Assessing Oral Cancer Awareness Among Dental Students in Van Province, Turkey

Ayşe Gül Öner Talmaç[1] , Gaye Keser[2] , Filiz Namdar Pekiner[2] , Nihal Fahrzadeh[3]

[1] Van Yüzüncü Yıl University, Faculty of Dentistry Department of Dentomaxillofacial Radiology, Van, Türkiye.
[2] Marmara University, Faculty of Dentistry, Department of Dentomaxillofacial Radiology, İstanbul, Türkiye.
[3] Van Yüzüncü Yıl University, Faculty of Dentistry, Department of Orthodontics, Van, Türkiye.

Correspondence Author: Gaye Keser
E-mail: gayekeser@hotmail.com
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ABSTRACT

Objective: The aim of this study was to assess and compare oral cancer awareness among 3rd year and 5th year undergraduate dental students in Faculty of Dentistry, Van Yüzüncü Yıl University.

Method: A validated questionnaire testing oral cancer awareness was distributed to third and fifth year dental students at Faculty of Dentistry, Van Yüzüncü Yıl University. A total of 140 students participated in this survey. Knowledge of oral cancer risk factors and diagnostic procedures, dental students' attitudes towards oral cancers, management practices related to oral cancer and sources of oral cancer information were evaluated using 25 questions. The level of significance was set at p<.05.

Results: Among the 140 participating dental students, there were 70 (50.%) third-year and 70 (50%) fifth-year students. The responses of 3rd grade students were significantly lower than 5th grade students in evaluating tobacco use, chewing maras grass and primary oral lesions as risk factors. The rate of 3rd grade students identifying leukoplakia and erythroplakia as the two lesions with the highest susceptibility to carcinogenesis (54.5%) was statistically significantly lower than that of 5th grade students (87.0%). The rate of 3rd grade students (35.9%) identifying squamous cell carcinoma as the most common form of oral cancer was statistically significantly lower than that of 5th grade students (84.1%).
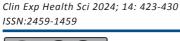
Conclusion: This study emphasized the importance of improved training methods for dentistry in oral cancer detection and prevention. As the oral cancer expertise of graduating dental students advances, so does the number of dentists who are informed and competent in delivering proper oral cancer therapy to their patients. In this study, 5th-grade students were shown to be more aware of oral cancer than 3rd-grade students.
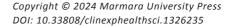
Keywords: Awareness, dentistry students, oral cancer, dental education

1. INTRODUCTION

Oral cancer is an important health problem. Cases of oral cancer represent the 16th most common malignant neoplasm worldwide, with approximately 355,000 new cases annually (1). In Turkey, oral cancers are the second most common cancers of the head and neck region after laryngeal carcinoma (2). It is more common in men over the age of 40 (2-4).

Oral cancer includes a subgroup of neoplasms arising from the lips, anterior two-thirds of the tongue, gums, hard and soft palate, oral mucosal surfaces and floor of the mouth. More than 90% of these oral cancers are oral squamous cell carcinomas (OSCC) (2-6). Various factors such as tobacco, alcohol, betel chewing, poor oral hygiene, malnutrition, ultraviolet light, immunosuppression, viruses, chronic

trauma play a role in its etiology (7). Among more than 4000 organic compounds in tobacco smoke, especially N-nitrosamines and polycyclic hydrocarbons are known to cause dysplastic changes in cells. Studies have reported that the risk of developing oral cancer is related to the duration and amount of smoking (8). Betel chewing is associated with oral submucous fibrosis (OSF) and co-use with tobacco can lead to leukoplakia formation, both of which are potentially precancerous in the oral cavity. Therefore, measures to stop betel use are recommended to control conditions such as OSF and oral cancer. (9) Given that most risk factors can be eliminated, oral cancer can be considered a largely preventable disease. However, it is still possible for it to occur in patients who do not belong to risk categories (8,10). It might show up as uneven and patchy lesions on the epithelium that are red,

white, or reddish-white in appearance. Over time, ulceration, hard border with malignant cell invasion, palpable infiltration into adjacent muscle and bone may occur (11).

