



Research Article

## Awareness among medical and dental professionals about oral and maxillofacial surgery – An original study

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### ABSTRACT

**Objectives:** The aim of the study is to determine the understanding and awareness about oral and maxillofacial surgery (OMFS) among dental and medical practitioners, paramedical students and nurses.

**Materials and Methods:** A set of 15 questions was made with the help of Google forms and circulated through social media. This study was performed in Garhwa district of Jharkhand among dental undergraduates and postgraduate students, medical practitioners, paramedical students and nurses.

**Results:** The result showed that out of 170 participants, 69.8% were undergraduates, postgraduate dental students, and practicing dentists; 8.3% were medical practitioners, 8.3% were paramedical students, and 13.5% were nurses. About 92.7% have heard about OMFS. Rest of the results will be discussed in later part of the article.

**Conclusion:** It is very disheartening that despite of prominent role of oral and maxillofacial surgeons in medical field, most of the public is not aware of this. Even medical practitioners are not aware of its role and scope in treatment of various kinds of diseases in head and neck region and as a result they cannot refer patients to the concerned department. Hence, most of the patients in our society are deprived of appropriate treatment. We should adopt different techniques to make people aware about this specialty.

**Keywords:** Oral and maxillofacial surgery, Undergraduate students, Postgraduates, Medical practitioners, Awareness

### INTRODUCTION

According to Association of Oral and Maxillofacial Surgeons of India (AOMSI), Oral and Maxillofacial Surgery (OMFS) is a branch of surgery to correct a wide spectrum of diseases, injuries and defects in the head, neck, face, jaws, and the hard and soft tissues of the oral and maxillofacial region. It is a recognized international surgical specialty and it is one of the nine specialties of dentistry.

It is one of the most prestigious branches of dentistry which acts as bridge between dentistry and medicine.<sup>[1]</sup> There has been continuous advancement in this branch over the past 50 years. The aim of this survey was to access the knowledge and perception about this specialty among dental and medical professionals.

This branch provides diagnosis and a wide range of treatments such as management of maxilla and mandible fracture, fracture of other bones in maxillofacial region, temporomandibular

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joint problems, benign and malignant lesions of head and neck region, orofacial pain, trigeminal neuralgia, facial space infections, and preprosthetic surgeries. OMFS also deals with removal of impacted teeth, placement of dental implants, bone grafting, and reconstructive surgeries in oral and maxillofacial regions. This branch deals with orthognathic surgery (correction of jaw deformities), management of cleft lip and palate, cosmetic surgeries in head and neck region, facial deformity management, hair transplant, and so on.<sup>[1]</sup>

A study done by Hunter *et al.*, demonstrated that “there is still lack of understanding about wide scope of surgical procedure that OMFS has to offer.”<sup>[2]</sup> A similar study was done by Ameerally *et al.*, who concluded that “79% of general population in England, had not heard about OMFS, and 74% did not understand its role and scope.”<sup>[3]</sup>

It is high time to spread awareness among general public that OMFS is an internationally recognized surgical specialty that not only deals with exodontia but also deals with facial aesthetics and many life-saving procedures. It is important to develop better understanding and perception among medical and dental professionals so that they can refer patients for appropriate treatment.<sup>[4]</sup>

## MATERIALS AND METHODS

This survey was conducted among undergraduate and postgraduate students, practicing dentists, medical practitioners, paramedical students and nurses of Garhwa district of Jharkhand.

A questionnaire was formed through Google form and circulated through social media. None of the participants were forced to fill out the form. All of the participants were requested to fill out the form after explaining the purpose of the survey. None of them could change their responses after submission.

There were 170 responses recorded. Responses were downloaded and statistical analysis was done.

