


# Investigation on the Knowledge, Attitude and Practice of Oral Health among Medical College and University Undergraduate

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## Abstract

**Objectives:** This study aims to investigate the status of knowledge, attitude and practice (KAP) of oral health among medical undergraduate students, and provide reference for implementing oral health interventions. **Methods:** A total of 528 undergraduate students enrolled in Fuzhou Medical College from February 2023 to September 2023 were selected as the research subjects. Their oral health KAP were investigated, and the oral health behavior habits of different types of medical students were compared, and possible influencing factors were analyzed. **Results:** The total awareness rate of oral health knowledge among medical students is 77.0%, with an average score of  $3.85 \pm 1.16$  points. The overall positive rate of oral health attitudes among medical students is 80.0%, with an average score of  $3.19 \pm 0.72$  points. The total qualified rate of oral health behavior is 65.9%, with an average score of  $4.61 \pm 1.23$  points. The scores of oral health knowledge, attitudes, and behaviors among medical students are related to gender, major, smoking status, and oral health status. The frequency of brushing teeth in the female group was higher than that in the male group, while the habit of brushing teeth before bedtime and the frequency of timely replacement of toothbrushes when deformed were lower, with statistical significance ( $p < 0.05$ ). The frequency of timely replacement of toothbrushes varies among medical students from different majors, and the difference is statistically significant ( $p < 0.05$ ). People who have a habit of eating hot and cold food have a higher frequency of brushing their teeth every day, and the difference is statistically significant ( $p < 0.05$ ). Non smokers have a better habit of brushing their teeth before bedtime and a higher frequency of timely replacement when their toothbrush deforms, with a statistically significant difference ( $p < 0.05$ ). The frequency of using fluoride toothpaste or medicated toothpaste, having a habit of unilateral chewing, and

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timely replacement of toothbrushes when deformed in patients with existing oral problems is higher than that of those without oral problems, and the difference is statistically significant ( $p < 0.05$ ). **Conclusion:** The knowledge, attitude, and behavior of oral health among medical students in this school are above average. Students with different genders, dietary and smoking habits, and oral health status have different oral health behavioral habits. It is recommended to include oral health education in mandatory courses for various medical majors.

## Keywords

Medical Students, Oral Health, Knowledge Attitude Practice, Correlation Analysis

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## 1. Introduction

Oral health is an important part of maintaining overall health, which is related to the occurrence and development of cardiovascular disease, diabetes, stroke and other diseases [1] [2]. The Global Oral Health Report released by WHO in 2022 pointed out that oral diseases are a common non communicable disease, affecting approximately 3.5 billion people worldwide [3]. This data shows the severity of oral health issues on a global scale, emphasizing the importance of understanding the oral health status of individuals of different genders, races, ages, and socio-economic levels, as well as taking more measures to prevent and treat oral diseases. The 74th World Health Assembly of the World Health Organization also passed a resolution on oral health, calling on countries to strengthen the provision of oral health services and promote the integration of oral health and primary healthcare systems at the household and school levels to promote the improvement of oral health [4]. As the main force of future health services, medical students can serve as role models for patients, family members, and friends to emulate in their oral health attitudes and behaviors [5]. Therefore, understanding the oral health status, knowledge, attitudes, and behaviors of medical students is necessary for both patients and students themselves. This study conducted a questionnaire survey on oral health knowledge, attitude, and behavior (KAP) among college students at Fuzhou Medical College, in order to understand the current situation of KAP in the oral health of medical students at the school and provide some reference for implementing oral health intervention measures for medical students.

## 2. Materials and Methods

### 2.1. Basic Information

From February 2023 to September 2023, 528 medical students from Fuzhou Medical College of Nanchang University were randomly selected as the research subjects, including 284 males and 244 females, aged 18 - 24 years, with an aver-

age age of  $20.38 \pm 1.15$  years; There were 185 cases in clinical medicine, 252 cases in medical imaging, 25 cases in dentistry, and 28 cases in prevention. Due to the small number of participants in the survey in traditional Chinese medicine, nursing, laboratory, and rehabilitation, a total of 38 cases were merged into others. The inclusion criteria are: 1) No oral problems caused by trauma; 2) No severe cognitive impairment or unclear speech; 3) Voluntarily participate in a questionnaire survey. Exclusion criteria: 1) Students who are currently undergoing oral treatment; 2) Incomplete filling and multiple modifications.

