ASSESSING KNOWLEDGE, ATTITUDE AND PERCEPTION OF ORAL AND MAXILLOFACIAL SURGERY SPECIALITY AMONG JUMC MEDICAL PROFESSIONALS

BY : WABI TOLA (DMD,YEAR IV ORAL AND MAXILLOFACIAL SURGERY RESIDENT)

A RESEARCH THESIS SUBMITTED TO JIMMA UNIVERSITY INSTITUTE OF HEALTH, FACULTY OF MEDICAL SCIENCE, SCHOOL OF DENTAL MEDICINE, DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR SPECIALITY CERTIFECATE IN ORAL AND MAXILLOFACIAL SURGERY

APRIL , 2024

JIMMA, ETHIOPIA

ASSESSING KNOWLEDGE, ATTITUDE AND PERCEPTION OF ORAL AND MAXILLOFACIAL SURGERY SPECIALITY AMONG JUMC MEDICAL PROFESSIONALS

BY:WABI TOLA **(** DMD,YEAR IV ORAL AND MAXILLOFACIAL SURGERY RESIDENT)

ADVISOR; DR.WALBEK ASSEFA (DMD, ORAL AND MAXILLOFACIAL SURGEON)

CO ADVISOR ; MR ABEJE KEBEDE (BSc, ,MPHE)

APRIL, 2024

JIMMA, ETHIOPIA

ABSTRACT

Background : Oral and maxillofacial surgery specialty has grown rapidly in Ethiopia in recent years. However, the healthcare professionals specifically medical professionals remain unaware of its expanding scope of practice. This study aimed to assess professionals (dental and medical)knowledge, attitude and perception toward the oral and maxillofacial surgical specialty in JUMC.

Methods : This study used a descriptive survey method to collect quantitative data from dental interns, medical interns, dental general practitioners, and medical general practitioners at Jimma University Medical Center. The study was conducted between March and April 2024, and a sample of 198 participants was selected using simple random sampling. A self-administered questionnaire was used to collect data, and descriptive and inferential statistical analysis was performed to analyze the data and understand the knowledge, attitude, and perception of medical professionals..

Results: The data reveals that a high percentage of participants demonstrated knowledge in different aspects of oral and maxillofacial surgery (OMFS). For example, 197 participants (99.5%) were aware that OMFS is a specialty branch of dentistry, and 195 participants (98.5%) recognized various treatment modalities offered by OMFS. Moreover, 160 participants (80.8%) knew that oral and maxillofacial surgeons have advanced their surgical skills, extending their expertise from tooth extraction to microvascular reconstruction of jaw defects. However, there were areas where participants showed less certainty, such as 22 participants (11.1%) being unsure about the management of common oral and maxillofacial conditions, and 62 (31.3%) and 67 (33.8%) participants being unsure about the roles of oral and maxillofacial surgeons in treating facial fractures and lacerations, respectively. Additionally, the data reveals that 15 participants (7.6%) were unaware of the growing usage of orthognathic and cosmetic surgery in the area, and 37 participants (18.7%) were unaware of the progress of surgical abilities in oral and maxillofacial surgery.

Conclusions and recommendation: Participants generally demonstrate a high level of knowledge and awareness OMFS, but there are areas of uncertainty. Ongoing education is needed to address knowledge gaps. Positive attitudes towards OMFS and interdisciplinary collaboration exist, but acceptance of patient referrals to OMFS can be improved. Recommendations include targeted education, promoting collaboration, addressing misconceptions, and enhancing understanding among healthcare professionals to enhance patient care and outcomes.

Keywords : Perception, Attitude, Oral and maxillofacial surgery, Specialty

ACKNOWLEGMENT

I would like to express my sincere gratitude and acknowledgement to my advisors, **Dr. Walbek Assefa** and **Mr. Abeje Kebede**, for their invaluable support and guidance throughout the process of developing this thesis. Their advice and comments were instrumental in shaping the content of this document. I would also like to extend my heartfelt thanks to my beloved family and friends for their unwavering support and prayers.

I am grateful to Jimma University School of Dental Medicine, specifically the Oral and Maxillofacial Surgery department, for sponsoring and enabling me to work on this research topic, which has provided valuable insights. Lastly, I am deeply thankful to God for His strength and guidance, particularly during challenging times. It is by His grace that I have reached this stage, and I will continue to place my faith in Him for my future endeavors. Thank you, God.

List of tables

Table 1: Basic sociodemographic characteristics of medical professionals in JUMC, southwest Ethiopia. 20

Table 2:Knowledge of medical professionals in JUMC toward oral and maxillofacial specialist, southwest Ethiopia 22

Table 3:Attitude of medical professionals in JUMC toward oral and maxillofacial specialist, southwest Ethiopia 23

Table 4:Perception of medical professionals in JUMC toward oral and maxillofacial specialist, southwest Ethiopia 26

TABLE OF CONTENT

ABSTRACT 3

ACKNOWLEGMENT 4

List of tables 5

TABLE OF CONTENT 6

ACRONYMS 7

Chapter one : Introduction 8

1.1Background of the Study 8

1.2. Statement of the Problem 9

Chapter two : Review of Related Literature 12

Chapter three :Objective of the Study 16

Chapter four :Methods and Materials 17

Chapter five : Result 20

Discussion 27

Conclusion 29

Recommendation 29

References 30

Annexes 32

Annex I : Consent form 32

Annexes II : Questionnaire Interview 33

ACRONYMS

OMFS - Oral and Maxillofacial surgery

PR - Pulse rate

BP - Blood pressure

TMJ - Temporomandibular Joint

ENT - Ear,Nose and Throat

ACTH - Adreno corticothropic Hormone

HPA - Hypothalamic-pitutary –Adrenal Axis

GDC – General dental council

JUMC – Jimma university Medical center

Chapter one : Introduction

1.1Background of the Study

The need for skilled oral and maxillofacial surgeons is growing on a global scale. This surgical specialty was once mostly confined to the fields of maxillofacial and general surgeons, but it has since developed into a distinct area of dentistry. We used to rely on books that were written and published in the United States. Still, it is a welcome discovery to read a book written by a British oral and maxillofacial surgeon. This is due to the fact that British oral and maxillofacial surgery is highly regarded for its outstanding educational initiatives and outstanding achievements within the oral surgery community (1). Prioritize the management issues that can be resolved in advance of the admissions date. It is crucial to seek an anesthetic opinion and be prepared for any problems that may arise with the administration of general anesthesia. The admittance time should be scheduled to enable enough time for any necessary special preparations, such as blood tests or meetings with other doctors, if any are needed beforehand (2).