In general, the prognosis deteriorates as the disease advances and the tumor's site becomes more difficult to access. The most important factor impacting prognosis is the clinical and pathologic stage at diagnosis (12). Given the high death rate, early identification of oral cancer and prediction of diagnosis resulted in a better prognosis and survival rate, as well as less morbidity (13).

There are various number of studies reporting oral cancer awareness of dental students (14-17). In a survey study conducted in the United Kingdom, oral cancer awareness of medical and dental students was evaluated and the need for better education of undergraduate students on oral cancer was emphasized (14). Despite increasing knowledge in recent years, oral cancer mortality and morbidity rates have not improved significantly (18,19). In a research of 541 patients with oral squamous cell carcinoma presented to the North West England Regional Maxillofacial Unit between 1992 and 2002, 5-year survival rates were reported to be around 50%, with patients often diagnosed at an advanced stage (20). Therefore, more invasive treatments may lead to a lower quality of life and disfigurement for these patients (21,22).

Deficiencies in education prevent the recognition of lesions and may lead to late diagnosis (23). Therefore, it is important for health professionals, especially dentists, to perform oral cancer examinations and be aware of the pathogenesis of the disease as well as the first clinical signs (24). The aim of this study was to evaluate oral cancer awareness among undergraduate dental students at the Faculty of Dentistry, Van Yüzüncü Yıl University.

2. METHODS

Ethical approvals were obtained from the Non-Interventional Ethics Committee of Van Yüzüncü Yıl University (2023/03-08). A validated questionnaire testing oral cancer awareness was given to third and fifth year students at the Faculty of Dentistry, Van Yüzüncü Yıl University. A total of 140 students (70 third-year and 70 fifth-year) participated in this survey. Knowledge of oral cancer risk factors and diagnostic procedures, dental students' attitudes towards oral cancers, oral cancer management practices and oral cancer information sources were assessed using 25 questions. The questionnaire was distributed in paper format. Participation was voluntary and all participants were clearly informed that participation was anonymous.

Table 1. Knowledge about oral cancer risk factors of respondents

Risk factors		Third grade	Fifth grade	Total	P
		n (%)	n (%)	n (%)	
Do you consider use of tobacco as a risk factor?	Yes	54 (77.1)	68 (97.1)	122 (87.1)	.001[1]*
	No	15 (21.4)	2 (2.9)	17 (12.1)	
	I don't know	1 (1.4)	0 (0)	1 (0.7)	
Do you consider low consumption of fruit and vegetable as a risk factor?	Yes	56 (80.0)	60 (85.7)	116 (82.9)	.612[1]
	No	12 (17.1)	9 (12.9)	21 (15.0)	
	I don't know	2 (2.9)	1 (1.4)	3 (2.1)	
Do you consider betel quid chewing as a risk factor?	Yes	41 (61.2)	55 (78.6)	96 (70.1)	.020[1]*
	No	3 (4.5)	5 (7.1)	8 (5.8)	
	I don't know	23 (34.3)	10 (14.3)	33 (24.1)	
Do you consider ultraviolet exposure as a risk factor?	Yes	60 (85.7)	62 (88.6)	122 (87.1)	.925[1]
	No	7 (10.0)	5 (7.1)	12 (8.6)	
	I don't know	3 (4.3)	3 (4.3)	6 (4.3)	
Do you consider viral infection (eg. HPV…) as a risk factor?	Yes	65 (92.9)	67 (97.1)	132 (95.0)	.560[1]
	No	4 (5.7)	2 (2.9)	6 (4.3)	
	I don't know	1 (1.4)	0 (0)	1(0.7)	
Do you consider alcohol use as a risk factor?	Yes	55 (78.6)	57(81.4)	112(80)	.870[1]
	No	13(18.6)	12(17.1)	25(17.9)	
	I don't know	2(2.9)	1(1.4)	3(2.1)	
Do you consider prior oral cancer lesion as a risk factor?	Yes	61(87.1)	66(94.3)	127(90.7)	.049[1]*
	No	3(4.3)	4(5.7)	7(5.0)	
	I don't know	6(8.5)	0(0)	6(4.3)	
Do you consider older age as a risk factor?	Yes	52(75.4)	51(72.9)	103(74.1)	.953[1]
	No	13(18.8)	15(21.4)	28(20.1)	
	I don't know	4(5.8)	4(5.7)	8(5.8)	