## 2.2. Method

The survey questionnaire is based on the Fourth National Oral Health Epidemiological Survey Report [6], and relevant items of the survey questionnaire are designed and determined under the guidance of professional dentists. After pre-investigation, expert review, and revision, it was finalized. All survey questionnaires are reviewed on-site by a dental doctor, with a focus on the completeness and logical quality of the questionnaire. Any unqualified questionnaires will be immediately corrected on-site.

All respondents were informed of the survey purpose and precautions before the survey, and participated in the questionnaire anonymously. They were required to independently complete the questionnaire.

## 2.3. Survey Content and Evaluation Criteria

The survey involves: 1) basic information (including gender, major, body type, etc.), a total of 9 questions; 2) The oral health KAP questionnaire consists of 16 questions, including 5 questions on oral health knowledge, including the harm of drinking and smoking to oral health, and the relationship between oral diseases and cardiovascular and cerebrovascular diseases. The attitude towards oral health includes four questions: the necessity for schools to strengthen oral health promotion and education, and the impact of parents' learning of oral health related knowledge on their children's oral health status. Oral hygiene habits include 7 questions, including the use of oral health care tools, daily brushing frequency, and the phenomenon of unilateral chewing.

The body type classification in this questionnaire is based on the Asian standards proposed by the World Health Organization [7]: BMI  $< 18.5 \text{ kg/m}^2$  is considered lean,  $18.5 \text{ kg/m}^2 \leq \text{BMI} < 23 \text{ kg/m}^2$  is considered standard,  $23 \text{ kg/m}^2 \leq \text{BMI} < 27.5 \text{ kg/m}^2$  is considered overweight, and  $\text{BMI} \geq 27.5 \text{ kg/m}^2$  is considered obese. The sleep time is set at 7 hours as the time node [8] [9]. Sleep time  $< 7$  hours is considered insufficient sleep, and sleep time  $\geq 7$  hours is considered sufficient sleep.

The scoring criteria for the KAP questionnaire refer to the methods used in the HU-DBI questionnaire evaluation [10]. Each item is answered by selecting yes or no, with a score of 1 for a correct answer and 0 for an incorrect answer. Answering "yes" to questions 1 - 5, 7 - 11, and 13 - 16 counts as 1 point, while answering "no" to questions 6 and 12 counts as 1 point. Knowledge dimension 5

questions, scoring range from 0 to 5 points, with a total score of 5 points; Attitude dimension 4 questions, scoring range from 0 to 4 points, with a total score of 4 points; Behavior dimension 7 questions, scoring range from 0 to 7 points, with a total score of 7 points. The higher the score, the richer the knowledge of oral health, the more positive the attitude towards oral health, and the better the habits of oral health behavior. Oral health knowledge awareness rate = total number of correctly answered questions/(total number of knowledge questions × total number of survey cases) × 100%, positive attitude rate for oral health = total number of positive attitude answered questions/(total number of attitude questions × total number of survey cases) × 100%, compliance rate for oral health behavior = total number of correct behavior questions/(total number of behavior questions × total number of survey cases) × 100%.

### 3. Analysis

SPSS 26.0 statistical software was used for data analysis, and the quantitative data were expressed as mean ± standard deviation ( $\bar{x} \pm s$ ); The count data is expressed as a percentage, and the comparison between groups is conducted using the chi square test. The correlation analysis is conducted using Spearman correlation analysis, with a  $p < 0.05$  indicating statistical significance.

## 4. Results

### 4.1. Basic Information of Medical Students

After statistical analysis and elimination of obviously incomplete and non-standard questionnaires, 528 valid questionnaires were obtained. The frequency of different types of students is detailed in **Table 1**.

**Table 1.** Basic information statistics table for different types of medical students [n (%)].

Variable	Groups	Frequency/n (%)
Gender	Male	284 (53.8)
	Female	244 (46.2)
Major	Clinical medicine	185 (35.0)
	Dentistry	25 (4.7)
	Prevention medicine	28 (5.3)
	medical imaging	252 (47.7)
	Other	38 (7.2)
Body type	Standard	320 (60.6)
	Overweight	54 (10.2)
	Obese	29 (5.5)
	Lean	125 (23.7)
Sleep time	≥7 h	201 (38.1)
	<7 h	327 (61.9)