The patient should be visited by the surgical team within a few hours of admission and findings made at the outpatient examination reviewed and revised if necessary. Pulse rate (PR), temperature and blood pressure (BP)are recorded(3).

Blood tests should be performed with ample time for analysis prior to surgery, if they are deemed required. The surgical site should be reevaluated, and a comprehensive oral examination should be performed. Any changes in the dentition should be documented if any teeth need to be pulled so that those that cannot be saved can be extracted under the same anesthesia. To stop insecure dressings from moving into a socket or wound, replace them. Any crowned or loose teeth should be recognized and reported to the anesthetist before general anesthesia. When substantial bleeding is anticipated, blood samples should be obtained for cross-matching and grouping, and the necessary quantity of blood for a possible transfusion should be requested. Serum can be stored for cross-matching

if grouping is done as a precaution; nevertheless, blood should not be procured unless absolutely required.Written informed consent should be acquired for both the anesthetic and the operation, a nd the patient should be fully informed about the nature of the procedure and any potential probl ems.(4).

1.2. Statement of the Problem

A significant specialization in the diagnosis, clinical management, and surgical correction of traumatic, congenital, developmental, and iatrogenic diseases of the oral and maxillofacial complex is oral and maxillofacial surgery (OMFS) (5). OFMS has a far wider reach now than it had in the past, when it was primarily restricted to dent alveolar surgery and minor maxillofacial trauma. These days, the specialty includes more intricate procedures like bone grafting, craniofacial surgery, temporomandibular joint (TMJ) surgery, treatment of benign and malignant head and neck diseases, cleft lip and palate treatment, correction of dental facial deformities, cosmetic facial surgery, implant surgery, and so forth. In addition, non-surgical therapies are provided by OMFS, including those that address oral mucosal disease and facial pain(6).

OMFS is one of the most rapidly expanding specialties in Ethiopia (population approximately 120 million), with OMFS services centralized in the main cities. Peripheral hospitals provide OMFS services through outpatient clinics and day-care facilities. These departments provide all aspects of OMFS and accept referrals from all medical and dental practitioners in the area. The demand for OMFS services in Ethiopia is constantly increasing, especially with the very high incidence of road traffic accidents across the country and the high incidence of oral cancers, particularly in the south western regions(7).

Even while major hospitals worldwide acknowledge OMFS as a well-recognized specialty of the facial skeleton, there are still differences in students' and healthcare professionals' understanding of the field's scope and familiarity with OMFS surgical methods. Based on a survey instrument examining 26 procedures, previous study in Kuwait by Haron et al. evaluated the perception of OMFS by medical and dental professionals and discovered disparities regarding healthcare professional consultations for various disorders in the head and neck region. Significant variations were also observed in the perception of OMFS between dentists and medical professionals in a related study conducted in Saudi Arabia by Alnofaie et al.(8).

Studies carried out in the UK and the USA about 20 years ago showed that the general public and the medical community had little knowledge of OMFS. A decade or two later, Ifeacho et al. noted a slight improvement in the perception of OMFS, and Laskin et al. stated that health professionals recognized the specialty term well. Research carried out in India revealed that experts knew very little about OMFS. There is a marked absence of professional understanding

in poor nations such as Nigeria, where most patients present at advanced stages. More recently, research conducted in Jazan, Saudi Arabia, using medical professionals as its target population revealed little knowledge of OMFS. Achieving the full potential of OMFS requires acknowledging the specialty and comprehending the extent of its practice. A thorough grasp of the specialization is necessary to guarantee appropriate recommendations and the provision of effective and efficient services in OMS departments. Moreover, ongoing education and knowledge upgrading among dental professionals is required because OMFS differs from dental practice. Assessing the level of knowledge about OMFS among medical professionals is crucial because of the growing number of cases and the substantial overlap that exists between OMFS and other specialties, such as plastic surgery and ear, nose, and throat (ENT). Improving the understanding and consciousness of OMFS will help to make the referral system better and, as a result, the medical industry's ability to provide the best possible healthcare services.(9).

It looks like no research has yet assessed Ethiopian health care professionals' knowledge and perceptions of OMS, including dentists and physicians. The goal of this study was to evaluate Ethiopian healthcare professionals' perceptions, knowledge, and awareness of OMS. In Ethiopia, the field of oral and maxillofacial surgery has expanded quickly in the last several years. Healthcare experts are still ignorant of its growing field of practice, nevertheless. The study's objective is to evaluate how medical and dental professionals see the specialty of oral and maxillofacial surgery at JUMC.

1.3 Significance of the study

There are several reasons why this study, which aims to assess medical professionals' attitudes, knowledge, and views about the OMFS specialty at JUMC, is significant. It first addresses a crucial need to understand the level of OMFS awareness and understanding among JUMC's medical team. By evaluating the participants' understanding of OMFS concepts, this study can identify any potential gaps and areas that require further training and direction. Second, it is possible to determine whether or not medical professionals recognize the importance and relevance of the OMFS specialty by assessing their opinions and attitudes toward it.

The findings can be utilized to identify any biases, misinterpretations, or barriers that may be keeping doctors and OMFS specialists from collaborating or referring patients to one another. Thirdly, the results of the study can be used to inform targeted training programs and public awareness campaigns that will improve the knowledge and appreciation of the OMFS specialty among medical professionals at JUMC. By increasing awareness and knowledge, the study can support improved patient care and results, as well as stronger interdisciplinary teamwork.

Furthermore, the information gained from this study can help the domains of medical education and healthcare policy more generally by highlighting the importance of comprehensive instruction in OMFS and advocating for its inclusion in medical curricula. The study's real significance lies in its potential to enhance patient care and elevate JUMC's standards for healthcare services by promoting greater knowledge, understanding, and cooperation about the OMFS specialty.