[1]*Fisher-Freeman-Halton test* [2]*Chi-square test* *p < .05*

Table 2. Knowledge about oral cancer diagnostic procedures of third and fifth grades

Diagnostic procedures		Third grade	Fifth grade	Total	P
		n (%)	n (%)	n (%)	
The most common sited for oral cancer	All sites equally	10 (14.7)	1(1.6)	11(8.3)	.047[1]*
	Floor of mouth and under the tongue	16(23.5)	24(37.5)	40(30.3)	
	Mucous membrane cheek/lip/gums and back of the tongue	26(38.2)	23(35.9)	49(37.1)	
	Hard and soft palate and floor of mouth	5(7.4)	4(6.3)	9(6.8)	
	Back of the tongue and mucous membrane cheek/lip/gums	11(16.2)	12(18.8)	23(17.4)	
	Under the tongue and hard and soft palate	0 (0)	0 (0)	0 (0)	
Two lesions most likely to be precancerous	Eryhtroplakia and Morbus Bowen	12(18.2)	6(8.7)	18(13.3)	.00008[1]*
	Leukoplakia and eryhtroplakia	36(54.5)	60(87.0)	96(71.1)	
	Blue nevus and leukoplakia	10(15.2)	3(4.3)	13(9.6)	
	Morbus Bowen and blue nevus	8(12.1)	0(0)	8(5.9)	
The most common form of oral cancer	Squamous cell carcinoma	23(35.9)	58(84.1)	81(60.9)	.000001[2]*
	Large cell carcinoma	14(21.9)	1(1.4)	15(11.3)	
	Small cell carcinoma	16(25.0)	8(11.6)	24(18.0)	
	Adenosquamous cell carcinoma	11(17.2)	2(2.9)	13(9.8)	
Age group more likely to be diagnosed with oral cancer	10-20	4(5.7)	1(1.4)	5(3.6)	.087[1]
	20-40	23(32.9)	14(20.0)	37(26.4)	
	40-60	32(45.7)	46(65.7)	78(55.7)	
	60-80	11(15.7)	9(12.9)	20(14.3)	
Clinical properties of a prior oral cancer lesion	Small, painful, white area	13(20.3)	10(14.5)	23(17.3)	.177[2]
	Small, painless, white area	26(40.6)	37(53.6)	63(47.4)	
	Small, painful, red area	15(23.4)	8(11.6)	23(17.3)	
	Small, painless, red area	10(15.6)	14(20.3)	24(18.0)	

[1]Chi-square test [2]Fisher-Freeman-Halton test *p < .05

2.1. Statistical analysis

IBM SPSS Statistics 22.0 (IBM SPSS, Turkey) program was used for statistical analysis. The normal distribution of the parameters was evaluated by Shapiro Wilks test. Chi-square test and Fisher-Freeman-Halton test were used to compare descriptive statistics (mean, standard deviation, frequency) and qualitative data. The significance level was determined as $p < .05$.

3. RESULTS

A total of 140 participants, 70 (50%) 3rd grade students and 70 (50%) 5th grade students, aged between 19-25 years, studying at Faculty of Dentistry, Van Yüzüncü Yıl University participated in the study. 84 (60%) of the participants were male and 56 (40%) were female with a mean age of 22.58 ± 1.47 years.

