Knowledge, Attitude and Awareness of Speciality of Oral and Maxillofacial Surgery Amongst Medical Consultants of Vadodara District in Gujarat State

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Abstract

Background and Aim Aim of this study was to survey the knowledge, attitude and awareness of the subject of oral and maxillofacial surgery speciality amongst the consultants and practitioners of medicine in district of Vadodara.

Materials and Methods List of members of various specialities in medical faculty were obtained from Indian Medical Association, Baroda branch and staff members of medical colleges of Vadodara district. A questionnaire survey was made which was distributed and their options were noted.

Results Surgical removal of third molar, oral submucous fibrosis and implants were the problems where oral surgeons were preferred. For maxillofacial trauma plastic surgeons and orthopaedic surgeons were preferred than oral surgeons. For maxillofacial pathology E.N.T surgeons were mostly preferred. There is low awareness regarding oral and maxillofacial surgery amongst the general practitioners and medical consultants in Vadodara district.

Conclusion Survey shows that our training needs to be upgraded and revamped so that our trainees (post graduates in oral surgery) and have a greater “hands-on” exposure during their postgraduate training. They will then be able to handle increasingly complex cases in a multispecialty setup when they graduate and earn the mutual respect of the medical and dental fraternity and also the general public. MBBS students during their dental postings should be made aware of the depth and scope of oral surgery branch.

Keywords Oral and maxillofacial surgery (OMFS) · Medical practitioners · General practitioners · Awareness

Introduction

Oral and Maxillofacial Surgery is a specialty of dentistry, but the typical oral surgeon functions more like a hybrid between medicine and dentistry. Having our roots in dentistry is what makes Oral and Maxillofacial Surgeons so technically adept at surgery. The hand eye coordination required to perform quality dentistry lends itself well to the practice of surgery. Oral and maxillofacial surgery is used to treat many diseases, injuries and defects in the head, neck, face, jaws and the hard and soft tissues of the oral (mouth) and maxillofacial (jaws and face) region. It is an internationally recognized surgical specialty. In some countries, including the United States, it is a recognized specialty of dentistry; in others, including the UK, it is recognized as a medical specialty [1].

From its roots in dentistry, Oral and Maxillofacial Surgery addresses numerous dental and oral procedures such as the removal of impacted teeth, placement of dental implants, intraoral bone grafting, and removal of pathology in the oral cavity. Facial cosmetic surgery, cleft lip and palate surgery, orthognathic (corrective jaw) surgery, facial trauma and reconstructive surgery and head and neck cancer surgery can and do fall within the scope of the practicing Oral and Maxillofacial Surgeon.

The specialty also deals with non-surgical problems affecting the oro-facial region such as the management of facial pain, oral mucosal disease and infections. Consultant oral and maxillofacial surgeons usually work in teams,

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developing areas of sub-specialisation in their practice that include head and neck cancer and reconstruction, cranio-facial deformity, cleft lip and palate and aesthetic facial surgery. Medical practitioners should also possess basic dental knowledge to uncover signs and symptoms of dental diseases from patients, to provide appropriate treatment or advice to these patients and to act as public health educators. It has been found that very few studies have collected data concerning the dental knowledge of medical practitioners.

Material and Methods

List of members of various specialities in medical faculty was obtained from Indian Medical Association, Baroda branch and the questionnaire survey was posted via self addressed reply envelop. Repeated reminders were given via e-mail and sms within a month. Considering the nature and type of the study minimal sample size was (20 E.N.T

treatments. Cosmetic and orthognathic surgery is becoming a routine procedure in the field of oral and maxillofacial surgery.

I request you to spare your few minutes for providing your inputs for the following questionnaire survey and mail it back by pre-paid envelop.

We would like to get your opinion regarding importance and need of oral and maxillofacial surgeons for comprehensive care of patients for the following listed disorders. We would appreciate your views and opinion regarding the following mentioned disorders questionnaire survey:

1. Whether you would like to refer the patients to oral and maxillofacial surgeon?
2. Would you like to include oral and maxillofacial surgeon in your panel of expertise for delivery of treatment?

Name of the consultant/medical practitioner. Qualification with year of passing. Residence No. Clinic No

Sl. no	Various problems as listed below	E.N.T surgeons	Plastic surgeons	Orthopaedic surgeons	General surgeons (M.S.)	General practitioners
1	Impactions/unerupted/malposed tooth					
2	Neuralgic pain					
3	Atypical facial pain					
4	Paranasal and maxillary sinus problems					
5	Acquired and congenital maxillofacial deformities					
6	Salivary gland disorders					
7	Oral submucous fibrosis					
8	Facial esthetic surgeries					
9	Cysts and tumours in maxillofacial region					
10	Maxillofacial trauma					
11	Facial abscess and maxillofacial infections including Ludwig's angina					
12	Oral rehabilitation (implants)					
13	Cleft lip and palate					

surgeons, 20 plastic surgeons, 20 orthopaedics, 20 general surgeons and 70 general medical practitioners) (total 150). All the members were provided with following form to obtain their views

Respected Consultant,

Oral and maxillofacial surgery has witnessed the progress from simple dentoalveolar surgery to advanced trauma care and skull base surgery. Oral and maxillofacial surgeons have improvised their surgical skill and competence from simple closure of the wounds to microvascular reconstruction of various jaw defects.