**Continued**

Dietary preferences (eating hot and cold)	Yes	471 (89.2)
	No	57 (10.8)
Smoking	Yes	14 (2.7)
	No	514 (97.3)
Drink	Yes	182 (65.5)
	No	346 (34.5)
Oral Diseases (dental caries, periodontitis, gum swelling and pain, oral ulcers, uneven dentition, etc.)	Yes	407 (77.1)
	No	121 (22.9)
Family history (hypertension, hyperlipidemia or diabetes)	Yes	201 (38.1)
	No	327 (61.9)

#### 4.2. Knowledge Status of Oral Health among Medical Students

In this survey, most medical students have a good level of knowledge about oral health care. The average score of oral health knowledge among medical students is  $3.85 \pm 1.16$  points, and the awareness rate of oral health knowledge is 77.0%. The survey found that the vast majority of medical students believe that drinking alcohol and smoking are harmful to oral health (96.4%). More than half of medical students believe that flossing is beneficial for oral health (78.4%), oral care can effectively remove dental plaque (77.5%), and oral diseases affect cardiovascular and cerebrovascular health (70.6%), as shown in **Table 2**.

#### 4.3. Attitude Status of Oral Health among Medical Students

In this survey, most medical students hold a positive attitude towards oral health care. The average score of oral health attitude among medical students is  $3.19 \pm 0.72$  points, and the positive rate of oral health attitude is 80.0%. The survey found that the vast majority of medical students agree that oral health affects learning (97.7%), and schools need to strengthen oral health education (94.5%). However, only 52.7% of medical students believe that their parents will strengthen their attention to their oral health status through their own understanding and learning of oral health-related knowledge, as shown in **Table 2**.

#### 4.4. Practice Status of Oral Health among Medical Students

In this survey, the majority of medical students have a good compliance rate with oral health behavior habits. The average score of oral health behavior is  $4.61 \pm 1.23$  points, and the qualified rate of behavior is 74.4%. Most medical students replace their toothbrushes in a timely manner when they deform (96.0%), maintain a habit of brushing before bedtime (84.3%), brush their teeth more than twice a day (77.5%), rinse their mouth after meals (66.1%), and use fluoride toothpaste or medicated toothpaste (66.3%). However, relatively few (50.8%) use tools such as floss/mouthwash to maintain oral hygiene, as shown in **Table 2**.

**Table 2.** Correct answers to oral health knowledge, attitudes, and behaviors among college students [n (%)].

Dimension	Items	Correct answer	Accuracy/n (%)
Knowledge	1. Do you think drinking and smoking are harmful to oral health?	Yes	509 (96.4)
	2. Do you think there is a relationship between oral diseases and cardiovascular diseases?	Yes	373 (70.6)
	3. Do you know about dental plaque?	Yes	329 (62.3)
	4. Do you know that using dental floss can effectively remove plaque and food residue from the gaps between teeth?	Yes	414 (78.4)
	5. Do you know that developing good oral hygiene habits can effectively remove dental plaque?	Yes	409 (77.5)
Attitude	6. Do you have dental phobia?	No	396 (75.0)
	7. Do you think schools should further strengthen oral health promotion and education?	Yes	499 (94.5)
	8. Will your parents strengthen their emphasis on your oral health status through their understanding and learning of oral health-related knowledge?	Yes	278 (52.7)
	9. Do you think oral health has a significant impact on learning?	Yes	516 (97.7)
Practice	10. Do you use tools (such as dental floss/mouthwash) to maintain oral hygiene?	Yes	268 (50.8)
	11. Brushing teeth at least twice a day?	Yes	409 (77.5)
	12. Is there any lateral chewing phenomenon?	No	420 (79.6)
	13. Do you use fluoride toothpaste or medicated toothpaste?	Yes	350 (66.3)
	14. Do you have the habit of rinsing your mouth after meals?	Yes	349 (66.1)
	15. Do you have the habit of brushing your teeth before bedtime?	Yes	445 (84.3)
	16. Will the toothbrush be replaced promptly when the bristles of the toothbrush are deformed?	Yes	507 (96.0)

#### 4.5. Different Types of Medical Student Populations' Oral Hygiene Habits

The frequency of brushing teeth in the female group was higher than that in the male group every day, but the frequency of brushing teeth before bedtime and timely replacement of toothbrushes when deformed was lower in the female group than in the male group, and the difference was statistically significant ( $p < 0.05$ ). The frequency of timely replacement of toothbrushes varies among medical students from different majors, and the overall difference is statistically significant ( $p < 0.05$ ). The frequency of brushing teeth per day in the group with a preference for hot and cold diets was higher than that in the group without a preference, and the difference was statistically significant ( $p < 0.05$ ). The smoking group had fewer cases of brushing teeth before bedtime and timely replacement of deformed toothbrushes compared to the non-smoking group, and the difference was statistically significant ( $p < 0.05$ ). The group without oral problems had less timely replacement of fluoride toothpaste or medicated toothpaste, unilateral chewing, and deformed toothbrushes compared to the group with existing oral problems, and the difference was statistically significant ( $p < 0.05$ ), as shown in **Table 3**.