Chapter two : Review of Related Literature

2.1. Principles of Oral and Maxillofacial Surgery

While the surgical team is in charge of mouth hygiene, the ward sister is in charge of general and oral hygiene. The patient should have an evaluation of their oral hygiene and be provided with the necessary advice upon admission. One possible way to do this would be to rinse the mouth with 0.2% aqueous chlorhexidine before surgery (10)

A modified method is required for severely injured individuals, the elderly, and those who have recently undergone surgery, either to prevent discomfort or because they require assistance. It is not recommended to clean your mouth for the first 24 hours following surgery since it could cause bleeding. After that, the mouth can be irrigated with 0.2% aqueous chlorhexidine following each meal, and mucous membranes and teeth can be cleaned with a soft toothbrush or foam pads affixed to orange sticks. Because they often catch food in the incision, intraoral sutures also need to be carefully tended to. Every day, clinging debris should be wiped away with cotton wool. A hypertonic saline mouth bath, as hot as the individual can bear without scalding, may be used and allowed to lie over the wound until cool, but unlike the mouthwashes used preoperatively, no violent flushing is advised (3)

Patients who are referred for oral and maxillofacial surgical procedures may be receiving medication treatment or have systemic diseases. The process, including the selection and application of a local anesthetic, sedation, or anesthesia, may become more difficult in either of these scenarios. For this reason, a complete medical history is necessary and should be reviewed on a regular basis if the patient stays for an extended period of time. Liaison with the surgeon or medical professional treating specific systemic illnesses is crucial. Drug therapy is advancing quickly; therefore, if a patient is taking a medicine that the oral surgeon is unfamiliar with, they should consult the most recent (11)

The hormones produced by the adrenal cortex are crucial to surgeons because, among other things, they influence electrolyte balance, suppress the immune system, and influence how the body responds to stress. (12). Adrenocortical hypofunction can cause an adrenal crisis, which can end in hypotension, shock, and even death. It is controversial to give individuals at risk of adrenal crisis additional steroids before oral and maxillofacial surgery. (13).

Oral and maxillofacial surgery may not require supplements, according to recent studies. But "steroid cover" might still be necessary for some procedures, such as third-molar surgery or treating extremely nervous patients. It is advisable to keep an eye on blood pressure in patients who may be in danger of an adrenal crisis if more steroids are not administered (14).

2.2. Basic OMFS procedures and its managements

2.2.1. Managing the Operating Room, Instruments and the Surgical Team

This article covers the dental operating room, the tools used in oral and maxillofacial surgery, and the surgical team's preparation. Both hospital and general dentistry practices should have simple-designed operating rooms with easily-cleanable walls and furniture that can fit the necessary equipment without being too crowded. It must be properly aired and maintained at a constant temperature between 18 and 21 degrees with minimal humidity. Positive-pressure air conditioning works best in hospital theaters because it keeps contaminants from the outside air out and reduces noise pollution. A well-trained nursing staff should have a recovery area where patients can rest on a bed or trolley conveniently accessible to the operating room, sterilization, instruments, and surgical team, as well as sterile technique, and the procedure (15) .

2.2.2 Surgical Procedures and Techniques of OMFS

Although the surgeon may need to adapt techniques to fit the anatomical field, the type of operation, and the current conditions, the practice of surgery is based on a few fundamental principles that have not altered over time. The pathology of the ailment being treated, the anatomy of the area being operated on, and surgical physiology must all be thoroughly understood by the surgeon. (16)

It is now acknowledged that all surgeries ought to be painless. Preventing psychological and physical stress in patients is crucial, as it can increase their vulnerability to shock, hinder their recuperation, and complicate surgery performed under local anesthesia for the surgeon. While the oral and maxillofacial surgeon is typically quite adept at administering local anesthetic injections, general anesthetics are handled by a specialist in this specialty in oral and maxillofacial surgery. The following principles apply: painless operation, asepsis, little harm,

appropriate access, stopping bleeding, debridement (wound toilet), drainage, wound repair, Control and avoidance of wound infection, as well as patient support (17).

A common OMFS procedures includes Dentoalveolar Surgery, Dental Implants, Surgical Correction of Maxillofacial Skeletal Deformities, Orthognathic Surgery, Cleft and Craniofacial Surgery, Maxillofacial Trauma, Temporomandibular Joint, Pathologic Conditions and Reconstructive and Cosmetic Surgery The removal of unhealthy or impacted teeth is the cornerstone of the majority of OMFS practices.

Dental implants are used to replace lost teeth, and OMFS plans and installs them. Appropriate diagnosis, therapy, site preparation (including soft tissue and bone restoration), and maintenance are all part of implant placement procedure. Repositioning and recontouring the face bones is one of the surgical techniques for maxillofacial skeletal deformities, which aim to address pathologic or functional issues. Restoring and/or improving function and preventing potential consequences are the main objectives of surgical treatment of certain bone abnormalities. Orthognathic surgery is used to treat irregularities in the growth and development of the jaw and face bones. Malocclusion is typically found in patients with these disorders. Congenital and acquired abnormalities in the maxillofacial region, such as cleft lip and palate, are surgically corrected by OMFS. Most craniofacial and cleft surgeries are performed on children. OMFS treat various facial and neck injuries, fix fractured jaw and facial bones, repair severed nerves and ducts, and repair both simple and complicated facial injuries. (18–20).

2.3. Knowledge, attitude and perception of Medical Professional toward OMFS

Out of the medical professionals, 105 individuals (84%) recognized oral and maxillofacial surgery as a specialty area within the dental field. Of the participants, only 52 (41.6%) were aware of the various treatment techniques that fall under the scope of oral and maxillofacial surgery. Fifty (40%) of the participants referred cases that related to the oral and maxillofacial region to OMFS in addition to the oral and maxillofacial surgeon. The extraction of teeth was the only treatment about which the majority of medical professionals were aware that it was an oral and maxillofacial surgeon's expertise(21).

A survey conducted in South India found that of the participants, only 71.3% were aware of the various dental specialties, while 28.7% were not. Only 70.3% of them answered "yes," while 29.7% said "no," when asked if they were aware of the specialty known as OMFS. Of the individuals involved, half claimed to know about the various operations carried out in OMFS,

while the other half didn't know. Furthermore, 65.3% of them were still unaware of the various education tracks in OMFS, compared to just 34.7% of those who were aware of them.
Out of all the participants, only 53% were aware that OMFS was not limited to dentoalveolar surgeries, and 47% believed that OMFS was solely relevant to dentoalveolar surgeries
Of those who took part, 51% believed that OMF surgeons were qualified to do treatments other than dentoalveolar surgery, while 49% disagreed. It's important to note that 6.3% of participants did not think OMF surgeons were qualified to undertake third molar procedures or tooth extractions, compared to 93.7% of people who thought so.(22).