The questionnaire is as follows:

1. Which field do you belong to
  - BDS/MDS
  - MBBS/MD/MS
  - Nurse
  - Paramedical
2. Do you heard about OMFS?
  - Yes/No
3. If you want to remove your wisdom tooth, to whom will you go for it?
  - General dentist/Oral and maxillofacial surgeon
4. In case of orbital bone, nasal bone, zygomatic bone fracture, to whom will you go for the treatment?
  - General surgeon
  - Oral and maxillofacial surgeon
  - Plastic surgeon
  - Orthopedic surgeon
  - Do not know
5. In case of maxilla or mandibular fracture, to whom will you go for the treatment?
  - General surgeon
  - Oral and maxillofacial surgeon
  - Plastic surgeon
  - Orthopedic surgeon
  - Do not know
6. If you have jaw deformities, to whom will you go for the corrective surgery?
  - Orthodontist
  - Orthopedic surgeon
  - Oral and maxillofacial surgeon
  - Cosmetic surgeon
  - Do not know
7. If a child born with cleft lip and palate, to whom will you go for the treatment?
  - General surgeon
  - Otolaryngologist
  - Oral and maxillofacial surgeon
  - Cosmetic surgeon
  - Do not know
8. If you have facial space infection (submandibular, submental, buccal, canine space, etc.), to whom will you go?
  - Oral and maxillofacial surgeon
  - General surgeon
  - ENT surgeon
  - Do not know
9. If you have infection in maxillary sinus (maxillary sinusitis or oroantral fistula), to whom will you go for the treatment?
  - General surgeon
  - Oral and maxillofacial surgeon
  - ENT surgeon
  - Do not know
10. If you want to transplant your hair, to whom will you go?
  - Dermatologist
  - Cosmetic surgeon
  - Oral and maxillofacial surgeon
  - Do not know
11. If you are facing problems during mouth opening, to whom will you go?
  - General dentist
  - Oral and maxillofacial surgeon
  - Do not know

12. If someone is diagnosed with salivary gland carcinoma or other salivary gland diseases, to whom will you go for the treatment?
    - Oncologist
    - Oral and maxillofacial surgeon
    - General surgeon
    - Do not know
  13. If you are diagnosed with obstructive sleep apnea, to whom will you go for the treatment?
    - General surgeon
    - Otolaryngologist
    - Oral and maxillofacial surgeon
    - Do not know
  14. If you have massive swelling in head and neck region, to whom will you go for the treatment?
    - General surgeon
    - Oral and maxillofacial surgeon
    - Oncosurgeon
    - Do not know
  15. If you have malignant ulcer in oral cavity (tongue, gingiva, and palate), to whom will you go for the treatment?
    - Oral and maxillofacial surgeon
    - Oncosurgeon
    - Do not know
- In case of maxillary sinus infection, 8.3% chose general surgeon, 76% chose oral surgeon, 17.7% chose ENT surgeon, and 5.2% chose do not know.
  - In case of hair transplantation, 24.0% chose oral and maxillofacial surgeon, 28.1% chose dermatologist, 30.2% chose cosmetic surgeon. 5.2% people responded as “don’t know”. 5.2% people chose both dermatologist and cosmetic surgeon. 4.2% people chose both cosmetic surgeon and oral surgeon.
  - In case of patients facing problems during mouth opening, 30.2% chose general dentist and 70.8% chose oral surgeon and 7.3% responded that they do not know.
  - In case of salivary gland carcinoma or any other salivary gland diseases, 32.3% chose Onco surgeon, 46.9% chose oral surgeon, 6.3% general surgeon, 9.4% chose both Onco surgeon and oral surgeon. 3.1% chose do not know.
  - For the treatment of obstructive sleep apnoea, 38.5% chose oral surgeon, 16.7% chose otolaryngologist, 10.4% chose ENT surgeon. Some of the participants chose both otolaryngologist and oral and maxillofacial surgeon.
  - In case of massive swelling in head and neck region, 25% chose general surgeon for the treatment. About 60.4% chose oral surgeon, 15.6% chose no surgeon, and 6.3% chose do not know.
  - In case of malignant ulcers in oral cavity, 57.3% chose oral and maxillofacial surgeon, 24% chose Onco surgeon, 7.3% chose don’t know.

