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# Knowledge and Awareness of Medical Practitioners of Jazan City towards Oral and Maxillofacial Surgery as a Specialty

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## Abstract

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**BACKGROUND:** In many health services communities the scope of oral and maxillofacial surgery (OMFS) as a discipline is frequently not probably understood. Good awareness towards OMFS among different branches of health services providers is essential for better referral strategies and will be for the benefit of the patient.

**MATERIALS AND METHODS:** The cross-sectional study was done using a specially prepared questionnaire distributed randomly to 125 general medical practitioners working in Jazan province. In this questionnaire, there were also some close-ended questions to evaluate awareness regarding a variety of conditions treated by the oral and maxillofacial surgeons.

**RESULTS:** Out of 125 participants, 105 (84%) were aware of the oral and maxillofacial surgery as a speciality branch of dentistry. Only 52 (41.6%) participants were aware of the different treatment modalities coming under the scope of oral and maxillofacial surgery. Also in the referral of cases to the oral and maxillofacial surgeon, 50 (40%) participants referred their oral and maxillofacial region cases to OMS. Tooth removal was the only procedure where most of the medical practitioners knew it is a speciality procedure of the oral and maxillofacial surgeon. For facial fractures, 76 medical practitioners believe it comes under the scope of the orthopaedic surgeon. Similarly, for facial abscesses, 81 and 36 practitioners responded that it is a job of a general surgeon and OMS respectively.

**CONCLUSION:** There is low awareness toward the scope of oral and maxillofacial surgery in the medical community. Knowledge and awareness of the scope of oral and maxillofacial surgery can improve the success and promptness of delivery of health services.

## Introduction

Oral and Maxillofacial Surgery is a speciality branch of dentistry. It functions more like a borderline between dentistry and medicine [1] [2]. Unfortunately, it has been very common to alienate Dentistry from other medical specialities. Since OMFS was a branch of dentistry, then medical practitioners link it to Dental practice or by far to no more than dentoalveolar procedures.

Oral and maxillofacial surgery had expanded with time to include cases of facial trauma, jaw pathologies, dentofacial deformities,

temporomandibular joint disorders, salivary gland pathologies, trigeminal neuralgias, orofacial pains, swellings of the face and neck and oral cancer [2].

New methods had also been introduced in the field like distraction osteogenesis, tissue engineering, dental implant surgeries, treatment of cleft lip and palate, and reconstruction, etc. However, still, it is not clear how OMFS is being perceived as a speciality among medical professionals [2].

In contrast to common belief, the work of an oral and maxillofacial surgeon (OMS) does not start and end with teeth and its surroundings. It also expands to include procedures that enhance the quality of life by providing better function and

aesthetics, as well as life - saving procedures. In many countries, OMFS as a speciality is not developed in the thoughts of medical professionals and the general public [3].

In Saudi Arabia, the general perception towards OMFS does not differ much from what is noticed in many countries, but this was a personal opinion which is not supported by any studies.

This study was done to assess the knowledge and awareness of general medical practitioners towards oral and maxillofacial surgery as a speciality.

## Materials and Methods

The cross-sectional study of knowledge and awareness towards oral and maxillofacial surgery as a speciality was done using specially prepared questionnaire. The questionnaire was validated by a pilot study. Also, some closed-ended questions were formulated for the evaluation of a variety of conditions treated by the oral and maxillofacial surgeons. The questionnaire was distributed randomly to 125 medical professionals working in Jazan province. Approval from college level ethical committee & informed consent from each of the participant were taken. All the data were collected, and statistical analysis was done.

## Results

Out of 125 participants, 55 were male, and 70 were females. The participants were from different medical specialities such as general practitioners, family medicine, obstetrics and gynaecology, medical interns, etc. The clinical experiences of the medical practitioners ranged from 1 to 15 years.