**Table 3.** Oral hygiene behavior habits of different types of college students in medical colleges and universities [n (%)].

Variable	use tools to maintain oral hygiene (n = 268)	Brush teeth twice or more times a day (n = 409)	Use fluoride toothpaste or medicated toothpaste (n = 350)	lateral chewing phenomenon (n = 108)	Rinse your mouth after meals (n = 349)	Bedtime brushing habits (n = 445)	Replaced promptly when the bristles of the toothbrush are deformed (n = 507)
<b>Gender</b>							
Male	139 (51.9)	203 (49.6)	191 (54.6)	61 (56.5)	185 (53.0)	223 (50.1)	267 (52.7)
Female	129 (48.1)	206 (50.4)	159 (45.4)	47 (43.5)	164 (47.0)	222 (49.9)	240 (47.3)
$\chi^2$	0.809	12.602	0.256	0.396	0.252	15.386	6.492
<i>p</i>	0.368	<0.001**	0.613	0.529	0.616	<0.001**	0.011*
<b>Major</b>							
Clinical medicine	90 (33.6)	141 (34.5)	126 (36.0)	41 (38.0)	130 (37.2)	157 (35.3)	173 (34.1)
Dentistry	17 (6.3)	23 (5.6)	19 (5.4)	6 (5.6)	19 (5.4)	20 (4.5)	25 (4.9)
Prevention medicine	16 (6.0)	23 (5.6)	22 (6.3)	6 (5.6)	19 (5.4)	25 (5.6)	25 (4.9)
Medical imaging	121 (45.1)	193 (47.2)	155 (44.3)	48 (44.4)	151 (43.3)	213 (47.9)	247 (48.7)
Other	24 (9.0)	29 (7.1)	28 (8.0)	7 (6.5)	30 (8.6)	30 (6.7)	37 (7.3)
$\chi^2$	6.855	3.681	6.727	0.944	9.661	1.750	10.215
<i>p</i>	0.144	0.451	0.151	0.918	0.047	0.787	0.035*
<b>Body type</b>							
Standard	162 (60.4)	249 (60.9)	209 (59.7)	66 (61.1)	218 (62.5)	276 (62.0)	306 (60.4)
Overweight	29 (10.8)	41 (10.0)	34 (9.7)	12 (11.1)	32 (9.2)	42 (9.4)	52 (10.3)
Obese	16 (6.0)	19 (4.6)	21 (6.0)	6 (5.6)	17 (4.9)	22 (4.9)	28 (5.5)
Lean	61 (22.8)	100 (24.4)	86 (24.6)	24 (22.2)	82 (23.5)	105 (23.6)	121 (23.9)
$\chi^2$	0.608	2.927	1.243	0.231	2.451	4.219	0.362
<i>p</i>	0.895	0.403	0.743	0.972	0.484	0.271	0.946
<b>Sleep time</b>							
≥7 h	100 (37.3)	160 (39.1)	140 (40.0)	43 (39.8)	128 (36.7)	164 (36.9)	192 (37.9)
<7 h	168 (62.7)	249 (60.9)	210 (60.0)	65 (60.2)	221 (63.3)	281 (63.1)	315 (62.1)
$\chi^2$	0.131	0.851	1.643	0.176	0.846	1.770	0.213
<i>p</i>	0.717	0.356	0.200	0.675	0.358	0.183	0.645
<b>hot-cold diets preference</b>							
Yes	238 (88.8)	372 (91.0)	310 (88.6)	91 (84.3)	310 (88.8)	401 (90.1)	455 (89.7)
No	30 (11.2)	37 (9.0)	40 (11.4)	17 (15.7)	39 (11.2)	44 (9.9)	52 (10.3)
$\chi^2$	0.090	5.765	0.432	3.448	0.154	2.423	3.846
<i>p</i>	0.764	0.016*	0.511	0.063	0.695	0.120	0.109

