IBOM MEDICAL JOURNAL
Vol.18 No.3 | July - September 2025 | Pages 470-478
www.ibommedicaljournal.org

Interest in oral and maxillofacial surgery among final year dental students and dental interns and its effect on knowledge and confidence in making clinical decisions

Uchenna P. Egbunah BDS, MD, Uzoma L. Offojebe BDS, Olawale O. Adamson FMCDS, Olalekan M. Gbotolorun FMCDS

Department of Oral and Maxillofacial Surgery, Lagos University Teaching Hospital, Lagos, Nigeria

Abstract

Background: Oral and maxillofacial surgery (OMFS) is a surgical specialty that covers a wide scope of management. This translates to a high inflow of patients and an increased workload for practitioners. This increased workload may affect the interest of young dental practitioners in the specialty which may negatively influence their productivity.
Objectives: To determine the level of interest in OMFS and its effect on knowledge and confidence in clinical decision making among final year dental students and dental interns.
Methods: This was a descriptive cross-sectional study conducted at the Faculty of Dental Sciences, University of Lagos and the Dental Center, Lagos University Teaching Hospital. Participants were final year dental students and dental interns. Interest in OMFS for future specialization, knowledge on management of OMFS cases, and level of confidence in management choices were assessed using a self-administered questionnaire.
Results: A total of 64 dental students and interns with mean age of 25.9±2.09 years participated in the study. Among the 22 (34.4%) participants interested in OMFS, 12 (12/22, 54.5%) had high level of knowledge while among the 42 (65.6%) participants not interested in OMFS, only 15 (15/42, 35.7%) had high level of knowledge. Similarly, among participants interested in OMFS, 15 (15/22, 68.2%) had high confidence in their clinical decisions in OMFS case management while among participants not interested in OMFS, 24 (24/42, 57.1%) had high confidence. There was no statistically significant relationship between interest in OMFS and knowledge and confidence level ($p > 0.05$ for both relationships).
Conclusion: The majority of participants included were not interested in OMFS as a future specialty. Among those interested, the majority had a high level of knowledge and confidence. Although these results were not statistically significant, they highlight the importance of interest in productivity.

Keywords: knowledge, confidence, interest, oral and maxillofacial surgery, dental students, dental interns.

Introduction

Oral and maxillofacial surgery (OMFS) is a specialty in dentistry that addresses a variety of head and neck conditions and injuries. The scope of the specialty includes but is not limited to the management of dental infections and injuries, maxillofacial space infections, orofacial cleft defects, maxillofacial traumas, oncology of the head and neck and emergency cases.[1,2] The wide scope of the specialty often translates into an inflow of large numbers of patients, longer clinic and call duty hours and more advanced surgical procedures.[1] The increased work load seen in the specialty may lead to a decline in interest in future specialization among young dental practitioners, particularly if adequate remunerations are not provided.[1–3]

Corresponding Author:

Uchenna P. Egbunah BDS, MD
Chief Resident, Oral and Maxillofacial Surgery, Lagos University Teaching Hospital, Lagos, Nigeria.