Ninety-one percent of them felt an OMF surgeon was qualified to execute the procedure when it came to implant placement. Regarding TMJ procedures, cosmetic surgeries, and cleft lip and palate surgeries, participant opinions were divided. That is to say, just 46.5%, 53%, and 41.6% of the participants thought an OMF surgeon was qualified to operate on cleft lip and palate, TMJ, and cosmetic procedures, respectively. Merely 29.2% of the participants believed that an OMF surgeon was qualified to perform procedures to address craniofacial deformities, while 70.8% disagreed. Of the participants, only 43.6% had referred patients for purposes other than dentoalveolar operations, and only 59.4% had ever referred a patient to an OMF surgeon. In the future, 61.4% of participants stated they would refer patients to an OMF surgeon for purposes other than dentoalveolar procedures (22).

Chapter three :Objective of the Study

3.1. General Objective

The main objective of the study was assessing knowledge, attitude and perception of oral and maxillofacial surgery specialty among JUMC healthcare professionals

3.2. Specific Objectives

The specific objectives of this study were

- To assess knowledge of oral and maxillofacial surgery specialty among JUMC medical professionals
- To assess attitude of oral and maxillofacial surgery specialty among JUMC medical professionals
- To assess perception of oral and maxillofacial surgery specialty among JUMC medical professionals

Chapter four :Methods and Materials

4.1. Study Design

A descriptive study method with quantitative data collection approaches was utilized. In this quantitative data collection approach, a cross-sectional survey data was used to collect data at Jimma University Medical Center (JUMC). The data was collected from dental interns, medical interns, dental general practitioners, and medical general practitioners interns between September 2023 and June 30, 2024.

4.2. Study Area

The Jimma University Medical Center was the study area (JUMC). JUMC which has 800 beds, is one of the nation's oldest public hospitals. Geographically speaking, it lies 352 kilometers southwest of Addis Ababa near the city of Jimma. Serving about 16,000 inpatients, 220,000 outpatient attendants, 12,000 emergency cases, and 4,500 deliveries annually, it is currently the only teaching and referral hospital in the southwest region of the nation. The hospital's catchment population is estimated to be around 15 million. The Jimma University Medical Center was the study area (JUMC). Dental general practitioners, medical general practitioners, and limited dental interns was employed by Jimma University Medical Center (JUMC).

4.3. Study Period

In 2024, the research was conducted in the months of March and April. During this period, the research thesis was drafted and submitted to the department. Following advisor comments, the principal researcher made the necessary modifications. The adviser was consulted on the first draft of the study, and data was collected and analyzed in compliance with the presented thesis. The researcher was resubmitted the work to the department after considering the comments.

4.4. Population

All dental interns, medical interns, general practitioners in the medical field, and general practitioners in the dental field was the source population. Study Population: All of the sampled general practitioners—dentists, physicians, and medical practitioners was the study population.

4.5. Sample Population

Based on the conventional single proportion formula, 198 dental interns, medical interns, dental general practitioners, and medical general practitioners was chosen from the entire population of N (408) by a simple random sampling techniques. 50% is the expected prevalence of knowledge about OMFS, and 0.05 is the maximum amount of absolute precision or error allowed. A 95% confidence level (Zα/2) standard normal variable is 1.96. Since there are fewer than 10,000 people in the population overall, 198 samples was collected in total. After using the minimization formula, 198 people will make up the final sample size.

$$n = \frac{\left[\left(\frac{Z\alpha}{2}\right) 2 * p(1-p)\right]}{d2}$$

Where,

p= knowledge toward OMFS (50% since we don't have data)

d= degree of absolute precision/ error tolerated (0.05)

Z α/2= Standard normal variable at 95% Confidence level (1.96).

By taking anticipated prevalence knowledge toward OMFS 50%, a total 384 samples Since the total population was less than 10,000, minimization formula was applied as and final sample size was **198**:

Nf = n/(1+n/N)

4.6 Sampling Techniques

A simple random sampling procedure was used to choose the sample population for the study. Dental interns, medical interns, general practitioners in the medical field, and dental interns was the sample population from which the needed sample was collected.

4.7. Data Collection Tools

Quantitative information from 198 dental interns, medical interns, dental general practitioners, an d medical general practitioners was gathered via a self-administered questionnaire.

4.8. Methods of Data Analysis

The data was analyzed by using both descriptive and inferential statistical techniques. Percentages, frequencies, means, and standard deviations are all part of a descriptive analysis. To clarify the specifics of the knowledge, attitude, and perspective of medical professionals, the data will be provided in a descriptive manner. The result was expressed in terms of graphs, tables, and figures.

4.9. Ethical Consideration

All the respondents received explicit information to ensure the research is ethical. In the introduction to the questionnaires and interview guides, the purpose of the study was well described, and the confidentiality of the responses was strictly guaranteed. The study's participants was made aware that their participation is contingent upon their agreement. When presenting, analyzing, and interpreting the data, the research was not add any personal touches to any of the respondents' response.

Chapter five : Result

5.1 Basic sociodemographic characteristics of medical professionals in JUMC

In this study, 198 participants were participated with 100% response rate. Out of them, 108 (45.5%) of the participants were female, while 90 (54.5%) of the participants were male. Regarding working units, 30 (15.2%) worked in the emergency OPD, 90 (46.5%) worked in the cold OPD, and 76 (38.4%) were allocated to the ward. In terms of occupation, there were 23 (11.6%)of general practitioners in medicine, 74 (37.4%) of dental interns, 7 (3.5%) of dental general practitioners, and 74 (47.4%) of medical interns. Regarding experience, the bulk of participants 165 ((83.3%) had less than a year's worth, but smaller percentages had experience ranging from one year (1.5%) to two years (7.1%), three years (5.6%), or four years or more (2.5%). (See table 1)

Table 1: Basic sociodemographic characteristics of medical professionals in JUMC, southwest Ethiopia.

SN	Variables		Frequency	Percentages
1	Sex	Male	108	54.5
		Female	90	45.5
2	Working unit	Ward	76	38.4
		Cold OPD	92	46.5
		Emergency OPD	30	15.2
3	Profession	Medical Intern	94	47.4
		Dental Intern	74	37.4
		Dental GP	7	3.5
		Medical GP	23	11.6
4	Experience	Less than 1 year	165	83.3
		1 year	3	1.5
		2 year	14	7.1
		3 year	11	5.6
		4 year and above	5	2.5

5.2 Knowledge of medical professionals in JUMC toward oral and maxillofacial specialist

The data reveals several key findings regarding participants' knowledge toward oral and maxillofacial surgery (OMFS). In terms of awareness, a high percentage of participants (ranging from 92.4% to 99.5%) demonstrated knowledge in different aspects of OMFS. Specifically, 197 (99.5%) were aware that OMFS is a specialty branch of dentistry. Similarly, 195 (98.5%) of participants recognized various treatment modalities offered by OMFS. Moreover, 160 (80.8%) knew that oral and maxillofacial surgeons have advanced their surgical skills, extending their expertise from tooth extraction to microvascular reconstruction of jaw defects. However, there were some areas where participants showed less certainty. For instance, 22 (11.1%) were unsure about the management of common oral and maxillofacial conditions. Furthermore, there was some uncertainty regarding the roles of oral and maxillofacial surgeons in treating facial fractures 62 (31.3% unsure) and facial lacerations 67 (33.8% unsure).

