographic data, oral hygiene knowledge, attitude and practices was distributed. The data collected was analyzed using Statistical package for social sciences (SPSS) version 11.5.

**Results and Conclusion:** A majority of the respondents were practicing healthy oral hygiene practices that included brushing twice a day with toothbrush and toothpaste for adequate duration of 2-3 minutes. Almost 87% of them were aware of the diseased gingival condition and the consequences due to accumulation of plaque. Almost half of the participants visited a dentist only on pain. However, a majority of them had given importance to their teeth equally as their general health. It was seen that the knowledge, attitude and practice of nursing students about oral health was adequate, but further improvements can be encouraged.

### Key Words

Oral health, Oral hygiene practice

### Introduction

Health is a common theme in most cultures. During the past few decades, there has been a reawakening that health is a fundamental human right and a worldwide social goal; that it is essential to the satisfaction of basic human needs and to an improved quality of life. According to World Health Organization, Health has been defined as "a state of complete physical, mental and social well being and not merely the absence of disease and infirmity" (1948)<sup>[1]</sup>. For the field of dentistry, this new perspective on health suggested that the ultimate goal of dental care, namely good oral health, should no longer merely be seen as the absence of caries or periodontal disease; a patient's mental and social well-being should be considered as well<sup>[2]</sup>. Based on this, it is the primary concern of dental professionals and oral health educators to impart a positive oral health knowledge and behavior in the society and there has been a growing idea of health promotion through education, instruction and motivation all over. It will take a definite track only if there will be a presence of supportive environments, strengthening

community action and development of personal skills. (Ottawa charter of WHO in 1986 for health promotion)<sup>[3]</sup>. It creates and environment which is conducive for shifting the onus of public health from the shoulder of health care professionals to "people's own hands". To achieve this there should an accurate knowledge and understanding of scientifically supported information and facts. Nursing personnel play a vital role in health promotion and preventive information dissemination, therefore it is very important that their own oral health knowledge is good and their oral health behavior conforms to expectation of the community people. One group which could be more easily used for this purpose is nursing students of rohilkhand hospital. The simple concept of oral hygiene should be equally understood and put into practice by them. Central to that, the purpose of the study was to investigate the oral health knowledge, attitude and practice among the nursing students of Rohilkhand hospital.

### Materials and Methods

A self administered structured

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questionnaire consisting of 32 questions written in english was used for this study. The questionnaire was adopted from a study done by Yee et al<sup>[4]</sup> and Al-Omiri et al.<sup>[5]</sup> Among those 32 questions, 28 were close ended and 4 were open ended. It was distributed to 111 nursing students and the response rate was 100%. The respondents were instructed to fill the questionnaire without discussion with each other in their own classroom. They took an average of ten minutes to complete the questionnaire. The preliminary section was designed to gather demographic data and the anonymity of the respondents was assured. The second section was concerned with oral health knowledge, attitude and practice related questions.

### Statistical Analysis

All answers were treated with utmost confidentiality. Results were statistically analyzed using Statistical Package for

Social Sciences (SPSS) 11.5 version. Descriptive statistics were obtained and mean, standard deviation and frequency distribution were calculated.

## Results

The questionnaire was distributed among 111 nursing students between the age of 17-19 years and the response rate was 100%. A majority of the respondents (96%) were using toothbrush and toothpaste as cleaning aids, however only 69% used to brush twice a day followed by 25% who used to brush their teeth only once a day. A variety of responses were obtained when they were asked regarding the duration of time of brushing. Almost half of them used to brush their teeth for 2-3 minutes in the morning before breakfast (**Fig 1**). Regarding the knowledge of gingival conditions, a majority of them (87%) knew that gum bleeding meant inflamed gums. Besides toothbrush and toothpaste (41%), a considerable number of respondents (39%) were also aware of the other oral hygiene aids like dental floss. A total of 66% of the respondents knew the basic composition of plaque and 63.1% had the correct knowledge regarding the role of dental plaque as caries producing agent (**Fig 2**). Almost half of the respondents (45%) believed to visit the dentist only in pain. Less than 20% knew the importance of visit to the dentist twice a year. However, it seemed due to some problems related to oral cavity, they had visited the dentist in the past 6-12 months. The most common reason for visiting the dentist was due to pain (47%) and for general dental check up (37%) (**Fig 3**). Almost 43% of the respondents were only slightly afraid of the dental treatment that showed they were conscious about the need and importance of timely dental treatment. Around 1/3rd of the respondents had not visited a dentist due to lack of time and the fear of dental needle. The other reasons for not visiting a dentist were high costs of the treatment, accessibility of the dental clinic etc. A majority of the respondents had the correct knowledge regarding the number of deciduous and permanent teeth. Almost half of the respondents had 1-2 carious teeth and 2-3 filled teeth. A maximum number of respondents (75-85%) had the correct knowledge about the effects of cold drinks, sweets on the teeth and the impact of carious teeth not only as pain but also on the esthetic value of a person. Almost all of them were