To test their knowledge about oral cancer, questions about risk factors and diagnostic procedures were asked to 3rd and 5th year dental students who participated in the survey. The distribution of the respondents is presented in Table 1 and Table 2.

There was no statistically significant difference between 3rd and 5th grade students in the rate of low consumption of vegetables and fruits, exposure to ultraviolet rays, viral infections, alcohol use and high age as risk factors (p>.05). The rate of 3rd grade students perceiving tobacco use as a risk factor (77.1%) was found to be statistically significantly lower compared to 5th grade students (97.1%) (p= .001). The 3rd grade students' perception of chewing maras grass as a risk factor (61.2%) was statistically significantly lower compared to the 5th grade students (78.6%) (p=.02). The rate of 3rd grade students perceiving primary oral cancer lesion as a risk factor (87.1%) was statistically significantly lower compared to 5th grade students (94.3%) (p=.925).

3rd grade students were significantly more likely to identify cheek/lip/gingival mucous membrane and dorsum of tongue as the most common sites of oral cancer (38.2%) than 5th grade students (35.9%) (p=.047). The 3rd grade students were statistically significantly less likely to identify leukoplakia and erythroplakia as the two lesions with the

***Table 3.** Attitude towards oral cancer of the respondents*

		Third grade n (%)	Fifth grade n (%)	Total n (%)	P
I advise my patients with suspicious oral lesions.	Strongly agree	29(42.6)	40(57.1)	69(50.0)	.047[1]*
	Agree	18(26.5)	20(28.6)	38(27.5)	
	Uncertain	16(23.5)	5(7.1)	21(15.2)	
	Disagree	4(5.9)	5(7.1)	9(6.5)	
	Strongly disagree	1(1.5)	0(0)	1(0.7)	
My patients are sufficiently informed on risk factors for oral cancer.	Strongly agree	24(35.8)	15(21.4)	39(28.5)	.021[1]*
	Agree	12(17.9)	28(40)	40(29.2)	
	Uncertain	24(35.8)	20(28.6)	44(32.1)	
	Disagree	5(7.5)	7(10)	12(8,8)	
	Strongly disagree	2(3.0)	0(0)	2(1.5)	
My patients sufficiently know signs and symptoms of oral cancer.	Strongly agree	4(5.8)	5(7.1)	9(6.5)	.861[1]
	Agree	12(17.4)	8(11.4)	20(14.4)	
	Uncertain	18(26.1)	17(24.3)	35(25.2)	
	Disagree	27(39.1)	32(45.7)	59(42.4)	
	Strongly disagree	8(11.6)	8(11.4)	16(11.5)	
I am adequately trained to perform an oral cancer examination.	Strongly agree	9(12.9)	2(2.9)	11(7.9)	.0001[2]*
	Agree	11(15.7)	19(27.1)	30(21.4)	
	Uncertain	17(24.3)	33(47.1)	50(35.7)	
	Disagree	21(30)	15(21.4)	36(25.7)	
	Strongly disagree	12(17.1)	1(1.4)	13(9.3)	
I am adequately trained to perform patient's lymph nodes palpation.	Strongly agree	8(11.6)	12(17.1)	20(14.4)	.0001[1]*
	Agree	12(17.4)	29(41.6)	41(29.5)	
	Uncertain	17(24.6)	23(32.9)	40(28.8)	
	Disagree	24(34.8)	5(7.1)	29(20.9)	
	Strongly disagree	8(11.6)	1(1.4)	9(6.5)	

[1]*Fisher Freeman Halton Test*   [2]*Chi-square test*   **p<.05*

highest susceptibility to carcinogenesis (54.5%) than the 5th grade students (87%) (p=.000). The rate of 3rd grade students identifying squamous cell carcinoma as the most common form of oral cancer (35.9%) was statistically significantly lower than that of 5th grade students (84.1%) (p=.000). There was no statistically significant difference between 3rd and 5th year dental students in terms of the distribution of the age range in which oral cancer was most commonly diagnosed and in terms of identifying the clinical features of the primary oral cancer lesion (p>.05).

