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# **Original Research**

# Awareness of Specialty of Oral and Maxillofacial Surgery among the Paramedical Fraternity: A Cross-sectional Study

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#### **Abstract**

**Objectives:** Although maxillofacial surgeons are qualified to perform complex procedures such as oral cancer resection, head and neck tumor surgery etc, most of the people are not aware of the scope of the specialty. Thus, the aim of this study was to evaluate the awareness of the specialty of OMFS among the paramedical fraternity at a tertiary health centre in South India.

**Methods:** This was a cross-sectional study conducted among paramedical fraternity who were employed at Saveetha Medical College and Hospitals, a tertiary health care centre in Chennai, South India. A questionnaire was framed and developed which consisted of basic questions related to various treatments options which an Oral and Maxillofacial Surgeon performs and was circulated among the paramedical fraternity. All the responses were tabulated in excel and represented graphically.

**Results:** A total 100 respondents were included. 58% of the respondents were nursing staff. 73% of the respondents replied that they were aware of the OMFS specialty. A Majority of the respondents replied that they would visit an oral and maxillofacial surgeon for the treatment of temporomandibular joint pain, wisdom tooth pain, mouth opening difficulty, facial pain, oral cancer and jaw fractures.

**Conclusion:** Our study concludes that there is minimal awareness of paramedical fraternity towards OMFS. Hence more awareness programs and continuing educational programs must be provided to both the general public and medical personnel irrespective of their specialty.

Keywords: Awareness, Oral And Maxillofacial Surgeon, Extraction, Oral Surgery, Impacted Tooth Removal

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## INTRODUCTION

The diseases and disorders of the oral and maxillofacial region are at times very extensive and can also exhibit a neoplastic nature, leading to the resection of a part of the maxillofacial region in toto. Such hard and soft tissue defects result from the resection of squamous cell carcinomas, salivary gland neoplasms, sarcomas, and primary bone neoplasms as well as defects related to osteoradionecrosis, trauma, and facial paralysis [1]. This puts the patient in a state of physical, physiological, and psychological trauma. The concept of reconstruction post-resection comes to the rescue of such patients and improves their quality of life.

An oral and maxillofacial surgeon specializes in the diagnosis and treatment of a varied range of disorders involving the head and neck region. It is one unique field in dentistry and medicine where the doctor needs knowledge of both the fields to successfully treat the patient. Some of the commonly treated conditions are dentoalveolar surgery, facial trauma, oral cancer, temporo- mandibular joint disorder, benign tumors etc.

The awareness of such specialty is however very sparse. In developed countries like USA and UK, for a person to practice oral and maxillofacial surgery (OMFS), they must possess both medical and dental undergraduate degree [1]. Especially in UK, way back in late 1980's, General Medical Council regarded OMFS as one of the 10 specialties in surgery. Around 300 OMFS consultants and 120 Specialist trainees are practicing OMFS in UK only after obtaining both Medical and Dental undergraduate degrees [2].

In England, a study by Ameerally et al, regarding awareness about OMFS reported that 79% of the people who participated including the public, local dentists and general medical practitioners were not aware of the term OMFS. 74% of the general population who participated in the study were not aware of its aim and scope [3]. In another study conducted among medical professionals by Ifeacho et al [4], the participants had heard about the specialty but they were not well clear about what clinical experience that a surgeon would possess.

In India, the scope of OMFS has increased broadly as it provides a variety of treatments like dentoalveolar surgery and maxillo-facial trauma, pathology of head and neck, cleft lip and cleft palate, bone grafting, facial deformity correction, craniofacial surgery, aesthetic facial surgery, TMJ surgery, and implant surgery. In spite of all these advances, the awareness of this specialty is very sparse. Thus, the aim of this study was to evaluate the awareness of the specialty of OMFS among the paramedical fraternity at a tertiary health centre in South India.