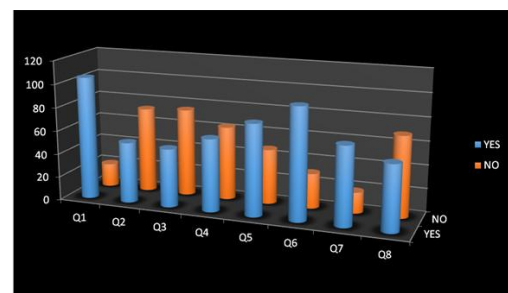
Out of 125 participants, 105 (84%) were aware of the oral and maxillofacial surgery as a speciality branch of dentistry. Only 52 (41.6%) participants were aware of the different treatment modalities coming under oral and maxillofacial surgery. Also in case of referral of cases to the oral surgeon, 50 (40%) participants referred their oral and maxillofacial region cases to OMS. Almost 50% of the participants had come across a patient of facial trauma, and 50% had not encountered a patient with such trauma. Most of the medical practitioners (62.4%) were aware of the fact of cosmetic and orthognathic surgery as becoming a routine procedure in the field of oral and maxillofacial surgery. Regarding the evolution of the surgical skills from the simple

closure of wounds to the microvascular reconstruction of various jaw defects, most of the medical practitioners were agreeing (95.76%). Sixty - seven participants had shown positivity towards the inclusion of the oral and maxillofacial surgeon in the panel of experts. Sixty -nine medical practitioners felt the term "oral and maxillofacial surgery" is winded and complicated (Table 1, Fig.1).

**Table 1: Responses of the medical practitioners to the different questionnaire for the speciality of the oral and maxillofacial surgery**

Are you aware of oral maxillofacial surgery as a speciality branch of dentistry?	105 (84%)	20 (16%)
Are you aware of the different variety of treatment modalities coming under oral and maxillofacial surgery?	52 (41.6%)	73 (58.4%)
Have you referred oral and maxillofacial region cases to an oral surgeon?	50 (40%)	75 (60%)
Have you ever come across a patient with facial trauma?	62 (49.6%)	63 (50.4%)
Are you aware of the fact that Cosmetic and orthognathic surgery is becoming a routine procedure in the field of oral and maxillofacial surgery?	78 (62.4%)	47 (37.6%)
Will you agree that Oral and maxillofacial surgeons have improvised their surgical skill and competence from simple closure of the wounds to microvascular reconstruction of various jaw defects?	95 (76%)	30 (24%)
Would you like to include oral and maxillofacial surgeon in your panel expertise for delivery of treatment?	67 (53.6%)	58 (46.4%)
Is the name of the speciality "oral and maxillofacial surgery" is winded and complicated?	56 (44.8%)	69 (55.2%)

Medical practitioners were also asked about the management of various conditions. Most of the medical practitioners knew that Wisdom tooth removal is in the scope of the oral and maxillofacial surgeon. But in case of cleft lip and palate, most of the medical practitioners (65) agreed that it is managed by the plastic surgeon, and only forty - five believed the OMS manages it.



*Figure 1: Responses of the medical practitioners to the different questionnaire for the speciality of the oral and maxillofacial surgery*

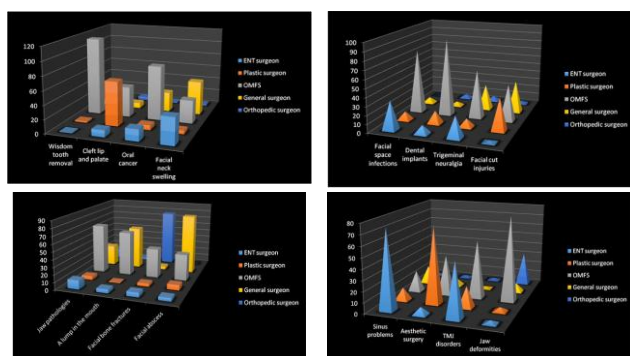
Oral cancer management according to 80 participants was by the OMS, while 29 participants thought it is managed by the general surgeon and 17 by the ENT surgeon. For facial swellings, most of the practitioners (50) believe that it should be managed by the general surgeon. Facial space infections and dental implants were the two procedures, which medical practitioners (76 and 91, respectively) agreed it is a speciality procedure of OMS. While participants' answers ranged randomly among different specialities

regarding the management of trigeminal neuralgia, facial injuries, jaw pathologies and lumps in the mouth. For the facial fractures, 76 medical practitioners believe that it is within the scope of orthopaedic surgery.