## Continued

Smoking							
Yes	8 (3.0)	8 (2.0)	7 (2.0)	3 (2.8)	6 (1.7)	8 (1.8)	11 (2.2)
No	260 (97.0)	401 (98.0)	343 (98.0)	105 (97.2)	343 (98.3)	437 (98.2)	496 (97.8)
$\chi^2$	0.235	3.401	1.707	0.008	3.467	7.994	11.468
$p$	0.628	0.065	0.308	1.000	0.115	0.014*	0.014
Drink							
Yes	96 (35.8)	132 (32.3)	112 (32.0)	32 (29.6)	125 (35.8)	150 (33.7)	177 (34.9)
No	172 (64.2)	277 (67.7)	238 (68.0)	76 (70.4)	224 (64.2)	295 (66.3)	330 (65.1)
$\chi^2$	0.440	3.874	2.803	1.408	0.827	0.727	1.100
$p$	0.507	0.049	0.094	0.235	0.323	0.394	0.294
Oral Diseases							
Yes	212 (79.1)	315 (77.0)	260 (74.3)	73 (67.6)	267 (76.5)	348 (78.2)	396 (78.1)
No	56 (20.9)	94 (23.0)	90 (25.7)	35 (32.4)	82 (23.5)	97 (21.8)	111 (21.9)
$\chi^2$	1.259	0.005	4.600	6.923	0.195	2.006	7.555
$p$	0.262	0.946	0.032*	0.009	0.658	0.157	0.013*
Family history							
Yes	112 (41.8)	158 (38.6)	137 (39.1)	42 (38.9)	136 (39.0)	174 (39.1)	192 (37.9)
No	156 (58.2)	251 (61.4)	213 (60.9)	66 (61.1)	213 (61.0)	271 (60.9)	315 (62.1)
$\chi^2$	3.199	0.244	0.509	0.039	0.354	1.281	0.213
$p$	0.074	0.622	0.476	0.844	0.552	0.258	0.645

Note: Significance: \*:  $p < 0.05$ , \*\*:  $p < 0.01$ .

#### 4.6. Correlation Analysis of Factors Influencing Oral Health KAP among Medical Students

Spearman correlation analysis showed that a positive correlation between gender and oral health knowledge and behavior ( $r = 0.192$ ,  $p < 0.001$ ;  $r = 0.124$ ,  $p = 0.004$ ); Smoking is positively correlated with oral health knowledge ( $r=0.139$ ,  $p = 0.001$ ), attitude ( $r = 0.147$ ,  $p = 0.001$ ), and behavior ( $r = 0.091$ ,  $p = 0.036$ ); The current oral condition is positively correlated with oral health attitudes ( $r = 0.110$ ,  $p = 0.011$ ), as shown in **Table 4**.

### 5. Discussion

Oral disease is a global public health problem, which not only reduces the quality of life of patients, but also has a high incidence rate [11]-[14]. Multiple studies have shown that the oral health status of college students is not optimistic [15] [16]. Therefore, this study takes medical students as the research object, explores the current situation of KAP in oral health of medical students, and analyzes potential related factors that affect their oral health, aiming to provide some reference for oral health care and prevention of oral problems for college students.

**Table 4.** Correlation analysis of factors affecting oral health among medical college students.

Variable	Knowledge score		Attitude score		Behavior score	
	r	P	r	P	r	P
Gender	0.192	<0.001**	-0.021	0.634	0.124	0.004**
Major	-0.034	0.430	-0.035	0.424	-0.035	0.429
Body type	0.001	0.985	-0.048	0.271	-0.032	0.466
Sleep time	0.005	0.903	0.061	0.161	0.001	0.976
hot-cold diets preference	0.058	0.181	0.036	0.404	0.003	0.949
Smoking	0.139	0.001**	0.147	0.001**	0.091	0.036*
Drink	-0.080	0.067	0.033	0.445	-0.058	0.182
Oral Diseases	-0.015	0.729	0.110	0.011*	0.024	0.583
Family history	0.049	0.265	-0.058	0.183	0.083	0.057

Note: Significance: \*:  $p < 0.05$ , \*\*:  $p < 0.01$ .

This survey found that the oral health knowledge level of medical students in our school is good, their attitude is positive, and their behavior is above average. This result is similar to the survey conducted by KAREM *et al.* [17] among Iraqi dental students, but opposite to the oral health survey conducted by KOMABAYASHI *et al.* [18] in 2005 involving Chinese dental students. This may be related to China's increased promotion of oral health promotion in recent years.