Overall, these findings highlight the varying levels of knowledge and awareness among participants regarding different aspects of OMFS. The data reveals that 15 (7.6%) of participants were unaware of the growing usage of orthognathic and cosmetic surgery in the area, and 37 (18.7%) of participants were unaware of the progress of surgical abilities in oral and maxillofacial surgery. Furthermore, the research shows that 1.5% to 0.5% of participants were either unclear or did not know specific components of OMFS. (see table 2)

The attitudes of participants toward various aspects of oral and maxillofacial surgery (OMFS) is explained as follow. A significant percentage of participants agreed or strongly agreed with several statements. Firstly, 131 (66.2%) believed that collaboration between different healthcare specialties and oral and maxillofacial surgeons improves patient outcomes. Similarly, a majority 129 (65.2%) agreed that a variety of treatment modalities fall under the domain of OMFS. Furthermore, 113 (57.1%) agreed that cosmetic and orthognathic surgery has become a routine procedure in the field. Additionally, 116 (58.6%) of participants agreed that oral and maxillofacial surgeons have advanced their surgical skills and competence. (See table 3)

Table 2:Knowledge of medical professionals in JUMC toward oral and maxillofacial specialist, southwest Ethiopia

SN	Variables	Knowledge toward OMFS Category					
		Yes, I know		I am not sure		No, I don't know	
		N	%	N	%	N	%
1	Do you know that oral and maxillofacial surgery as a specialty branch of dentistry?	197	99.5	1	0.5		
2	Do you know that different variety of treatment modalities coming under oral and maxillofacial surgery?	195	98.5	3	1.5		
3	Do you know the fact that the cosmetic and orthognathic surgery becoming a routine procedure in the field of oral and maxillofacial surgery?	183	92.4	15	7.6		
4	Do you know basics regarding common oral and maxillofacial conditions and their management?	176	88.9	22	11.1		
5	Do you know that oral and maxillofacial surgeons have improved their surgical skills and competence from simple procedure as surgical removal of tooth to micro vascular reconstruction of various jaw defects?	160	80.8	37	18.7	1	0.5
6	Do you know that Oral and maxillofacial surgeons are right to treat facial fractures	136	68.7	62	31.3		
7	Do you know that Oral and maxillofacial surgeon will treat is the right profession to treat facial lacerations	130	65.7	67	33.8	1	0.5

5.3 Attitude of medical professionals in JUMC toward oral and maxillofacial specialist

Moreover, there was agreement that oral and maxillofacial surgeons have a role in treating temporomandibular joint disorders 127 (64.1%), oral cancer 139 (70.2%), cleft lip and cleft palate 130 (65.7%), craniofacial anomalies 131 (66.2%), and salivary gland diseases 134 (67.7%). These findings highlight positive attitudes toward the collaborative nature of OMFS,

the diverse treatment modalities within the field, and the role of oral and maxillofacial surgeons in various conditions. (see table 3)

The findings from this data indicate several significant differences in attitudes towards Oral and Maxillofacial Surgeons (OMFS). Firstly, a majority of respondents 131(66.2%) agreed that collaboration between different healthcare specialties and OMFS improves patient outcomes, while 67(33.8%) either did not agree or were unsure. Secondly, there was agreement that a variety of treatment modalities fall under oral and maxillofacial surgery, with 129 (65.2%) agreeing and 68 (34.3%) either not agreeing or unsure. However, there was a slight disagreement 1(0.5%) regarding cosmetic and orthognathic surgery becoming routine procedures in the field. Similarly, while a majority agreed 116(58.6%) that OMFS have improved their surgical skills, including microvascular reconstruction,77(38.9%)either did not agree or were unsure. . (see table 3)

Regarding specific roles, a majority agreed that OMFS play a role in treating temporomandibular joint disorders 127 (64.1%), cleft lip and palate (65.7%), craniofacial anomalies 131 (66.2%), and salivary gland diseases 130 (67.7%). However, there was some disagreement or uncertainty in the role of OMFS in treating oral cancer 57(28.8% either did not agree or were unsure). These findings highlight the need for further education and awareness to address any misconceptions or uncertainties about the various roles and capabilities of OMFS in different treatment areas. . (see table 3)

Table 3:Attitude of medical professionals in JUMC toward oral and maxillofacial specialist, southwest Ethiopia

SN	Variables	Attitude toward OMFS Category					
		Strongly Agree		Agree		Do not agree	
		N	%	N	%	N	%
1	Do you believe that collaboration between different healthcare specialties and Oral and Maxillofacial Surgeons improves patient outcomes?	131	66.2	67	33.8		
2	Are you agree that different variety of treatment modalities coming under oral and maxillofacial surgery?	129	65.2	68	34.3	1	.5
3	Are you agree the fact that the cosmetic and	113	57.1	84	42.4	1	.5

	orthognathic surgery becoming a routine procedure in the field of oral and maxillofacial surgery?						
4	Are you agree that oral and maxillofacial surgeons have improved their surgical skills and competence from simple procedure as surgical removal of tooth to micro vascular reconstruction of various jaw defects?	116	58.6	77	38.9	5	2.5
5	Do you agree that oral and maxillofacial surgeon has a role in treating temporomandibular joint disorders?	127	64.1	70	35.4	1	.5
6	Do you agree that oral and maxillofacial surgeon has a role in treating oral cancer	139	70.2	57	28.8	2	1
7	Do you agree that oral and maxillofacial surgeon has a role in treating cleft lip and cleft palate?	130	65.7	65	32.8	3	1.5
8	Do you agree that oral and maxillofacial surgeon has a role in treating craniofacial anomalies?	131	66.2	65	32.8	2	1
9	Do you think oral and maxillofacial surgeon has a role in treating Salivary gland diseases?	134	67.7	64	32.3		