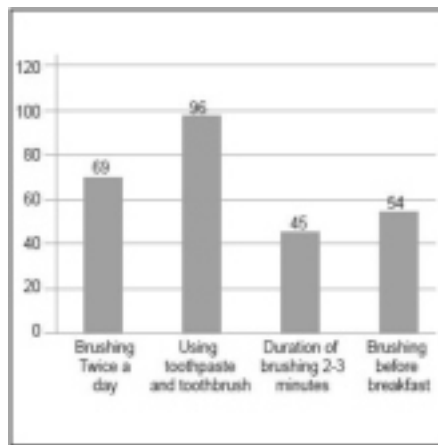


Fig 1 Oral Hygiene Practices

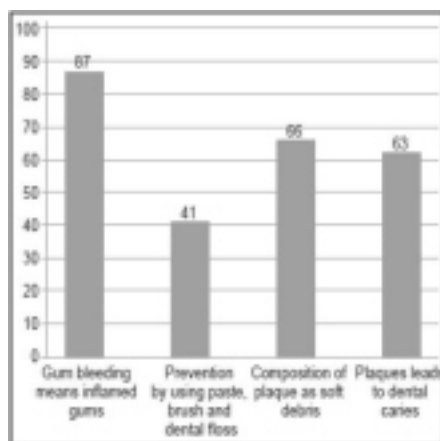


Fig 2 Knowledge Regarding Gingival Condition

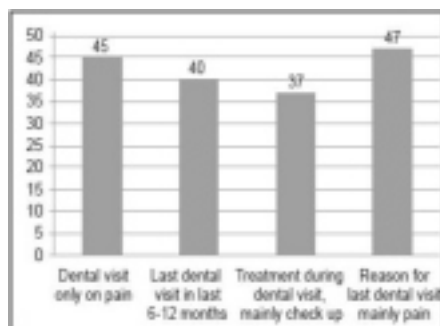


Fig 3 Dental Visits And Its Reasons

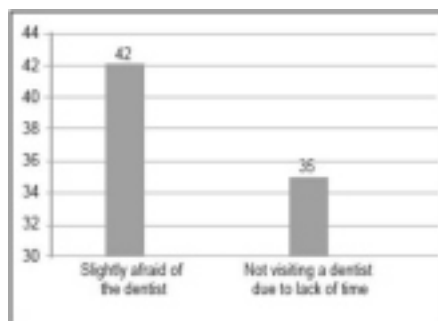


Fig 4 Dental Visit

aware of the importance of brushing teeth for the prevention of dental caries. A total of 95% of them had heard of fluoride as an anti-caries agent in the prevention of dental caries. Similarly, 80-85% were aware of the importance of dental visit and the role of dentist as a crucial one. When they were asked regarding the most important role of dentists, the following responses were obtained. Almost half of the respondents thought dentists only care about the treatment part and not the preventive one. A total of 80-85% of them had given an importance to their teeth equally as their general health which was quite appreciable. Almost 98% of them were aware of the harmful effects of tobacco and tobacco products as well as 94% were aware of the worst impacts of alcohol on oral health. Various responses were derived from the respondents when they were asked regarding the concept of healthy tooth. Most of them (85%) thought strong and caries free teeth as the healthy teeth.