The field of oral and maxillofacial surgery is advancing into the applications of lasers in various surgical jaw

Results

Oral and maxillofacial surgeons were preferred for various problems by medical and general practitioners (Table 1).

For impactions (Fig. 1), 95.7 % general MBBS practitioners referred them to oral and maxillofacial surgeons. About four percent were referred to E.N.T as well as general surgeons. 100 % E.N.T. surgeons, 100 % orthopaedicians, 100 % general surgeons and 95 % plastic surgeons referred their cases to oral and maxillofacial surgeons.

For neuralgic pain and atypical pain (Figs. 2, 3), around 20 % general MBBS practitioners referred to oral

Table 1 Preferences of oral surgeon as 1st consultant

Sl. No	Various problems as listed below	General practitioners (total no: 70)	E.N.T surgeons (total no: 20)	Orthopaedic surgeons (total no: 20)	Plastic surgeons (total no: 20)	General surgeons (total no: 20)
1.	Impactions/unerupted/malposed tooth	67 (95.7 %)	20 (100 %)	20 (100 %)	19 (95 %)	20 (100 %)
2.	Neuralgic pain	14 (20 %)	2 (10 %)	4 (20 %)	2 (10 %)	5 (25 %)
3.	Atypical facial pain	14 (20 %)	5 (25 %)	4 (20 %)	4 (20 %)	11 (55 %)
4.	Paranasal and maxillary sinus problems	21 (30 %)	–	6 (30 %)	4 (20 %)	4 (20 %)
5.	Acquired and congenital maxillofacial deformities	38 (54.3 %)	–	9 (45 %)	2 (10 %)	–
6.	Salivary gland disorders	25 (35.7 %)	–	8 (40 %)	3 (15 %)	–
7.	Oral submucous fibrosis	62 (88.6 %)	1 (5 %)	2 (10 %)	6 (30 %)	–
8.	Facial esthetic surgeries	15 (21.4 %)	8 (40 %)	3 (15 %)	–	–
9.	Cysts and tumours in maxillofacial region	9 (12.9 %)	2 (10 %)	2 (10 %)	–	9 (12.9 %)
10.	Maxillofacial trauma	3 (4.3 %)	–	3 (15 %)	–	–
11.	Facial abscess and maxillofacial infections including Ludwig's angina	8 (11.4 %)	–	5 (25 %)	8 (40 %)	–
12.	Oral rehabilitation (implants)	68 (97.1 %)	20 (100 %)	18 (90 %)	18 (90 %)	18 (90 %)
13.	Cleft lip and palate	10 (14.2 %)	3 (15 %)	8 (40 %)	2 (10 %)	5 (25 %)

Fig. 1 Impactions and unerupted and malposed tooth **Fig. 4** Paranasal and maxillary sinus problems **Fig. 2** Neuralgic pain **Fig. 5** Acquired and congenital maxillofacial deformities **Fig. 3** Atypical facial pain

surgeons. E.N.T surgeons did not refer cases to any other consultants except some to oral surgeons (10 %). Orthopaedicians refer most of the cases to E.N.T surgeons and some to plastic and oral surgeons (20 %).

For paranasal and maxillary sinus disorders (Fig. 4), only 30 % general MBBS practitioners and orthopaedic surgeons referred patients to oral surgeons. E.N.T surgeons were the most preferred for this disorder.

For acquired and congenital deformities (Fig. 5) (54.3 %) general MBBS practitioners, and 45 % orthopaedicians referred cases to oral surgeons. 10 % Plastic surgeons referred cases to oral and maxillofacial surgeons.

For salivary gland disorders (Fig. 6), 35.7 % general MBBS practitioners referred patients to oral and maxillofacial surgeons. 40 % orthopaedicians referred cases to oral surgeons.

Fig. 6 Salivary gland disorders

Fig. 7 Oral submucous fibrosis

Fig. 8 Facial esthetic surgeries

For oral and submucous fibrosis (Fig. 7), 88.6 % general MBBS practitioners referred patients to oral and maxillofacial surgeons. 30 % plastic surgeons and 5 % E.N.T surgeons referred cases to oral and maxillofacial surgeons.

For facial esthetic surgeries (Fig. 8), 21.4 % MBBS practitioners referred patients to oral and maxillofacial surgeons. Some were referred to E.N.T and general surgeons. 40 % E.N.T. surgeons, referred cases to oral surgeons.

For cysts and tumors (Fig. 9), only 12.9 % general MBBS practitioners referred cases to oral surgeons. 10 % E.N.T. surgeons, referred cases to oral surgeons. 10 % orthopaedicians referred to oral surgeons.

For facial trauma (Fig. 10), 4.3 % general MBBS practitioners referred patients to oral surgeons. 15 % orthopaedicians referred cases to oral surgeons.