5.4 Perception of medical professionals in JUMC toward oral and maxillofacial specialist

The main findings of the current study indicate that a significant majority of respondents 132 (66.7%) strongly agreed and 65 (32.8%) agreed to introducing oral and maxillofacial surgeons (OMFS) in their panel expertise for the delivery of treatment. Similarly, a majority of respondents 133 (67.2%) strongly agreed and 63 (31.8%) agreed to consulting OMFS in their panel for cases needing their field of expertise advice. When asked about the importance of the Oral and Maxillofacial Surgery specialty, the majority 133 (67.2%) strongly agreed, and 63 (31.8%) agreed that it is important in the healthcare system. Additionally, a substantial proportion of respondents 146 (73.7%) accepted the act of referring patients to an OMFS when

necessary. Moreover, a majority of respondents 132 (66.7%) believed that collaboration between different medical specialties and OMFS improves patient outcomes.(see table 4)

There is a significant difference in the acceptance of referring patients to an Oral and Maxillofacial Surgeon when necessary. While the majority 146 (73.7%) accepted the act, a notable proportion 52 (26.3%) did not provide a response or did not agree. This finding highlights the need for further investigation into the reasons behind this reluctance or lack of response. It may be important to address any barriers or concerns related to patient referrals and provide additional information or training to improve understanding and acceptance among healthcare professionals.(see table 4)

Another significant difference observed in the data is related to the belief in the collaboration between different medical specialties and Oral and Maxillofacial Surgeons (OMFS) for improving patient outcomes. While a majority of respondents 132 (66.7%) agreed that such collaboration is beneficial, a considerable proportion 66 (33.3%) either did not agree or were unsure. This finding suggests a need for promoting the understanding and importance of interdisciplinary collaboration among healthcare professionals, specifically highlighting the positive impact that collaboration with OMFS can have on patient outcomes. Additional efforts can be made to enhance communication and cooperation between medical specialties to ensure optimal patient care and outcomes.(see table 4)

Table 4:Perception of medical professionals in JUMC toward oral and maxillofacial specialist, southwest Ethiopia

SN	Variables	Perception toward OMFS Category					
		Strongly Agree		Agree		Do not agree	
		N	%	N	%	N	%
1	Would you like to introduce oral and maxillofacial surgeon in your panel expertise for delivery of treatment ?	132	66.7	65	32.8	1	0.5
2	Would you like to consult oral and maxillofacial surgeon in your panel in in cases needing their field of their expertise advise ?	133	67.2	63	31.8	2	1
3	Do you agree that the Oral and Maxillofacial Surgery specialty in the healthcare system is important?	133	67.2	63	31.8	2	1
4	How do you accept the act of referring patients to an Oral and Maxillofacial Surgeon when necessary?	146	73.7	52	26.3		
5	Do you believe that collaboration between different medical specialties and Oral and Maxillofacial Surgeons improves patient outcomes?	132	66.7	66	33.3		

Discussion

The current study, indicates that participants generally demonstrate a high level of knowledge and awareness of oral and maxillofacial surgery (OMFS). In line with this study, the previous studies data highlights a significant level of awareness among medical professional regarding oral and maxillofacial surgery (OMFS) (23).

Similarly this study identified demonstrated strong knowledge of OMFS as a specialty branch of dentistry, various treatment modalities, and the advanced surgical skills of oral and maxillofacial surgeons(24,25).

Our study demonstrated still there are some uncertainty regarding the roles of oral and maxillofacial surgeons in treating facial fractures and facial lacerations. In line with our study, particularly in managing common conditions and understanding the roles of OMFS in treating facial fractures and lacerations the other study also reflected the significant uncertainty. Our finding reveals that also some of participants were unaware of the growing usage of orthognathic and cosmetic surgery in the field. Additionally, a portion of participants lacked awareness of the increasing use of orthognathic and cosmetic surgery in OMFS, as well as the advancements in surgical abilities within the field from the published studies as well (9,26).

The a significant number of the current study participants strongly agreed upon the role of OMFS as explained in the result. Similarly, in this study a significant percentage of participants acknowledged the role of OMFS in treating various conditions such as temporomandibular joint disorders, oral cancer, cleft lip and palate, craniofacial anomalies, and salivary gland diseases (8)

Our study identified that a significant majority of respondents 132 (66.7%) strongly agreed and 65 (32.8%) agreed to introducing oral and maxillofacial surgeons (OMFS) in their panel expertise for the delivery of treatment. Similarly, a majority of respondents 133 (67.2%) strongly agreed and 63 (31.8%) agreed to consulting OMFS in their panel for cases needing their field of expertise advice. When asked about the importance of the Oral and Maxillofacial Surgery specialty, the majority 133 (67.2%) strongly agreed, and 63 (31.8%) agreed that it is important in the healthcare system. Othe previously published studies also reflected similar finding in which the participant reflected a strong positive attitude towards the involvement of Oral and Maxillofacial Surgeons (OMFS) in healthcare delivery (5). Also in this study A significant

majority of respondents expressed agreement on the importance of OMFS expertise and the benefits of collaboration with different medical specialties for improved patient outcomes (8,27)

In the current study, a significant difference in the acceptance of referring patients to an Oral and Maxillofacial Surgeon when necessary. While the majority 146 (73.7%) accepted the act, a notable proportion 52 (26.3%) did not provide a response or did not agree. Another significant difference observed in the data is related to the belief in the collaboration between different medical specialties and Oral and Maxillofacial Surgeons (OMFS) for improving patient outcomes. While a majority of respondents 132 (66.7%) agreed that such collaboration is beneficial, a considerable proportion 66 (33.3%) either did not agree or were unsure. Similarly, there were notable proportions of respondents who either did not agree or were unsure about the significance of referring patients to OMFS when necessary and the value of interdisciplinary collaboration with OMFS in this study as well (28).

One potential limitation of this study is the relatively small sample size, which may limit the generalizability of the findings to a larger population. With only a specific number of participants included in the study, there is a possibility that the sample may not be fully representative of the target population. This limitation could impact the external validity of the study's results and may restrict the ability to draw broader conclusions or make generalizations about the perceptions of medical professionals towards oral and maxillofacial specialists. Another potential limitation of this study is the reliance on self-reported data, which can introduce response bias and potential inaccuracies. Participants' responses may be influenced by social desirability bias, leading them to provide answers

\

Conclusion

In conclusion, the current study, indicates that participants generally demonstrate a high level of knowledge and awareness of oral and maxillofacial surgery (OMFS). They recognize OMFS as a specialty branch of dentistry and are aware of various treatment modalities offered by OMFS. However, there are areas where participants show less certainty, particularly in managing common oral and maxillofacial conditions and understanding the roles of OMFS in treating facial fractures and lacerations. Ongoing education and training are needed to enhance knowledge and awareness in specific areas of OMFS. Participants generally have positive attitudes toward OMFS, recognizing its collaborative nature and the importance of interdisciplinary collaboration for improved patient outcomes. However, there are differences in the acceptance of patient referrals to OMFS, highlighting the need for further efforts to promote understanding and acceptance among healthcare professionals making perception low as compared to knowledge and attitude.