dregbunahup@gmail.com | ORCID: 0000-0002-3354-9732

DOI: 10.61386/imj.v18i3.705

In the Nigerian dental internship training module, all clinical dental interns (dental house officers) are expected to complete at least three months of clinical rotation in oral and maxillofacial surgery.[4] This is in addition to the clinical rotations completed as clinical dental students during their undergraduate training. The undergraduate clinical rotations serve as prerequisites for attaining the dental degree while the dental internship clinical rotations are prerequisites for attaining permanent dental licensure after internship.[4,5] It is expected that during these training periods, clinical dental students and dental interns should at least be able to make accurate clinical diagnoses, request appropriate investigations and determine when to refer or call the attention of a senior colleague. A lack of interest in the oral and maxillofacial surgery specialty may significantly affect their ability to perform these tasks when it relates to an oral and maxillofacial surgery case. Several clinical psychologists have noted that the more knowledge medical students have on a subject matter, the more confident and effective they are on said matter.[6] A previous study conducted by Forsgren et al.[6] showed that the knowledge of medical students significantly affected their confidence, and factors like percepton and interest affected their knowledge. This may also be applicable in the dental setting. A declining interest in oral and maxillofacial surgery may therefore result in clinical students and interns not gaining adequate knowledge and losing confidence in their clinical skills when managing a patient. The confidence of a medical practitioner is also important for alleviating the psychological stress of their patient.[2,7] In teaching hospital settings in Nigeria, where first patient contact is often made by clinical students and interns,[4] adequate knowledge and confidence of these students and interns are crucial in making accurate clinical decisions that will greatly improve patient outcome.

Although final year dental students and interns work under supervision of consultant surgeons, a lack of interest in any specialty particularly in a demanding surgical specialty like oral and maxillofacial surgery will have negative effects on the productivity of the trainees.[8,9] This reduction in productivity can lead to a stressful work environment not conducive to teaching or learning, further extending the cycle of dissatisfaction among surgeons, trainees and patients. This cycle can discourage young dental practitioners from specializing in a once highly sort-after surgical specialty[10,11] and may have untold future implications for both dental practitioners and patient care. It is therefore important to identify interest in oral and maxillofacial surgery and its determinants early in order to circumvent unwanted effects on the performance of young dental practitioners in oral and maxillofacial surgery. With this in view, the authors aimed to determine the level of interest in oral and maxillofacial surgery specialty and its effect on knowledge and confidence in clinical decision making among final year dental students and dental interns. The following objectives were addressed: 1) To determine the level of interest in oral and maxillofacial surgery among final year dental students and dental interns, 2) To determine the knowledge and confidence level of final year dental students and dental interns in the management of oral and maxillofacial surgery cases, and 3) To determine the effect of interest in oral and maxillofacial surgery on knowledge and confidence level of final year dental students and dental interns in the management of oral and maxillofacial surgery cases.

Methodology

The study was a descriptive cross-sectional study, and the study population were dental students in their final year of undergraduate training at the Faculty of Dental sciences, College of Medicine, University of Lagos, Nigeria who had completed at least three months of clinical rotation in Oral and Maxillofacial Surgery and dental interns at the Dental Center, Lagos University Teaching Hospital, Lagos, Nigeria who had not completed their internship training in oral and maxillofacial surgery. All dental students in their final year (6^{th} year) and all dental interns who were present at the time of data collection and consented to participate in the study were consecutively included. No other inclusion or exclusion criteria were used in participant selection.

The data was collected using a well-structured, open and close-ended, self-administered questionnaire. Information on socio-demographic characteristics (age, sex, marital status, level of education) were

obtained. Also, interest in OMFS for future specialization, knowledge on management of OMFS cases and level of confidence in management choices were assessed.

Knowledge was assessed using five clinically oriented scenarios on the management of OMFS cases on dental infection, orofacial cleft defect, maxillofacial trauma, maxillofacial oncology and emergency management.

Scenario 1: Dental infection clinical scenario. Patient presented to the oral surgery clinic on account of tooth pain precipitated by only mastication, suggestive of reversible pulpitis secondary to a carious tooth.

Scenario 2: Orofacial cleft clinical scenario. A mother with a child with a cleft lip and palate on her first presentation to the cleft clinic.

Scenario 3: Maxillofacial trauma clinical scenario. A young man with jaw pain, swelling and gagging of occlusion following assault suggestive of mandibular fracture.

Scenario 4: Maxillofacial oncology clinical scenario. A middle-aged man with 5-year history of non-tender, fluctuant, swelling on the mandible with associated mobile and displaced teeth suggestive of ameloblastoma of the mandible.