Table 3 shows the distribution of the participants' responses to questions concerning their opinions toward oral cancer. The participation rate of 3rd grade students in informing patients with suspicious oral lesions (42.6%) was significantly lower than that of 5th grade students (57.1%) (p=.047). The participation rate of 3rd grade students in adequately informing patients about oral cancer risk factors (42.6%) was statistically significantly lower than that of 5th grade students (57.1%) (p=.02). The rate of 3rd grade students being undecided about having sufficient training to perform oral cancer examination (24.3%) was statistically significantly lower than 5th grade students (47.1%) (p=.000). The rate of 3rd grade students agreeing that they have sufficient training to perform lymph node palpation (17.4%) was statistically

significantly lower than that of 5th grade students (41.6%). There was no statistically significant difference between 3rd and 5th grade dental students in the rate of agreement that their patients were sufficiently aware of the signs and symptoms of oral cancer (p>.05).

The distribution of the participants' answers to the questions regarding the evaluation of the patient's medical history is presented in Table 4. There was no statistically significant difference between 3rd and 5th grade students in terms of evaluating the patient's current tobacco use, current alcohol use, patient's cancer history, patient's past tobacco use and patient's family history of cancer (p>.05). The rate of 3rd grade students evaluating the patient's past alcohol use (75.8%) was statistically significantly higher than that of 5th grade students (58.8%).

The distribution of participants' oral cancer information sources is presented in Table 5. The 3rd grade students' rate of evaluating textbooks as a source of oral cancer information (47.1%) was statistically significantly lower than that of the 5th grade students (82.9%) (p=.000). There was no statistically significant difference between 3rd and 5th grade students in terms of evaluating training courses, scientific journals and dental congresses as oral cancer information sources (p>.05).

Table 4. Patient's health history assessment by the respondents

		Third grade	Fifth grade	Total	P
		n (%)	n (%)	n (%)	
Patient's current use of tobacco.	Yes	61(89.7)	61(89.7)	122(88.4)	.638
	No	7(10.3)	9(12.9)	16(11.6)	
Patient's current use of alcohol.	Yes	50(76.9)	51(73.9)	101(75.4)	.686
	No	15(23.1)	18(26.1)	33(24.6)	
Patient's history of cancer.	Yes	58(86.6)	63(91.3)	121(89)	.378
	No	9(13.4)	6(8.7)	15(11)	
Patient's previous use of tobacco.	Yes	53(79.1)	51(72.9)	104(75.9)	.393
	No	14(20.9)	19(27.1)	33(24.1)	
Patient's previous use of alcohol.	Yes	50(75.8)	40(58.8)	90(67.2)	.037*
	No	16(24.2)	28(41.2)	44(32.8)	
Patient's family history of cancer.	Yes	50(73.5)	56(81.2)	106(77.4)	.286
	No	18(26.5)	13(18.8)	31(22.6)	

Chi-square test   **p<.05*

Table 5. Information sources of the respondents

Oral cancer information source/ sources	Third grade	Fifth grade	Total	p
	n (%)	n (%)	n (%)	
Educational courses	28 (40.0)	26 (37.1)	54 (38.6)	**.728**
Scientific journals	23 (32.9)	22 (31.4)	45 (32.1)	**.856**
Textbooks	33 (47.1)	58 (82.9)	91 (65.0)	**.000009***
Dental congresses	17 (24.3)	18 (25.7)	35 (25.0)	**.845**

Chi-square test   **p<.05*

4. DISCUSSION

Early diagnosis of oral cancers is very important for the prognosis, treatment and quality of life of the patient (25, 26). The education and knowledge of dental students on this subject may be insufficient (27-29). Therefore, the aim of this study was to examine the knowledge of dental students about oral cancer risk factors, clinical aspects and attitudes.