## Discussion

Oral disease can be considered as a public health problem due to its high prevalence and significant social impact. Due to the educational level and the professional role of the nurses, it is expected that they are to be more knowledgeable in the community about oral health and its diseases. Keeping in mind the expected role to be played by the nursing students, a need was felt for assessing the oral health related knowledge, attitude and practice by these students. Oral hygiene is fundamental to the maintenance of oral health; therefore oral hygiene knowledge and practice were taken as the basic data. A self structured questionnaire was used for the collection of data in this study which constituted 32 questions. The questionnaire was written in English and adapted from a study conducted by Yee et al<sup>[4]</sup> and Al-Omiri et al.<sup>[5]</sup> To obtain the genuine responses, the anonymity of the respondents was ensured. Oral hygiene practices in our country are deeply based in tradition and culture with use of various materials.

This study revealed 96% of the respondents were using toothbrush and toothpaste to clean their teeth. It reflects on the homogeneity of the study group with the current lifestyle. This is similar to a study conducted by Doshi D et al<sup>[6]</sup> among medical and engineering students and a study among school children by Al-Omiri et al.<sup>[5]</sup> It seemed due to the

traditional belief, culture and feasibility of time almost 55% of the respondents used to brush their teeth before breakfast in the morning. It could be mainly due to the feasibility of the time as well as to feel fresh in the early start of the day. It is in accordance with the study by Doshi D et al<sup>[6]</sup> whereas in a study by Al-Omiri et al.<sup>[5]</sup> 52% of the respondents used to brush their teeth before going to bed at night. Almost 69% of the respondents in this study brush their teeth twice a day which showed the awareness level an implementation into practice among nursing students to a satisfactory level. The study sample showed awareness of inflamed gums as an indicator of diseased gingival, a finding that agreed with the results of previous study by Al-Omiri et al<sup>[5]</sup> and Farsi J.M.A et al.<sup>[7]</sup> Besides toothbrush and toothpaste, a maximum number of respondents (41%) were also aware of the other oral hygiene aids like dental floss which is quite an important sign of detail information among the nursing students. Almost 65% of them had correct knowledge regarding the role of dental plaque as producing dental caries. Being a developing country it is almost obvious the curative services predominant over preventive ones. So, almost half of the respondents believe to visit a dentist only in pain. Less than 20% knew the importance of dental visit twice a year. It was in agreement with the study by Al-Omiri et al.<sup>[5]</sup> In contrast to this response, it seemed that due to some problem related to oral cavity, and almost 40% of the respondents had visited a dentist in the past 6-12 months. A majority of them had visited a dentist for regular dental check up followed by other treatments like oral prophylaxis, filling, extraction etc. Almost 43% of them were only slightly afraid during their first dental visit that showed that they were conscious about the need and importance of timely dental treatment. This is in contrast with studies conducted by Farsi J.M.A et al<sup>[7]</sup> and Al-Omiri et al<sup>[5]</sup> in which almost half of the respondents were reluctant to visit a dentist due to the fear of pain. Similarly, when they were asked regarding not visiting a dentist, almost

equal number of respondents (30-35%) said that it was due to lack of time and the cost of the treatment being high. Most of the respondents were aware of the importance of the dental visit and the role of the dentist as a crucial one for maintaining their oral health. The participants demonstrated a positive attitude toward dentists and high awareness of the link between oral health and systemic well being. It is very important to mention the link as it might help promote oral health care and oral self-care practice among them. Almost all of them were aware of the importance of brushing for prevention of dental caries and the role of fluoride as an anti-carious agent. When they were asked regarding the most important role of dentists, various opinions were obtained. Almost half of them thought dentists only cares about the treatment part but not the prevention part. It is most likely due to the lack of awareness among them as well as due to various factors like most of them used to visit dentist only in pain. Due to the high cost of the treatment, most of the people in a developing country cannot afford the treatment cost, thus reluctant to seek the treatment. However, in a study by Al-Omiri et al, the respondents thought that dentists care about the prevention part more than the treatment part. Almost 95-98% of them were aware of the harmful effects of tobacco and tobacco products as well as the worst impacts of alcohol on oral health. This showed a good level of awareness and knowledge among them.

### Conclusion

The knowledge levels of the nursing students about oral health was found to be quite good. In the context of oral health, whatever amount of knowledge the subjects already has about healthcare and associated preventive measures, better positive attitudes can always be achieved at every step of their learning process. Thus, a more detailed studies probing in depth about the knowledge, attitude and practice about oral health can always be explored further.

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