Scenario 5: Emergency management clinical scenario. A young man rushed to the accident and emergency unit following a road traffic accident. The patient presented unconscious and bleeding from the maxillofacial region, upper and lower limbs, without airway or breathing compromise. The question was, what is the first step in this patient's management?

Scenarios 1 to 4 had multiple options of six, with three correct responses and three wrong responses. Participants were asked to select any three responses. In addition, participants were asked to list one additional step in management not stated in the options available. This completed a total of four responses per scenario. Scenario 5 ended with an open-ended question. Participants were asked to state their first step in the management of the patient in the scenario presented.

For scenarios 1 to 4, a score of 0 was given for all wrong responses and a score of 0.5 was given for each correct selected option. In addition, a score of 0.5 was given for the correct additional management step stated. Therefore, scenarios 1 to 4 had a minimum score of 0 and a maximum score of 2. The question on emergency management had only one correct response and a score of 0 was given for wrong responses and a score of 2 for correct responses. From the summation of scores from scenarios 1 to 5, the minimum total obtainable knowledge score was 0 and the maximum total obtainable knowledge score was 10. Total knowledge scores from 0 to 3.5 were considered as low level of knowledge, 4 to 6.5 as moderate level of knowledge and 7 to 10 as high level of knowledge.

Confidence in management choices was measured on a Likert scale from 1 (not confident) to 5 (very confident). The minimum obtainable score was 1 and the maximum obtainable score was 5 for each question. The confidence score for each clinical scenario was grouped into mild confidence (score of 1 to 2), moderate confidence (score of 3) and high confidence (score of 4 to 5). Total confidence was calculated as the sum of confidence score for each clinical scenario with a minimum score of 5 and maximum score of 25 and was grouped into mild confidence (score of 5 to 10), moderate confidence (score of 11 to 19) and high confidence (score of 20 to 25).

Prior to data collection, participants were made to understand the scope of the study including an explanation of the data collection instrument and were assured of strict confidentiality of their responses. Ethical approval for the study was obtained from the Lagos University Teaching Hospital; Health Research Ethics Committee (ADM/DCST/HREC/APP/5378b).

Data entry, analysis and validation were performed using the statistical package for social sciences for Windows (IBM SPSS Statistics for Windows, Version 23.0. Armonk, NY: IBM Corp). Descriptive analysis was carried out using frequency and proportion for categorical variables and mean and standard deviation for continuous normally distributed variables. Kolmogorov-Smirnov test was used to test for normality. Association between categorical variables were done using Pearson's chi-square test and Fisher's exact test where applicable. Confidence scores were not normally distributed and were compared with interest in oral and maxillofacial surgery using the Mann Whitney U test. A preset level of significance of $p<0.05$ was adopted for all analyses.

Results

A total of 64 dental students and dental interns participated in the study with a response rate of 100%. They consisted of 39 (60.9%) females and 25 (39.1%) males aged between 23 and 37 years with a mean ± SD age of 25.9 + 2.1 years. Majority (92.2%) were single, 29 (45.3%) were final year dental students and 35 (54.7%) were dental interns. Twenty-two (34.4%) participants were interested in specializing in OMFS; 13 (59.1%) of them were final year dental students and nine (40.9%) were dental interns.

For scenario 1, the correct responses for management included patient education on conservative procedures to save the tooth (93.8%), patient reassurance (79.7%), and medications for pain and infection (40.6%). Correct additional step included radiologic investigation for definitive diagnosis or referral to consultant dentist for further management (32.8%). Participants who chose to extract the tooth scored 0 for the entire section. Fifteen (23.4%) participants scored 0 and only three (4.7%) participants scored 2. Table 1 shows participant knowledge scores for each oral and maxillofacial surgery clinical scenario distributed according to educational level. Only one (1.6%) participant was not confident in management choice, two (3.1%) were fairly confident, eight (12.5%) were moderately confident, 26 (40.6%) were confident and 27 (42.2%) were very confident in their management choices. Table 2 shows participant confidence scores for each oral and maxillofacial surgery clinical scenario distributed according to educational level.