Recommendation

The recommendations based on the data suggest implementing targeted education and training initiatives to address areas of uncertainty or lack of knowledge regarding oral and maxillofacial surgery (OMFS). This includes providing information on managing common oral and maxillofacial conditions, clarifying the roles of OMFS in treating facial fractures and lacerations, and raising awareness about orthognathic and cosmetic surgery in OMFS. These efforts aim to enhance participants' competence and understanding in specific areas. Additionally, it is recommended to reinforce positive attitudes towards OMFS by promoting collaboration between different specialties for improved patient outcomes. Addressing misconceptions and uncertainties regarding the role of OMFS in treating specific conditions, such as oral cancer, is important. Furthermore, efforts should be made to understand and address the hesitation or lack of response in referring patients to OMFS when necessary. Promoting interdisciplinary collaboration and providing additional information and training can enhance understanding and acceptance among healthcare professionals. Ultimately, these recommendations aim to improve the integration and utilization of OMFS expertise, leading to enhanced patient care and outcomes.

References

1. Moore UJ. Principles of Oral and Maxillofacial Surgery, Sixth Edition.

2. Zambouri A. Preoperative evaluation and preparation for anesthesia and surgery. Hippokratia. 2007 Mar;11(1):13.

3. de Virgilio C. Question Sets and Answers. Surgery. 2014 Jul 19;591–699.

4. Misganaw A, Simegn GD, Bayable SD, Aschale A, Beyable AA, Ashebir YG, et al. The practice of blood cross-match request and transfusion in surgical patients at Debre Markos comprehensive Specialized Hospital, Debre Markos, Ethiopia, 2021/2022. A prospective study. Ann Med Surg. 2022 Aug 8;80:104145.

5. Rocha NS, Laureano Filho JR, Silva EDO, Almeida RCA. Perception of oral maxillofacial surgery by health-care professionals. Int J Oral Maxillofac Surg. 2008 Jan;37(1):41–6.

6. Knoedler S, Baecher H, Hoch CC, Obed D, Matar DY, Rendenbach C, et al. Early Outcomes and Risk Factors in Orthognathic Surgery for Mandibular and Maxillary Hypo- and Hyperplasia: A 13-Year Analysis of a Multi-Institutional Database. J Clin Med. 2023 Feb 11;12(4):1444.

7. Oyeyemi OV, Rais MA, Eguavoen OG, Oluwaferanmi A, Abdalazez H, Osunronbi T. Oral and Maxillofacial Surgery: Availability of Specialist Training and Different Training Pathways across Africa. J West Afr Coll Surg. 2024 Jun;14(2):199.

8. Kamal M, Abdulwahab M, Al-Zaid A. Knowledge, attitude, and perception of oral and maxillofacial surgery specialty amongst healthcare professionals, and the General Public from a Gulf Cooperation Council (GCC) Country. BMC Surg. 2021 Jan 26;21(1):61.

9. Alnofaie H, Alchawaf B, AlKindi M. Knowledge, awareness, and perception of oral and maxillofacial surgery among the public and professionals in Saudi Arabia: a cross-sectional study. Int J Oral Maxillofac Surg. 2019 Dec 1;48(12):1597–603.

10. Moore UJ. Principles of Oral and Maxillofacial Surgery. John Wiley & Sons; 2011. 358 p.

11. Damle SG, Patil A, Jain S, Damle D, Chopal N. Effectiveness of supervised toothbrushing and oral health education in improving oral hygiene status and practices of urban and rural school children: A comparative study. J Int Soc Prev Community Dent. 2014;4(3):175–81.

12. Allen MJ, Sharma S. Physiology, Adrenocorticotropic Hormone (ACTH). In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 [cited 2024 Apr 4]. Available from: http://www.ncbi.nlm.nih.gov/books/NBK500031/

13. Elshimy G, Chippa V, Kaur J, Jeong JM. Adrenal Crisis. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 [cited 2024 Apr 4]. Available from: http://www.ncbi.nlm.nih.gov/books/NBK499968/

14. Bin Rubaia'an MA, Alotaibi MK, Alotaibi NM, Alqhtani NR. Cortisol in Oral and Maxillofacial Surgery: A Double-Edged Sword. Int J Dent. 2021 Sep 2;2021:7642875.

15. Themes UFO. Pocket Dentistry. 2015 [cited 2024 Apr 4]. 6 The Operating Room, Instruments and the Surgical Team. Available from: https://pocketdentistry.com/6-the-operating-room-instruments-and-the-surgical-team/

16. Moore JR. Principles of Oral Surgery. Manchester University Press; 1981. 276 p.

17. Wang YH, Wang DR, Liu JY, Pan J. Local anesthesia in oral and maxillofacial surgery: A review of current opinion. J Dent Sci. 2021 Oct;16(4):1055–65.

18. Cottrell DA, Farrell B, Ferrer-Nuin L, Ratner S. Surgical Correction of Maxillofacial Skeletal Deformities. J Oral Maxillofac Surg. 2017 Aug 1;75(8, Supplement):e94–125.

19. Haider SM, Latif W. Oral & Maxillofacial Surgery; A historical review of the development of the surgical discipline. Int J Surg. 2018 Jul 1;55:224–6.

20. Malik NA. Introduction to Oral and Maxillofacial Surgery. In: Textbook of Oral and Maxillofacial Surgery [Internet]. jaypee; 2016 [cited 2024 Apr 17]. Available from: https://www.jaypeedigital.com/eReader/chapter/9789385999871/ch1

21. Ali FM, Al-Iryani GM, Namis SM, Hezam AA, Swaid SA, Alomar AE. Knowledge and Awareness of Medical Practitioners of Jazan City towards Oral and Maxillofacial Surgery as a Specialty. Open Access Maced J Med Sci. 2018 Mar 3;6(3):588.

22. Albert D, M R M. Awareness About the Specialty of Oral and Maxillofacial Surgery among the Medical Fraternity in South India: A KAP Survey. Int J Dent Oral Sci. 2020 Nov 12;7.