**Table 2: Responses of the medical practitioners for the management of the various conditions**

Patient's complaint	ENT surgeon	Plastic surgeon	The oral and maxillofacial surgeon	General surgeon	Orthopaedic surgeon
Wisdom tooth removal	1	2	114	6	2
Cleft lip and palate	10	65	45	8	5
Oral cancer	17	7	80	29	2
Facial neck swelling	39	5	34	50	3
Facial space infections	34	10	76	7	0
Dental implants	10	15	91	5	5
Trigeminal neuralgia	25	10	57	30	6
Facial cut injuries	2	38	43	38	3
Jaw pathologies	12	5	67	28	13
A lump in the mouth	5	1	60	58	3
Facial bone fractures	6	4	40	4	76
Facial abscess	3	7	36	81	0
Sinus problems	75	12	20	17	1
Aesthetic surgery	7	72	38	7	2
TMJ disorders	51	20	55	2	2
Jaw deformities	3	4	80	8	31

Similarly, for the facial abscess and sinus problems, 81 and 75 practitioners thought it is the job of the general surgeon and ENT surgeon respectively. While for aesthetic surgery, 72 participants had shown positivity for the plastic surgeon and only 38 for the oral surgeon. (Table 2, Fig 2a, b, c, and d).



**Figure 2:** a) Responses of the medical practitioners for the management of the various conditions; b) Responses of the medical practitioners for the management of the various conditions; c) Responses of the medical practitioners for the management of the various conditions; d) Responses of the medical practitioners for the management of the various conditions

## Discussion

When the name of the field of “oral surgery” was altered to “oral and maxillofacial surgery” in 1977, the goal was to more clearly define the scope of

practice of the field to the public. Since then, there has been a significant argument, whether this objective has been accomplished. In trying to answer this question, it is important to study the knowledge and awareness of the medical practitioners [4].

OMFS includes treatment of many diseases, defects and injuries in the head, face, neck, jaws and also the hard and soft tissues of the oral and maxillofacial region. OMFS is an internationally accepted surgical speciality. In some countries, like in the United States, it is an accepted speciality of dentistry; while in others, such as in the UK, it is a speciality that requires a degree in medicine [1]. In Saudi Arabia, the OMFS is recognised as a speciality branch of dentistry.

The scope of the OMFS improved from simple surgical procedures such as dentoalveolar surgeries and basic maxillofacial trauma to more advanced procedures like management of pathologies of head and neck (both benign and malignant), bone grafting, craniofacial surgery, TMJ surgery, cleft lip and palate, facial deformities correction, aesthetic facial surgery, implant surgery, etc [1] [5]. Also, OMFS deals with non - surgical difficulties affecting the orofacial area like the treatment of facial pain or oral mucosal disease [1] [6].

Patients usually reach to their general medical practitioners, emergency departments or dentists with pathologies or abnormalities requiring referral to an oral and maxillofacial surgeon [4].

Basic knowledge of the speciality should be given to our medical colleagues for the benefit of the patients in making informed decisions. Also, the general public can benefit from knowing OMFS scope so that they can request appropriate referrals [3] [7].

In the present study, the knowledge and awareness of the medical practitioners about the oral and maxillofacial surgery were found to be low. Also, the scope of the management of the various conditions was found not to be in favour of the oral and maxillofacial surgeons and most of the conditions shown management by another medical speciality.

Ameerally et al., [8] done a study in England and shown that around 74% did not understand OMS role and scope and up to 79% of the general population had not heard of OMFS. Similarly, Ifeacho et al. [7] shown that most of the medical practitioners who had heard of OMFS, selected other specialities for management of conditions that might have some overlap with other disciplines. Hunter et al. [9] concluded in their study that medical persons who know about OMFS, their design for management of various conditions overlapping various specialities did not select oral and maxillofacial surgery.

As one of the nine surgical disciplines recognised internationally, OMFS is also recognised by the Saudi Health minister and the Saudi Commission for health specialities. The need for the

services of OMS in Saudi Arabia is ever increasing especially with the very high prevalence of road traffic accidents and also the high incidence of oral cancers, particularly in the southern regions.

There is the Saudi Society for Oral and Maxillofacial Surgery (SCOMS) which has an important role in providing advice to the government bodies to set regulations and guidelines for the practice of OMFS in the country. It also plays a major role in the promotion of the speciality among the general public and the health providing communities. The SCOMS recognises the low awareness toward the speciality in both the general and medical communities.

In conclusion, there is low awareness about the scope of oral and maxillofacial surgery among the medical practitioners. Knowledge and awareness of the scope of oral and maxillofacial surgery can improve the success and the delivery of quality service. Also, there is a need to increase the awareness of OMFS among the general public so that they can request their doctors for the appropriate referral pattern in Saudi Arabian cities.

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