Table 1: Participant knowledge scores for each oral and maxillofacial surgery clinical scenario distributed according to educational level

Clinical scenarios	Knowledge scores	Educational level		Total N (%)	p-value
		Final year N (%)	Dental intern N (%)		
Dental infection	0.0	11 (73.3)	4 (26.7)	15 (100.0)	0.082
	0.5	6 (54.5)	5 (45.5)	11 (100.0)	
	1.0	4 (26.7)	11 (73.3)	15 (100.0)	
	1.5	7 (35.0)	13 (65.0)	20 (100.0)	
	2.0	1 (33.3)	2 (66.7)	3 (100.0)	
Orofacial cleft	0.5	3 (75.0)	1 (25.0)	4 (100.0)	0.254
	1.0	0 (0.0)	1 (100.0)	1 (100.0)	
	1.5	22 (48.9)	23 (51.1)	45 (100.0)	
	2.0	4 (28.6)	10 (71.4)	14 (100.0)	
Maxillofacial trauma	0.5	3 (100.0)	0 (0.0)	3 (100.0)	0.208
	1.0	4 (44.4)	5 (55.6)	9 (100.0)	
	1.5	22 (43.1)	29 (56.9)	51 (100.0)	
	2.0	0 (0.0)	1 (100.0)	1 (100.0)	
Maxillofacial oncology	0.5	2 (100.0)	0 (0.0)	2 (100.0)	**0.046***
	1.0	2 (66.7)	1 (33.3)	3 (100.0)	
	1.5	25 (47.2)	28 (52.8)	53 (100.0)	
	2.0	0 (0.0)	6 (100.0)	6 (100.0)	
Emergency management	0.0	12 (40.0)	18 (60.0)	30 (100.0)	0.460
	2.0	17 (50.0)	17 (50.0)	34 (100.0)	

*= significant p-value

For scenario 2, the correct responses for management included extensive history of the mother (93.8%), extensive history of the child (93.5%), and thorough clinical examination of the child (95.3%). The correct additional steps included parental counseling and reassurance (25%). None of the participants scored 0 and the majority (70.3%) of participants scored 1.5 (Table 1). Only two (3.1%) participants were not confident in their management choice, four (6.3%) were fairly confident, nine (14.1%) were moderately confident, 25 (39.1%) were confident and 24 (37.5%) were very confident (Table 2).

For scenario 3, the correct responses for management included take extensive history (90.6%); perform thorough clinical examination (98.4%), request radiologic investigation (87.5%). Correct additional steps included counseling or education on treatment options and protocols (1.6%). Similar to scenario 2, none of the participants scored 0 and the majority (79.7%) of participants scored 1.5 (Table 1). Only one (1.6%) participant was not confident in management choice, six (9.4%) were fairly confident, 10 (15.6%) were moderately confident, 29 (45.3%) were confident and 18 (28.1%) were very confident (Table 2).

For scenario 4, the correct responses for management included take extensive history (93.8%), perform thorough clinical examination (100.0%), request radiologic investigation (95.3%). The correct additional step included further investigations such as chair-side aspiration biopsy (9.4%). None of the participants scored 0 and the majority (82.8%) of participants scored 1.5 (Table 1). Only one (1.6%) participant was not confident in management choice, four (6.3%) were fairly confident, 14 (21.9%) were moderately confident, 29 (45.3%) were confident and 16 (25.0%) were very confident (Table 2).