## MATERIALS AND METHODS

This was a cross-sectional study conducted among paramedical fraternity who were employed at Saveetha Medical College and Hospitals, a tertiary health care centre in Chennai, South India. A questionnaire was framed and developed which consisted of basic questions related to various treatments options which an Oral and Maxillofacial Surgeon performs such as extraction, molar impactions, dento-alveolar surgery, cosmetic surgery. The respondents were asked to mark as to which specialist they would most likely visit: general dentists, OMFS, plastic surgeons or Ear, Neck and Throat (ENT) surgeons or others. This questionnaire was then circulated among 100 paramedical fraternity. Their responses were noted in a excel sheets and the results were tabulated and presented using graphs. This study was reviewed and approved by the Institutional Review Board and informed consent was obtained from all the participants.

#### **RESULTS**

A total of 100 participants were included in the study. Nurses comprised of 58% of the respondents, followed by physiotherapists and technicians [Figure 1a]. Seventy-three participants who undertook the survey were aware of the OMFS specialty [Figure 1b].

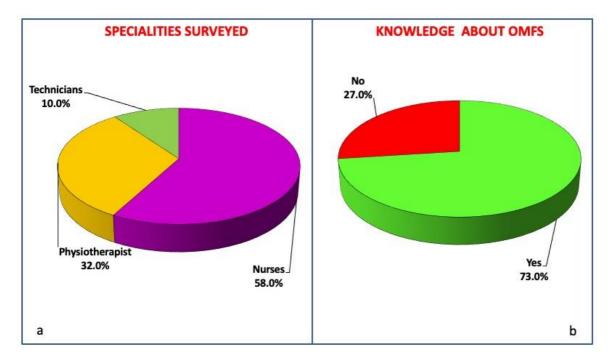


Figure 1. Specialities Surveyed; 1b. Knowledge about OMFS

A majority of the respondents answered that tooth extraction, tooth fracture and dental implants were treated by general dentists, whereas Temporomandibular (TMJ) disorders were managed by OMFS [Figure 2]. Mouth opening difficulty, facial pain, facial swelling and swelling in the mouth, oral cancer and jaw fractures were answered by the respondents as the procedures to be treated by OMFS [Figure 3, Figure 4]. Procedures such as cleft lip and palate, Cosmetic surgery of the jaws, cosmetic surgery of nose, facial deformity were likely to be referred to the plastic surgeons and nose bleeds, facial lacerations and sinus issue were mostly dealt with by ENT surgeons [Figure 4, Figure 5].

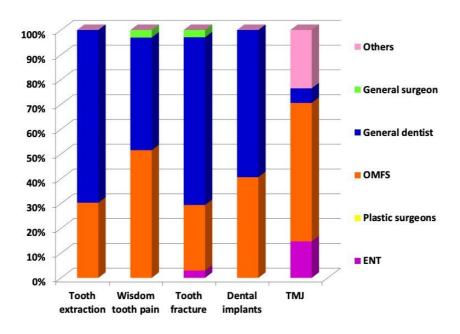


Figure 2. Responses of participants for various treatments with respect to general dentists

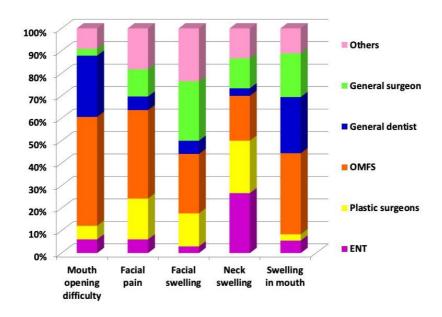


Figure 3. Responses of participants for various treatments with respect to OMFS

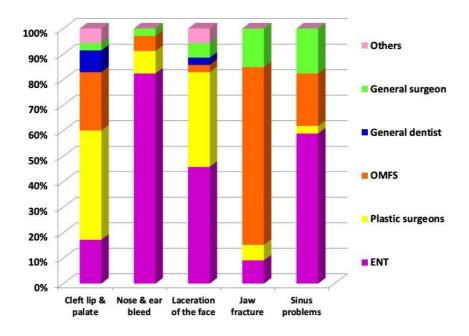


Figure 4. Responses of participants for various treatments with respect to plastic surgeons