Insufficient oral hygiene, smoking, excessive alcohol consumption, and unhealthy dietary habits all increase the risk of oral diseases [12]. Smoking is the second leading cause of bad breath, leading to serious damage and imbalance of the oral microbiota [19]. Periodontitis is a chronic tissue destructive inflammation of teeth caused by bacteria [20]. Research has shown that compared to individuals without alcohol exposure, individuals who consume alcohol have a higher total amount of Porphyromonasgingivalis and Candida nucleata bacteria in the subgingival microbiota [21]. In this survey, the vast majority of medical students believe that drinking alcohol and smoking affect oral health (96.4%), but only 62.3% of students are aware of dental plaque. This indicates that the awareness of dental plaque among medical students in our school is not sufficient, and it is necessary to strengthen the popularization and promotion of oral health knowledge among college students.

This survey found that some medical students still fear dental examination, and their parents have insufficient understanding and learning of oral health-related knowledge, failing to recognize the importance of oral health for overall health, thus neglecting the importance of oral health in their children. The World Dental Union proposed to include perinatal oral health care in policies promoting maternal and child health, and to encourage all women of child-bearing age to start oral health care as early as possible [22]. The study by

SOWMIYA *et al.* [23] showed that parental participation in oral health programs significantly improved the oral health status of 8 - 10 year old school-age children. It can be seen that improving the KAP level of oral health among students and strengthening family oral health education may be an effective breakthrough.

This survey also found that some medical students still do not realize the importance of fluoride toothpaste or medicated toothpaste in oral health, and most medical students survive in the phenomenon of unilateral chewing. Studies have shown that regular use of fluoride toothpaste helps reduce the incidence of cavities [24]. The study by GRUBA *et al.* [25] showed that fluoride toothpaste combined with trisodium phosphate mouthwash can effectively reduce enamel demineralization. Oral and facial pain is one of the most severe pain issues worldwide [26], and a significant association has been found between a preference for chewing on one side and oral and facial pain [27] [28].

This survey also found that the scores of oral health knowledge, attitudes, and behaviors among medical students are related to gender, major, smoking status, and oral health status. Female students cleaned their teeth more frequently than male students, with a statistically significant difference ( $p < 0.05$ ), which is consistent with the results of the oral health survey conducted by FARSI *et al.* [29] on 1177 senior college students at the University of Aziz; But girls brush their teeth and change their toothbrushes less frequently before bedtime than boys, and the difference is statistically significant ( $p < 0.05$ ). The reason may be that girls pay more attention to appearance but are more frugal in life. Comparing the oral hygiene habits of medical students from different majors, it was found that there was a statistically significant overall difference in postprandial mouthwash habits and toothbrush replacement frequency ( $p < 0.05$ ), but there was no statistically significant difference in pairwise comparison between different majors ( $p > 0.05$ ). The analysis of the reasons may be related to the uneven distribution of classes in various majors of our school. Students with intermittent hot and cold eating habits brush their teeth more times a day, and the difference is statistically significant ( $p < 0.05$ ); There were more students in the non-smoking group who had a habit of brushing their teeth before bedtime and changing their toothbrush compared to the smoking group, and the difference was statistically significant ( $p < 0.05$ ). The frequency of fluoride toothpaste use, unilateral chewing, and toothbrush replacement in the group with existing oral problems was higher than that in the group without oral problems, and the difference was statistically significant ( $p < 0.05$ ). The above results all suggest that students with different genders, dietary and smoking habits, and oral health status have different oral health behavior habits. Establishing a school-based oral health education plan is the primary task for current adolescent oral health management and oral disease prevention.

In summary, it can be seen that the medical students in this school have rich knowledge of oral health, good attitudes, and moderate to above average beha-

avior. Strengthening oral health education and promoting oral hygiene behavior habits is of great significance for early intervention in the oral health of medical students. It should be pointed out that due to the small number of classes in medical majors such as prevention, dentistry, and laboratory in our school, it is inevitable that there will be a shortage of students in related majors during the random sampling survey process. Therefore, the differences in oral health behavior among medical students still need further research and confirmation to expand the sample size. Finally, we suggest incorporating content related to oral health into university courses to further promote awareness of oral health among college students and cultivate good oral hygiene habits.

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### Conflict of Interest

The authors declare no conflicts of interest.

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