For scenario 5, the correct response for the first step was the control of bleeding and prevention of further blood loss (53.1%). Thirty-four (53.1%) participants responded correctly (Table 1). Only one (1.6%) participant was not confident in their management choice, four (6.3%) were fairly

Table 2: Participant confidence scores for each oral and maxillofacial clinical scenario distributed according to educational level

Clinical scenarios	Confidence scores	Educational level		Total (%)	p-value
		Final year N (%)	Dental intern N (%)		
Dental infection	1	1 (100.0)	0 (0.0)	1 (100.0)	0.052
	2	2 (100.0)	0 (0.0)	2 (100.0)	
	3	4 (50.0)	4 (50.0)	8 (100.0)	
	4	15 (57.7)	11 (42.3)	26 (100.0)	
	5	7 (25.9)	20 (74.1)	27 (100.0)	
Orofacial cleft	1	2 (100.0)	0 (0.0)	2 (100.0)	**0.038***
	2	4 (100.0)	0 (0.0)	4 (100.0)	
	3	5 (55.6)	4 (44.4)	9 (100.0)	
	4	11 (44.0)	14 (56.0)	25 (100.0)	
	5	7 (29.2)	17 (70.8)	24 (100.0)	
Maxillofacial trauma	1	1 (100.0)	0 (0.0)	1 (100.0)	
	2	5 (83.3)	1 (16.7)	6 (100.0)	
	3	4 (40.0)	6 (60.0)	10 (100.0)	
	4	14 (48.3)	15 (51.7)	29 (100.0)	
	5	5 (27.8)	3 (72.2)	18 (100.0)	
Maxillofacial oncology	1	1 (100.0)	0 (0.0)	1 (100.0)	0.058
	2	3 (75.0)	1 (25.0)	4 (100.0)	
	3	10 (71.4)	4 (28.6)	14 (100.0)	
	4	10 (34.5)	19 (65.5)	29 (100.0)	
	5	5 (31.3)	11 (68.8)	16 (100.0)	
Emergency management	1	1 (100.0)	0 (0.0)	1 (100.0)	0.275
	2	3 (75.0)	1 (25.0)	4 (100.0)	
	3	8 (53.3)	7 (46.7)	15 (100.0)	
	4	13 (44.8)	16 (55.2)	29 (100.0)	
	5	4 (26.7)	11 (73.3)	15 (100.0)	

*= significant p-value

confident, 15 (23.4%) were moderately confident, 29 (45.3%) were confident and 15 (23.4%) were very confident (Table 2).

No significant difference in knowledge and confidence was noted between final year dental students and dental interns for the majority of clinical scenarios presented (P>0.05). However, dental interns had significantly more knowledge in maxillofacial oncology and significantly more confidence in managing orofacial cleft compared to final year dental students (p<0.05 for both associations) (Table 1 and 2 respectively).

The minimum total knowledge score was 1.5 and was scored by only one (1.6%) participant while four (6.3%) had the maximum score of 8.5. The mean ± SD score was 6.4 ± 1.43. Only two (3.1%) participants attained scores between 0 and 3.5 representing low level of knowledge, 35 (54.7%) participants attained scores between 4 and 6.5 representing moderate level of knowledge, and 27 (42.2%) participants attained scores between 7 and 10 representing high level of knowledge. No significant difference was noted between age, sex, educational level and total knowledge (p > 0.05 for all three associations) (Table 3).

The minimum total confidence score was 7 and was scored by only one (1.6%) participant while eight (12.5%) had the maximum score of 25. The mean ± SD score was 19.8 ± 3.93. Only three (4.7%) participants scored between 5 and 10 representing low confidence, 22 (34.4%) participants scored between 11 and 19 representing moderate confidence, and 39 (60.9%) participants scored between 20 and 25 representing high confidence in management choices. No significant difference was noted between age, sex, educational level and total confidence (p > 0.05 for all three associations) (Table 4).

Among the 22 (34.4%) participants interested in oral and maxillofacial surgery, 12 (12/22, 54.5%) of them had high level of knowledge while among the 42 (65.6%) participants not interested in oral and maxillofacial surgery, only 15 (15/42, 35.7%) had high level of knowledge. However, this relationship was not statistically significant (p=0.273) (Table 5).