Awan et al. (30) conducted a questionnaire study evaluating the oral cancer knowledge of dental and medical students. Dental students were able to identify risk factors better than medical students. Keser and Pekiner (26) evaluated the level of awareness of third and fifth year dental school students about oral cancer risk factors in their questionnaire study. The majority of students reported tobacco use as a risk factor for oral cancers and the researchers reported that there was no significant difference between the groups. Although tobacco use was considered as a risk factor in present study, 3rd grade students were statistically significantly lower than 5th grade students.

Camélo et al. (27) conducted a questionnaire study to evaluate the oral cancer awareness of second and fifth year dental students. The researchers reported that factors such as smoking, alcohol consumption, and UV exposure were known by the students as predisposing factors for oral cancers. As a result of the study, it was reported that there was no significant difference between the groups Öztaş et al. (31) asked 32 questions in an oral cancer awareness

questionnaire to 53 intern students, 51 research assistants and 36 faculty members. Candida albicans, ultraviolet rays, thermal irritation, chronic oral traumas, viral infections such as HPV, white and red mouth lesions were evaluated as risk factors by more than 90% of the participants. In present study, there was no statistically significant difference between 3rd and 5th grade students in the rate of evaluating low consumption of vegetables and fruits, exposure to ultraviolet rays, viral infections, alcohol use and high age as risk factors for oral cancers.

The knowledge of future dentists in the United Arab Emirates on risk and non-risk factors for oral malignancies was assessed in a different research carried out in the country. A questionnaire regarding oral cancer risk factors was completed by first – and fifth-year dentistry students involved in the study. 83% of the students correctly recognized cigarette use as a risk factor for oral cancer, followed by 52% who properly identified high age, 45.6% who correctly identified poor consumption of fruits and vegetables, and 74.4% who correctly identified alcohol use. The knowledge of risk factors and academic year did not have the predicted statistical significance (32). Camelo et al. (27) evaluated the knowledge and attitudes of second and fifth year dental students about oral cancer. Smoking (92.4%) and alcohol (84.2%) were found to be the most frequently cited oral cancer risk factors. When the risk factors were analyzed according to grades, it was observed that only sunlight exposure and tobacco use were more clearly identified by advanced graduate students and there was no significant difference between the student groups in terms of other factors. In present study, 3rd grade students were found to be statistically significantly lower than 5th grade students in evaluating maras grass chewing, primary oral lesion and tobacco use as risk factors.

Silva et al. (33) they evaluated the oral cancer awareness of newly graduated dentists and dental students. In the study, the majority of both newly graduated dentists and dental students stated that the most common type of oral cancer is squamous cell carcinoma. The authors also reported a significant disparity between dental students and freshly graduated dentists in the prevalence of leukoplakia as a precursor lesion of oral cancer. This effect was ascribed by the researchers to the continuance of theoretical instruction as well as practical application. The researchers attributed this result to the continuation of theoretical education along with practical application. Koca and Yenidünya (34) conducted a 13-question questionnaire study on 55 students who did and did not complete surgical internship. There was a statistically significant correlation between completing the internship and correctly answering the question "Which is the precursor lesion of oral cancer?". In the study by Camelo et al. (27) squamous cell carcinoma was identified as the most common type of oral cancer by 48.1% of the students. In present study, the rate of 3rd year students identifying squamous cell carcinoma as the most common form of oral cancer (35.9%) was statistically significantly lower than that of 5th year students (84.1%). There was no statistically significant difference between 3rd and 5th year dental students in the

distribution of the age range in which the most common oral cancer was diagnosed and in terms of identifying the clinical features of the primary oral cancer lesion. Keser and Pekiner (26) reported that the majority of students stated that the most common site of oral cancers was the floor of the mouth and the sublingual region and that there was no statistically significant difference between the groups. In addition, it was mentioned that the number of third-year students who knew that erythroplakia and leukoplakia were precancerous lesions was statistically significantly higher. The researchers attributed these results to the fact that practical training was given to third-year students supported by seminars and presentations.