## RESULTS

The responses that were recorded were analyzed. Here, it is as follows-

- Among the participants, 68.8% were BDS/MDS students or practicing dentists. 8.3% paramedical student, 8.3% MBBS/medical practitioners, 13.5% nurses.
- 92.7% of participants heard about oral and maxillofacial surgery and 7.3% did not hear about this specialty.
- Preference of choosing treatment options in case of different facial bone fracture. 85.4% chose oral and maxillofacial surgeon, 2.1% chose general surgeon, 4.2% chose plastic surgeon, 2.1% chose Orthopedic surgeon. 2.1% people didn’t know where to go for the surgery.
- In case of maxilla or mandibular fracture, 90.6% chose oral surgeon, 2.1% chose general surgeon, 2.1% chose plastic surgeon, 2.1% people responded that they don’t know.
- Percentage of participants choosing treatment options for jaw deformities. 60.4% chose oral and maxillofacial surgeon, 20.8% chose orthodontist, 3.1% chose both orthodontist and oral surgeon. 5.2% gave preference to cosmetic surgeon. 5.2% people chose “don’t know”.
- In case of children born with cleft lip and palate, about 70.8% chose oral surgeon. 2.1% chose Oral and Maxillofacial surgeon and otolaryngologist both. 4.2% chose cosmetic surgeon, 9.4% chose general surgeon. 4.2% people chose “don’t know”.

## DISCUSSION

The name “oral and maxillofacial surgery” was given in 1977; before it was only oral surgery.<sup>[1]</sup> The goal was to specify the wide range of treatments, this specialty has to offer. Most people in our society do not know about this branch; therefore, people prioritize medical practitioners over oral surgeons.<sup>[1,4]</sup> Despite having crucial role in medical field, most medical professionals do not recognize it.<sup>[4]</sup> Most medical professionals believe that oral and maxillofacial surgery has no role in treating facial deformities, jaw deformities, hair transplantation, and facial bone fracture. Oral surgeons are treated as general dentists who can do only extraction and this perception has to be changed.<sup>[5]</sup>

People approach general surgeon or emergency department with any maxillofacial pathology (maybe benign or malignant), which requires referral to OMFS, but due to lack of knowledge about this branch, medical practitioners cannot refer patients to the OMFS. Oral and maxillofacial surgeons have starring role in the diagnosis and treatment of oral cancer.<sup>[4,5]</sup>

Hence, we should make medical professionals aware of the basic knowledge and wide scope of OMFS so that they can do appropriate referrals, because they prefer to refer the patients to ENT surgeons, oncosurgeons, or plastic surgeons.<sup>[6,7]</sup>

The current study demonstrates that out of 170 participants, 92% heard about OMFS.

For the treatment of various facial bone fractures, approximately 85.4% liked OMFS for the treatment; on the other hand, 92% chose OMFS for the maxilla or mandible fracture. In case of hair transplantation, most of the people chose dermatologists or cosmetic surgeons than OMFS. Public as well as medical professionals do not know that oral and maxillofacial surgeons are legally authorized by the Government of India for hair transplantation. For the treatment of obstructive sleep apnea, people chose general surgeons or otolaryngologists rather than OMFS; many of them were unfamiliar with the terminology.

For the treatment of any malignant lesion in the head and neck region, or for the treatment of salivary gland carcinoma, people chose oncosurgeon rather than oral and maxillofacial surgeon.

## CONCLUSION

It is the right time to create awareness among general public and medical practitioners about this specialty. AOMSI and Dental Council of India should initiate awareness programs repeatedly for public so that they come to know about various treatment procedures oral surgeons do.<sup>[6]</sup> Postgraduate students of OMFS can play key role. They can arrange awareness campaigns related to oral cancer and various other diseases of oral cavity and head and neck region so that people understand the importance of those diseases and who can treat them. Publicity through media or social media can help in building proper perception and knowledge among youngsters. In medical colleges, appropriate perception can be created among medical students and doctors through interdepartmental sessions using audio visual platforms so that they can refer the patients to the concerned department.<sup>[7,8]</sup>

## Declaration of patient consent

Patient's consent not required as patients identity is not disclosed or compromised.

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## Conflicts of interest

There are no conflicts of interest.

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