

## Oral Health Comprehension, Perspectives, and Conduct Among Paramedical Students Enrolled in Dasmesh College of Nursing -Faridkot

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### Keywords

Nursing, Paramedical, Oral health

### Abstract

The high occurrence of oral disorders has established them as a notable matter of public health concern. This emphasizes the pivotal function of oral health instructors in advocating optimistic awareness and conduct related to oral health among the population. The knowledge, attitude, and practice of healthcare professionals towards oral health have a considerable impact on the community, as they serve as primary sources of health education and initial points of contact within the community. The oral health conduct and mindset of paramedical students in developing countries have been insufficiently researched compared to those in developed countries. As such, this investigation aimed to appraise the oral health well-being of paramedical students registered at Dasmesh College of Nursing. The objective of the research was to appraise and scrutinize the comprehension, disposition, and behaviour pertaining to oral health among the paramedical students enrolled in Dasmesh College of Nursing.

### 1. Introduction

In addition to relying solely on clinical assessments to evaluate dental health, there has been a growing inclination towards incorporating psychosocial aspects, including self-reported perceptions of dental health status.<sup>1</sup>The World Health Organization has advised that in developing countries, a crucial area of focus when establishing or enhancing oral health programs is to redirect dental services towards prevention and the promotion of health.<sup>2</sup>The overall health of an individual is significantly influenced by their oral health. Therefore, it is imperative that medical and nursing students exhibit adequate knowledge regarding oral health and collaborate to enhance public health promotion, particularly in developing nations.<sup>3</sup>

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Considering the pivotal role of college students in the development of a cultured society, this study endeavoured to examine the comprehension, disposition, and conduct regarding oral health among paramedical students. The oral health conduct and mindset of paramedical students in developing countries have been insufficiently researched compared to those in developed countries. As such, this investigation aimed to appraise the oral health well-being of paramedical students registered at Dasmesh College of Nursing.

**Aim and objective:** The objective of the research was to appraise and scrutinize the comprehension, disposition, and behaviour pertaining to oral health among the paramedical students enrolled in Dasmesh College of Nursing.

## 2. Material and methods:

### Study Design / Setting:

To evaluate the comprehension, disposition, and behavior concerning oral health among paramedical students, the research was carried out at Dasmesh College of Nursing located in Faridkot, Punjab. Given that students serve as a cornerstone of society, the appraisal of their oral health knowledge, attitude, and practice holds paramount significance.

### Sample description / methodology:

Inclusion criteria included undergraduate students studying in the college and fully completing the questionnaire. Informed consent was obtained from participating students and the study was conducted. The questionnaire was hand distributed by group of dental interns as a part of research project course. Students were asked to return the questionnaire after answering independently without asking the other student in order to avoid any bias .

To preserve the confidentiality of the participants, the survey was conducted anonymously with the utilization of a numbering system. Additionally, prior to disseminating the questionnaire, the students were apprised that their participation was voluntary and declining to partake would not influence their academic performance.

### Data collection:

The information on the comprehension, disposition, and behaviour concerning oral health among paramedical students was gathered through a self-administered questionnaire. The data encompassed details regarding oral hygiene practices, duration since the previous dental appointment, grounds for seeking dental care, therapeutic interventions in the latest dental visit, and rationale behind not consulting a dentist.

The researchers underwent a brief training on the administration of the questionnaire before acquiring informed consent from each participant. The survey was then self-administered to evaluate the comprehension pertaining to oral health.

### Ethical clearance

The Ethical Review Committee of Dasmesh Institute of Research and Dental Sciences located in Faridkot provided ethical clearance for the study.

### Statistical analysis

The data was compiled systematically and statistical analysis was carried out with SPSS 13. The quantitative values were expressed as means ( $\pm$  standard deviation) and qualitative values as percentage