In the study conducted by Keser and Pekiner (26), the participation rate of 3rd grade students in informing patients with suspicious oral lesions was found to be statistically significantly lower than that of 5th grade students. In terms of awareness of the signs and symptoms of oral cancer patients, third grade students (23.2%) were significantly higher than fifth grade students (10.1%). In this study, the participation rate of 3rd grade students in informing patients with suspicious oral lesions (42.6%) was found to be statistically significantly lower than that of 5th grade students (57.1%). The participation rate of 3rd grade students in adequately informing patients about oral cancer risk factors (42.6%) was statistically significantly lower than that of 5th grade students (57.1%).

In the study by Camelo et al. (27), most students reported that they regularly performed a comprehensive oral examination (81.9%); 81.2% of the students stated that they informed their patients about the harms of alcohol and tobacco; 73.6% said that they could at least partially detect precancerous lesions; 69.1% stated that they would refer the patient to someone else. No statistically significant difference was found between the groups.

The goal of Shamala et al's (35) study was to evaluate senior dentistry students in Yemen's knowledge, attitudes, and practices about OC. Data were gathered online using a pre-validated questionnaire. It was formed up of many closed-ended questions about OC-related knowledge, attitudes, and practices. The survey was sent to nine dental schools located in four main cities, and it was intended for Yemeni dental students enrolled in clinical levels (4th and 5th years).927 students in all completed the survey, representing a 43% response rate. While most people (93.8%) and smokeless tobacco users (92.1%) recognized smoking and sun exposure as potential risk factors for oral cancer (OC), only 76.2% and 50.0%, respectively, recognized sun exposure and lip cancer as potential risk factors. Merely two thirds of the participants acknowledged that OC can manifest as a lesion that is either white or red in color. Regarding practices, only 78% of participants said they routinely do a soft tissue examination. The fifth-year students demonstrated noticeably superior practices and knowledge compared to the fourth-year students ($p < .05$). In our study there was no statistically significant difference between 3rd and 5th year dental students in terms of identifying the clinical features of the primary oral cancer lesion.

A profound limitation of the present study was that Likert Scale questions produce ordinal data, which means that even if a response is given, some opinions may fall between two scale points in reality. Careful construction of the scale and question is needed to ensure accurate results. The results could be influenced by a tendency toward results clustering.

Present study compared the 3rd graders' first visits to the clinic and their first examinations with patients and the 5th graders' knowledge accumulated during their graduation. 5th grade students' awareness of oral cancer was found to be higher than 3rd grade students. The beneficial correlation between dentistry students' activities to evaluate oral cancer risk factors and their increased awareness about oral cancer was also demonstrated by our data. As a result, it is critical that dentistry students get instruction that emphasizes the prevention and detection of oral cancer. Raising the level of oral cancer awareness among dental students who graduate also raises the number of dentists who are qualified and experienced in treating patients with the oral cancer. This study emphasized the value of practical and theoretical training for dental collages. We suggest devoting additional instructional time to teaching about disease identification. Incorporating a focus on the early identification of oral cancer is vital in order to provide dental students with accurate knowledge regarding the risk factors associated with malignant diseases. Present study supports the importance of dental education on oral cancer.

5. CONCLUSION

Oral cancer awareness and knowledge among dentistry students were investigated in this study. Several methodological limitations should be addressed when evaluating our study's findings; all data was self-reported and subjective. As a result, the generalizability of our findings may be restricted, however our study underscored the necessity of improved training techniques and programs for dentists and dental students in terms of early detection and prevention of oral cancer. Furthermore, medical history questionnaires at dentistry schools should be reviewed and revised to provide a thorough list of available and new risk factors for oral cancer.

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