Table 3: Association of selected sociodemographic characteristics of participants and knowledge level

	Knowledge level				
	Low N (%)	Moderate N (%)	High N (%)	Total N (%)	p-value
Age (years)					
20 – 24	1 (7.7)	9 (69.2)	3 (23.1)	13 (100.0)	0.461
25 – 29	1 (2.1)	24 (51.1)	22 (46.8)	47 (100.0)	
≥ 30	0 (0.0)	2 (50.0)	2 (50.0)	4 (100.0)	
Sex					
Female	1 (2.6)	23 (59.0)	15 (38.5%)	39 (100.0)	0.682
Male	1 (4.0)	12 (48.0)	12 (48.0)	25 (100.0)	
Educational level					
Final year	2 (6.9)	15 (51.7)	12 (41.4)	29 (100.0)	0.285
Dental intern	0 (0.0)	20 (57.1)	15 (42.9)	35 (100.0)	

Table 4: Association of selected sociodemographic characteristics of participants and confidence level

	Confidence level				
	Low N (%)	Moderate N (%)	High N (%)	Total N (%)	p-value
Age (years)					
20 – 24	0 (0.0)	4 (30.8)	9 (69.2)	13 (100.0)	0.798
25 – 29	3 (6.4)	16 (34.0)	28 (59.6)	47 (100.0)	
≥ 30	0 (0.0)	2 (50.0)	2 (50.0)	4 (100.0)	
Sex					
Female	1 (2.6)	14 (35.9)	24 (61.5)	39 (100.0)	0.596
Male	2 (8.0)	8 (32.0)	15 (60.0)	25 (100.0)	
Educational level					
Final year	3 (10.3)	12 (41.4)	14 (48.3)	29 (100.0)	0.056
Dental intern	0 (0.0)	10 (28.6)	25 (71.4)	35 (100.0)	

Table 5: Distribution of knowledge and confidence scores based on interest in OMFS

	Interest in OMFS		P-value
	NOT interested N (%)	Interested N (%)	
Low knowledge	1 (2.4)	1 (4.5)	0.273
Moderate knowledge	26 (61.9)	9 (40.9)	
High knowledge	15 (35.7)	12 (54.5)	
Total	42 (100.0)	22 (100.0)	
Low confidence	2 (4.8)	1 (4.5)	0.419
Moderate confidence	16 (38.1)	6 (27.3)	
High confidence	24 (57.1)	15 (68.2)	
Total	42 (100.0)	22 (100.0)	

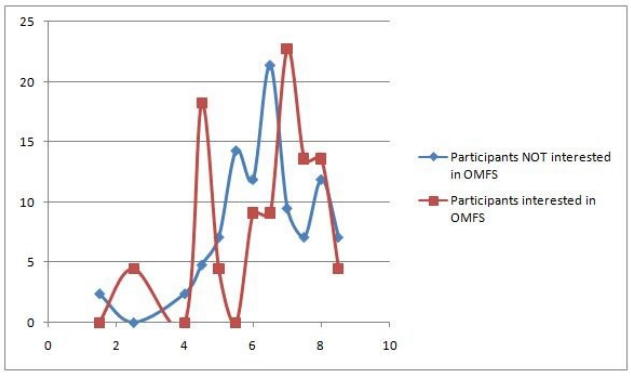

Figure 1: Individual knowledge scores of participants based on interest in oral and maxillofacial surgery. X-axis represents knowledge scores, and Y-axis represents the percentage of participants with each knowledge score charted.

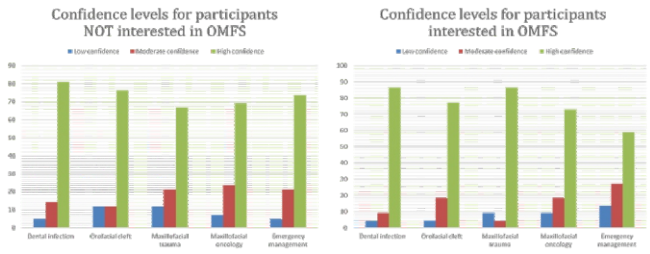

Figure 2: Participants' confidence levels for each clinical scenario grouped according to interest in OMFS (left = not interested, right = interested). The X axis represents the confidence level (low, moderate, high) for each clinical scenario and the Y axis represents the percentage of participants in each group.