## 3. Result

ORAL HEALTH KNOWLEDGE			
Question	Correct Answer N(%)	Wrong answer N(%)	Don't know N(%)
Do teeth caries affect dental appearance and aesthetics?	118 (78.66)%	18 (12)%	14 (9.33)%
Is the treatment of toothache as important as any organ in the body?	124 (82.66)%	18 (12)%	8 (5.33)%
Does bad oral hygiene impact the health of the Body?	126 (84)%	15 (10)%	9 (6)%
Does more dental plaque lead to dental caries?	94 (62.66)%	20 (13.33)%	36 (24)%
Does regular use of the tooth - brush and paste provide a healthy mouth and reduce gingivitis?	118 (78.66)%	26 (17.33)%	6 (4)%
Is flossing method needed to get optimal cleaning of the teeth	78 (52)%	30 (20)%	42 (28)%
Does gum bleeding mean inflamed gums?	96 (64)%	38 (25.33)%	16 (10.66)
Do sweets and soft drinks affect teeth adversely?	136 (90.66)%	9 (6)%	5 (3.33)
How many deciduous teeth are there?	98 (65.33)%	45 (30)%	7 (4.66)%
How many teeth are permanent?	124 (82.66)%	18 (12)%	8 (5.33)%

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The relationship between the knowledge scores and the gender of students	
KNOWLEDGE SCORES	
GENDER	MEAN
Male	73.46
Female	74.44
<b>Total</b>	<b>73.95</b>

Attitudes of the students towards professional dental care		
Attitude	FREQUENCY	%
<b>Are regular visits to the dentist necessary?</b>		
Yes	77	51.33
No	70	46.66
Don't know	3	2
<b>How often do you visit the dentist?</b>		
Regularly	13	8.66
When pain occurs	45	30
Occasionally	75	50
Never	17	11.33
<b>What are the causes that made you visit the dentist for your last visit?</b>		
Toothache	79	51.63
Dental advice	15	9.80
Parents advice	26	16.99
Other reason	33	21.56
<b>Do dentists always explain the problem and try to solve it?</b>		
Yes	141	94
No	5	3.33
Don't know	4	2.66
<b>The dentist always explains procedures before treatment?</b>		
yes	125	83.33
No	24	16
Don't know	1	0.66
<b>Dentists care more about treatment than prevention?</b>		
Yes	117	78
No	23	15.33
Don't know	10	6.66
<b>The dentist always involves you in your treatment?</b>		
Yes	80	53.33
No	55	36.67
Don't know	15	10.00
<b>*What are the reasons that make you fear or dislike visiting the dentist?</b>		
Fear of needles and drilling	64	42.67
Fear of pain	55	36.67
Fear of infection	27	17.67
Long waiting time	29	19.33
High cost	21	14.00
No clinic near by	4	2.67
Not specific	17	11.33
*more than one response		



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Oral care practices of students		
Practice	Frequency	%
<b>Oral hygiene methods used</b>		
Toothbrush and toothpaste	125	78.616
Mouthwash	27	16.981
Dental floss	7	4.402
Toothpick	0	
<b>Frequency of tooth brushing per day</b>		
Never	8	5.333
1	15	10
2	22	14.666
>2	105	70
<b>Time spent for brushing (per min )</b>		
<1	8	5.333
1	26	17.333
2	98	65.333
>2	18	12
<b>Time of toothbrushing</b>		
Morning only	22	14.379
Morning and evening	37	24.183
Before going to bed only	2	1.307
Before going to bed and morning	88	57.51
Evening only	1	0.653
Others	3	1.960
<b>Role of family in supervising Oral hygiene</b>		
Parents watch and advice	112	74.6
Parents advice but donot watch	26	17.33
Parents never care	12	8

**Table 1** displays the statistics of 150 paramedical students, comprising 16% males and 84% females.

Table 2 shows knowledge score of paramedical students. The maximum rate of right answers (90.667%) was seen for question "Do sweets and soft drinks affect teeth adversely"?

Table 1 demonstrates the correlation between gender and the scores of comprehension concerning oral health. The results show that average knowledge scores for paramedical students were 73.95%.

Table 3 exhibits the mindset of the participants regarding professional dental care, whereby approximately one-third of them opined that routine dental checkups were crucial. Conversely, almost half of the participants only visited the dentist when experiencing discomfort, with toothache being the primary cause for seeking dental care. Furthermore, 94% of the study cohort affirmed that their dentist

provided adequate elucidation concerning their dental ailments.

Additionally, a significant proportion of the participants expressed aversion towards dental visits owing to the apprehension of needles and drilling. Further details regarding the findings are also illustrated in Table 3.

Table 4 depicts the oral practices adopted by the paramedical students. The findings indicate that over 50% of the participants used a toothbrush to clean their teeth, and approximately 70% brushed their teeth two times or more per day. However, only 65.3% of the students brushed their teeth for duration of 2 minutes, while the majority (57.5%) preferred brushing their teeth before bed and in the morning. Additionally, almost three-fourths (74.6%) of the

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participants acknowledged receiving advice from their parents regarding the significance of oral hygiene.