23. Rastogi S, Dhawan V, Modi M. Awareness of Oral And Maxillofacial Surgery among Health care professionals-A cross sectional study. J Clin Diagn Res. 2008;2(6):1191–5.

24. Elyas H, Alomran S, Almosharraf E, Alomar G, Alkharaan M. Assessment of knowledge, attitude, and practices of dental practitioners regarding tempromandibular joint disorders in Saudi Arabia. Oral Maxillofac Surg. 2022;22:15–0.

25. Ali FM, Al-Iryani GM, Namis SM, Hezam AA, Swaid SA, Alomar AE. Knowledge and awareness of medical practitioners of Jazan city towards oral and maxillofacial surgery as a specialty. Open Access Maced J Med Sci. 2018;6(3):588.

26. Paul NR, Baker SR, Gibson BJ. Decision Making from the Experience of Orthognathic Surgery Patients: A Grounded Theory Approach. JDR Clin Transl Res. 2022 Jul;7(3):256–66.

27. Rocha NS, Laureano Filho JR, Silva EDO, Almeida RCA. Perception of oral maxillofacial surgery by health-care professionals. Int J Oral Maxillofac Surg. 2008;37(1):41–6.

28. Singh RB, Ibrahim Fazal L, Shah MA, Sutradhar D. Unleashing the Healing Potential: The Interdisciplinary Nexus of Maxillofacial Surgery, Periodontology and Patient Psychological Benefits. J Reatt Ther Dev Divers. 2023;6(10s):380–7.

Annexes

Annex I : Consent form

Dear participants,

I am writing to request your consent for an assessment titled "Assessment of Oral and Maxillofacial Surgery Specialty Among JUMC Medical Professionals" conducted by Dr. Wabi Tola at Jimma Medical Center (JUMC). Your participation in this voluntary assessment will contribute to understanding knowledge, attitudes, and perceptions toward the Oral and Maxillofacial Surgery Specialty. By participating in the assessment, you voluntarily consent to respond honestly, understanding that your participation is voluntary and withdrawable without consequences. You acknowledge that the collected data will be anonymized and used solely for research purposes, with no impact on your professional standing or relationships at JUMC.

Your consent is greatly appreciated.

Thank you for your cooperation.

Sincerely,

Dr. Wabi Tola

(Phone number : +251921145891)

I consent to participate in the assessment.

Participant's Name: _____

Participant's Signature: _____

Date: _____

Annexes II : Questionnaire Interview

	Data collection tool		
Code	**Variables**		**Remark**
	Part one : Sociodemographic characteristics of MP		
111	Age in years	_____	
112	Sex	1.Male 2.Female	
113	Type of medical professional	1. Medical Intern 2. Dental Intern 3. Dental General Practitioner 4. Medical General Practitioner	
114	Year of experience	----------	
115	Where are you working?	1. Ward 2. Cold OPD 3. Emergency OPD 4. Others , specify	Others , specify ----------
	Part two : Knowledge of MP questions		
116	Do you know that oral and maxillofacial surgery as a specialty branch of dentistry?	1. Yes, I know 2. I am not sure 3. I don't know	
117	Do you know that different variety of treatment modalities coming under oral and maxillofacial surgery?	1. Yes, I know 2. I am not sure 3. I don't know	
118	Do you know the fact that the cosmetic and orthognathic surgery	1. Yes, I know 2. I am not sure	

	becoming a routine procedure in the field of oral and maxillofacial surgery?	3. I don't know	
119	Do you know basics regarding common oral and maxillofacial conditions and their management?	1. Yes, I know 2. I am not sure 3. I don't know	
120	Do you know that oral and maxillofacial surgeons have improved their surgical skills and competence from simple procedure as surgical removal of tooth to micro vascular reconstruction of various jaw defects?	1. Yes, I know 2. I am not sure 3. I don't know	
121	Do you know that Oral and maxillofacial surgeons are right to treat facial fractures	1. Yes, I know 2. I am not sure 3. I don't know	
122	Do you know that Oral and maxillofacial surgeon will treat is the right profession to treat facial lacerations	1. Yes, I know 2. I am not sure 3. I don't know	
	Part three : Attitude of MP questions		
123	Do you believe that collaboration between different healthcare specialties and Oral and Maxillofacial Surgeons improves patient outcomes?	1. Strongly Agree 2. Agree 3. Do not Agree	

124	Are you agree that different variety of treatment modalities coming under oral and maxillofacial surgery?	1. Strongly Agree 2. Agree 3. Do not Agree	
125	Are you agree the fact that the cosmetic and orthognathic surgery becoming a routine procedure in the field of oral and maxillofacial surgery?	1. Strongly Agree 2. Agree 3. Do not Agree	
126	Are you agree that oral and maxillofacial surgeons have improved their surgical skills and competence from simple procedure as surgical removal of tooth to micro vascular reconstruction of various jaw defects?	1. Strongly Agree 2. Agree 3. Do not Agree	
127	Do you agree that oral and maxillofacial surgeon has a role in treating temporomandibular joint disorders?	1. Strongly Agree 2. Agree 3. Do not Agree	
128	Do you agree that oral and maxillofacial surgeon has a role in treating oral cancer	1. Strongly Agree 2. Agree 3. Do not Agree	
129	Do you agree that oral and maxillofacial surgeon has a role in treating cleft lip and cleft palate?	1. Strongly Agree 2. Agree 3. Do not Agree	
130	Do you agree that oral and	1. Strongly Agree	

	maxillofacial surgeon has a role in treating craniofacial anomalies?	2. Agree 3. Do not Agree	
131	Do you think oral and maxillofacial surgeon has a role in treating Salivary gland diseases?	1. Strongly Agree 2. Agree 3. Do not Agree	
	Part four : Perception of MP questions		
132	Would you like to introduce oral and maxillofacial surgeon in your panel expertise for delivery of treatment ?	1. Strongly Agree 2. Agree 3. Do not Agree	
133	Would you like to consult oral and maxillofacial surgeon in your panel in in cases needing their field of their expertise advise ?	1. Strongly Agree 2. Agree 3. Do not Agree	
134	Do you agree that the Oral and Maxillofacial Surgery specialty in the healthcare system is important?	1. Strongly Agree 2. Agree 3. Do not Agree	
135	How do you accept the act of referring patients to an Oral and Maxillofacial Surgeon when necessary?	1. Strongly Agree 2. Agree 3. Do not Agree	
136	Do you believe that collaboration between different medical specialties and Oral and Maxillofacial Surgeons improves patient outcomes?	1. Strongly Agree 2. Agree 3. Do not Agree	