Figure 1 is a plotted graph representing the knowledge score of each participant according to interest in oral and maxillofacial surgery. Although a higher percentage of participants interested in OMFS had high level of knowledge scores (scores above 7.0), there was no obvious pattern in the distribution of knowledge score based on interest in OMFS (Figure 1).

Also, among the 22 (34.4%) participants interested in oral and maxillofacial surgery, 15 (15/22, 68.2%) of them had high confidence in their management choices while among the 42 (65.6%) participants not interested in oral and maxillofacial surgery, 24 (24/42, 57.1%) had high confidence. This relationship was not statistically significant (p=0.419) (Table 5). Figure 2 are bar charts showing the level of confidence of participants for each clinical scenario according to their interest in oral and maxillofacial surgery.

Discussion

In Nigeria, the oral and maxillofacial surgery curriculum is prepared such that it encompasses a wide array of OMFS cases including but not limited to dental infections, orofacial cleft, maxillofacial trauma, maxillofacial oncology and emergency management. Final year dental students preparing for final examinations and recently graduated dental students, and dental interns are expected to have at least a basic understanding in the management of OMFS cases. In this study, there was no significant difference in the knowledge and confidence level of respondents for the majority of clinical scenarios based on level of education. Significant differences were only observed for knowledge in maxillofacial oncology and confidence in managing orofacial cleft cases.

Previous Nigerian studies[12,13] have reported OMFS as the specialty of choice for the majority of young dental practitioners, with a recent study[14] suggesting interest even among medical practitioners. However, the reports of this present study may highlight a change in this trend. In this study, a minority (34.4%) of study participants reported an interest in specializing in OMFS. This is similar to results reported by Egbunah et al.[11] which stated that there was a decline in interest in specialization in OMFS among young dental practitioners. Egbunah et al.[11] in their study identified length of work hours and call hours as major deterrents to interest in specialization in OMFS. In this study, the lack of interest in specializing in OMFS did not show any significant relationship with the knowledge and confidence of participants (p> 0.05 for both associations). However, the low level of interest in OMFS seen in this study, corroborated by recent findings[11] suggests a shift in the interest of young dental practitioners from OMFS to other dental specialties. It is therefore recommended that factors influencing this shift in interest be addressed by clinical and surgical faculties and educators to encourage young dental practitioners to consider a career in OMFS.

The results of this study showed that the majority of participants scored at least 50% in sections on dental infections, orofacial clefts, maxillofacial trauma, and maxillofacial oncology. In addition, although less than half of participants scored more than 50% in the dental infection section, over 80% of

participants scored more than 50% in the orofacial clefts, maxillofacial trauma, and maxillofacial oncology sections. For emergency management, more than half of participants responded correctly to the clinical scenario presented. Although a limited (3.1%) number of participants showed low knowledge in management of OMFS cases, less than half of participants demonstrated high knowledge, with the majority of participants exhibiting moderate knowledge levels. In addition, fewer patients demonstrated high knowledge level for dental infection and emergency management compared to what was seen in other sections of OMFS case management. The study by Al-Baghdadi et al.[15] reported that although young dental practitioners are expected to be competent in performing minor oral surgery procedures and managing basic OMFS cases, their knowledge was dependent on their education and training while in dental school. Previous studies by Cabbar et al.[16] and Macluskey et al.[17] also reported similar findings. The results of this study offer valuable insights and highlight the shortcomings of the current OMFS education and training program in developing interest in the OMFS specialty in the minds of final year dental students and dental interns. This present study also emphasized the need for improvement in the delivery of surgical skills and knowledge, particularly in management of dental infections and emergency cases.