## 4. Discussion

The central objective of the research was to examine how the oral health knowledge, attitudes, and practices of paramedical students, currently studying at Dasmesh Institute, relate to each other.<sup>8</sup>

Presently, dental hygiene and regular tooth brushing are commonly recognized as convenient and economical means for individuals to uphold good oral health. Additionally, the oral health attitudes and practices prevalent within a community can serve as a gauge for evaluating their level of oral health knowledge.<sup>6</sup>

The study revealed that the mean score for questions related to oral health knowledge was 73.95%. This finding is consistent with a study conducted in the Karak Governorate of Jordan.<sup>6</sup>

The deficiency of knowledge exhibited among paramedical students enrolled in Dasmesh Institute highlights the insufficiency of oral health education initiatives incorporated within the Indian educational curriculum.<sup>6</sup>

The results showed that the oral health knowledge and attitude of female participants were satisfactory, but there was still some scope for enhancement. This is in contrast to a study by Karl Peltzer et al. in 2017, which found that females in lower-middle-income countries were more likely to have poor oral health status.<sup>1</sup> Previous studies (Lian et al., 2010; Al Omiri et al., 2006; Al Sadhan, 2003; Russal et al., 1989; Lin et al., 2001) have also reported toothbrushes and toothpaste as the most commonly used oral hygiene aids, which is consistent with the findings of this study.

## Limitations of the Study

The present study had certain limitations as it relied on a self-administered questionnaire, which may have led to response bias and the possibility of participants forgetting pertinent information, potentially impacting the results.

## 5. Conclusions

As healthcare providers entrusted with the responsibility of patient well-being, paramedical are expected to possess an adequate understanding, positive disposition, and competent implementation of oral health principles. The present investigation revealed that the paramedical students displayed satisfactory knowledge, attitude, and practice in regards to toothbrush upkeep and utilization, with a similar level of comprehension across all aspects. Additionally, the majority of the students exhibited similar attitudes and practices in relation to most toothbrush maintenance and utilization factors. This research focused on medical and nursing students, while future studies should explore other students, particularly those in the dental field. Moreover, further research is necessary to assess the effectiveness of educational interventions aimed at improving the oral health knowledge, attitudes, and practices of healthcare students.

## Likely outcome / Benefits of study:

The research has revealed crucial information about the oral health knowledge and practices of paramedical students, which can serve as a foundation for designing, planning, implementing, and evaluating effective oral health promotion interventions. These interventions can play a pivotal role in promoting healthy lifestyles and behaviours among paramedical students, reducing the risk of oral diseases, and improving the overall health of the community. Additionally, as these students can act as agents of change, the findings of this study can help in shaping future policies and initiatives aimed at enhancing and maintaining the oral health of the community.

## References

- [1] Peltzer K, Pengpid S. Dental health status and oral health behavior among university students from five ASEAN countries. *Nagoya J Med Sci.* 2017 Feb;79(2):123-133. doi: 10.18999/nagjms.79.2.123. PMID: 28626248; PMCID: PMC5472538.
- [2] Bhardwaj T, Tandon S, Chand S, Bhargava A. Knowledge, attitude and practice towards preventive dental care- A KAP study. *J Global Oral Health* 2019;2(1):36-40.
- [3] Gurung M, Malla SS, Rajbhandari B, Bajracharya B. Knowledge, Attitude and

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- Practice (KAP) on Oral Health among students of Nepalese Army Institute of Health Sciences. *MJSBH*. 2022;21(1):81-86.
- [4] Singh O, Pradhan D, Sharma L, Srivastava R. Oral health knowledge, attitudes and practices of primary healthcare workers of Lucknow district: A cross-sectional study. *J Family Med Prim Care*. 2022 Feb;11(2):520-525.
- [5] Verma L, Passi S, Sharma U, Gupta J. Oral Health Knowledge, Attitude, and Practices among Postgraduate Students of Panjab University, Chandigarh: A Cross-sectional Study. *Int J ClinPediatr Dent*. 2020 Mar-Apr;13(2):113-118.
- [6] Khamaiseh AM, ALBashtawy M. Oral health knowledge, attitudes, and practices among secondary school students. *British Journal of School Nursing*. 2013; 8(4):194-199
- [7] Al-Batayneh, O. , Owais, A. and Khader, Y. (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.