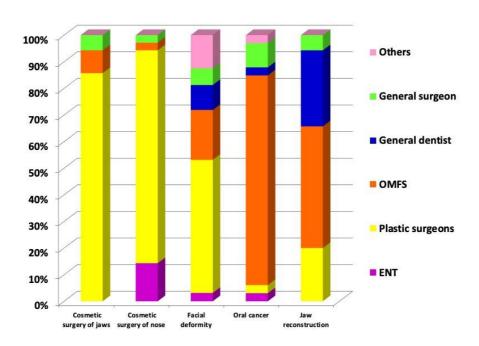


Figure 5. Responses of participants for various treatments with respect to ENT surgeons

#### **DISCUSSION**

When it comes to head and neck region, OMFS specialty is one such interesting and fascinating field which forms an inter link between medical and dental professionals. This paves way for any diagnosis restricted to head and neck regions and can be resolved easily [5]. In India, OMFS specialty is still at a developing stage. Awareness regarding OMFS specialty and procedures done by the surgeons' remains a questionable factor as people are not aware of what treatments that an oral surgeon can perform. Hence, in India, an increased awareness regarding OMFS is required [6].

General population and the other medical personnel are not aware of the facts that an OMF surgeon can provide multitude procedures which can be attributed to lack of knowledge and awareness [7,8]. In our study, the majority of the participants were aware of the specialty OMFS (73%) which was higher when compared to other studies which were conducted among general public and other medical colleagues [9,10]. One of the reasons attributed to this may be due to the fact that the hospital in which the survey was conducted has a maxillofacial unit attached to it.

Also in our study, in cases like tooth extraction or treatment of problems due to impacted tooth, the participants felt that general dentists are qualified enough to treat such cases. Seventy seven percent of the participants felt that general dentists are sufficient to do a tooth extraction and 22% of the participants said that extractions should be done only by maxillofacial surgeons. When the cause of pain comes to wisdom tooth, participants' responses were that surgeons were the right person to treat such cases. Rocha et al, in their study, which included medical students and general practitioners as participants, concluded that for management of any pathologies pertaining to head and neck region, a head and neck surgeon would be required to diagnose, whereas dental students in the same study said that they would consult a maxillofacial surgeon [11].

According to Subhashraj et al, the participants except those who were in dental field, believed that an ENT surgeon is the one to consult for problems like nose bleeds, fractures and sinus problems as they felt that ENT professionals possess an additional degree in medical practice when compared to dentists [12]. These results were similar to responses obtained from our study. A study conducted among medical consultants in Vadodra district in Gujarat Reported that they preferred an oral and maxillofacial surgeon for treating patients with cleft lip and palate conditions [13]. Contrary to their results, in our study, the participants who were paramedical professionals said that they preferred to refer those patients to a plastic surgeon as it deals with cosmetic appearance of the patient. Multiple studies reiterate the fact that there is abysmally low awareness about OMFS [14-25].

The results from our study proves that there is an increasing trend of knowledge towards OMFS as a specialized branch for treatment of above-mentioned conditions and also to other conditions which were not discussed at brief, which is a sign that there is improvement of awareness about various conditions and the right person to consult accordingly which is far better when compared to past in South India. Many awareness programs need to be conducted to educate and make the medical and paramedical fraternity more aware about the scope of an oral and maxillofacial surgeon.

#### **CONCLUSION**

Our study concludes that there is minimal awareness of paramedical fraternity towards OMFS. Hence more awareness programmes and continuing educational programs must be provided to both the general public and medical personnel irrespective of their specialty so that when any problem arises in future, they can consult the right specialist at the right time to avoid further complications.

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