In this study, the majority of participants were either confident or very confident in their treatment choices for all aspects of knowledge on OMFS assessed. Specifically, 82.8%, 76.6%, 73.4%, 70.3%, and 68.9% of participants reported a high level of confidence in their knowledge on dental infection, orofacial cleft, maxillofacial trauma, maxillofacial oncology and emergency management respectively. The highest confidence levels were seen for the dental infection clinical scenario. This is similar to results reported by Kamal et al.[18] According to Kamal et al,[18] the majority of students and young dental practitioners are confident in their management of dental infections which may be explained by the fact that they received hands on training in the management of dental infections including performing minor surgical procedures such as dental extraction, compared to other aspects of OMFS where their management involvement may be limited to history taking and examination.

According to Stewart et al,[19] confidence is the judgment that influences an individual's willingness to make a decision or undertake an activity. Since medical students and interns are often the first to review a newly presented patient, especially in teaching hospitals, it is not only important for them to have adequate knowledge, but they should be confident enough to apply said knowledge. According to Alhulayyil et al.[20] a dental intern may be competent enough to make certain clinical decisions but may not have the perceived ability or confidence to act. Other previous studies[18,21] have also reported a similar relationship between knowledge and confidence stating that one without the other will result in an unsatisfactory performance particularly as it pertains to surgical specialties. With this in mind, it can be surmised that factors that affect knowledge of OMFS may also affect confidence in clinical decisions of OMFS cases and vice versa. Interest in OMFS may be one of the said factors.

Among respondents interested in OMF surgery, the majority had high knowledge in management of OMFS cases (54.4%) compared to respondents not interested in OMFS with majority showing moderate knowledge (61.9%). Although this result was not statistically significant, it is noteworthy as this may be a potential factor that affects knowledge level of dental students and interns in OMFS. As regards the confidence level, the majority of participants interested in OMFS and those not interested in OMFS both reported high levels of confidence. However, a higher percentage was seen in those interested in OMFS (68.2%) compared to those not interested (57.1%). Although this result was also not statistically significant, it is equally noteworthy as it may point to certain trends and patterns between interest and confidence. The higher knowledge and confidence level seen in participants interested in OMFS could be explained by the fact that interest in a particular field usually translates to an increased willingness to learn and more attention to details in the field of interest.[19]

A major limitation of this study was the low sample size. This may explain the reason for the statistically insignificant results obtained. However, the results highlight certain trends between interest in OMFS

and knowledge and confidence levels among young dental practitioners. Further investigation with a larger sample size preferably multi-centered data is essential to fully understand the effect of interest in OMFS and knowledge and confidence particularly among young dental practitioners. This study also brings to the fore the dearth of available data on the effect of interest in OMFS and surgical specialties as a whole and the knowledge and confidence of young medical practitioners. Young medical practitioners are the future of the medical and surgical profession and understanding factors that affect their performance including interest in specialty of choice will be beneficial to their productivity.

Conclusion

In conclusion, this study showed that the majority of participants included were not interested in OMFS as a future specialty and that the majority of participants had a moderate to high level of knowledge and confidence in the management of OMFS cases.

Also, among participants interested in OMFS, the majority had a high level of knowledge and confidence. However, there was no statistically significant difference in knowledge and confidence in management of OMFS cases between participants interested in OMFS as a future specialty and participants not interested in OMFS.

The lack of statistically significant findings may be due to the small sample size of this study. Further studies with larger sample sizes are therefore recommended.

Conflict of interest: The authors declare no conflict of interest.

Funding: This research did not receive any grant from funding agencies in the public, commercial, or not-for-profit sectors.

Data availability statement: The datasets analyzed during the current study can be made available from the corresponding author on reasonable request.

Acknowledgement: Nil.

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