For facial abscess including Ludwig's angina (Fig. 11), 11.4 % general MBBS practitioners referred patients to oral surgeons. 25 % orthopaedicians referred some cases to oral surgeons.

For implants (oral rehabilitation) (Fig. 12), 97.1 % general MBBS practitioners referred impactions to oral and

Fig. 9 Cysts and tumors

Fig. 10 Facial trauma and reconstruction of jaw bones

Fig. 11 Facial abscess and other maxillofacial infections including Ludwig angina

Fig. 12 Oral rehabilitations (implants)

maxillofacial surgeons. Only few percent were referred to E.N.T as well as general surgeons. E.N.T. surgeons (100 %), orthopaedicians (90 %), general surgeons (90 %) and plastic surgeons (90 %) referred their cases to oral and maxillofacial surgeons.

For cleft lip and palate (Fig. 13), 14.2 % general MBBS practitioners referred patients to oral surgeons. 15 % E.N.T. surgeons, referred to oral surgeons. 40 % orthopaedicians referred cases to oral surgeons. 25 % general surgeons referred cases to oral surgeons.

For (Table 2) acquired and congenital maxillofacial deformities, about 17.3 % of consultants gave second preference to oral surgeons. Even for trauma and

Fig. 13 Cleft lip and cleft palate

reconstruction of jaws, 12 % gave second preference to oral surgeons. This shows that even though oral and maxillofacial surgeons have their maximum practice in trauma, very few medical consultants prefer oral surgeons as their second preference. For cysts and tumors 20.6 % medical consultants gave oral surgeons second preference.

Discussion

Dental knowledge of qualified medical practitioners is different when compared to the general public. Even though they are qualified in the medical faculty their knowledge about dental diseases, relationship of oral health with systemic diseases and life threatening dental diseases are scarce [2].

Due to the problems of access to dental care, patients may turn to other primary health care providers for their oral health needs sometimes resulting in medical practitioners encountering patients presenting with oral and dental problems [3].

In study done by Reddy et al. [1] they found that all study groups were not clear about the scope of the specialty and its capabilities. All groups were aware that impactions, implants, trauma are treated by maxillofacial surgeons. This may be due to an emphasis placed during training on maxillofacial trauma management during the postgraduate MDS course. All postgraduate trainees are mostly able to

manage basic maxillofacial trauma whereas a vast majority of them are not confident in treating oral cancer, cleft lip and palate and so on. This limits the exposure of the specialty in a multi-specialist medical setup.

Ameerally et al. [4] stated that if patients are to receive the optimal treatment for oral and facial problems, dental and medical practitioners need to have a better understanding of what their specialty has to offer. OMFS has a long and complicated Latin name, and health coordinators have to be informed of the importance of this specialty in the management of complex and diverse problems within a well-defined anatomical area.

Hunter et al. [5] demonstrated that not surprisingly, most professionals like dental and medical students have heard of OMFS, but only a few realize the full scope of the specialty. They attribute this to a lack of publicity in the media, along with the fact that OMFS is grounded in dentistry rather than in medicine.

Parnes [6] stated that the governing bodies of the American Association of Oral and Maxillofacial Surgery formed a task force to discuss a possible name change for the specialty. Any change from the current name was rejected at that time. One of the concerns over changing the name was that another specialty of dentistry or medicine might adopt the abandoned name.

Ifeacho et al. [7], noticed that recognition of OMFS among the general public and health professionals had increased (21–34 %), and also, that the specialty had improved only marginally. Their results suggest that there was a clear division in the awareness between conditions relating to the mouth and those outside the mouth, in the head and neck region, despite the latter being well within the scope of OMFS.

Laskin et al. [8] evaluated the knowledge of 12 different specialties to determine whether such unfamiliarity is true only for OMFS, or whether it occurs with other specialties also. The result of their study shows that every effort should be made to inform the public about what OMF surgeons do.

Table 2 Preferences of oral surgeon as member in team of consultants

Sl. No	Various problems as listed below	General practitioners (total no: 70)	E.N.T surgeons (total no: 20)	Orthopaedic surgeons (total no: 20)	Plastic surgeons (total no: 20)	General surgeons (total no: 20)
1.	Acquired and congenital maxillofacial deformities	15 (21.4 %)	3 (15 %)	4 (20 %)	4 (20 %)	0
2.	Salivary gland disorders	2 (2.8 %)	2 (10 %)	0	4 (20 %)	0
3.	Oral submucous fibrosis	14 (20 %)	4 (20 %)	0	0	0
4.	Facial esthetic surgeries	10 (14.2 %)	5 (25 %)	0	0	0
5.	Cysts and tumours in maxillofacial region	20 (28.5 %)	10 (50 %)	4 (20 %)	1	0
6.	Maxillofacial trauma and reconstruction of jaws	4 (5.7 %)	2 (10 %)	4 (20 %)	2 (10 %)	6 (30 %)

A cross-sectional study done by Srinidhi et al. [3] showed that medical practitioners had good knowledge about dentistry and 76.3 % of them would suggest their patients to visit the dentist once in 6 months.

A cross-sectional study done by Rastogi et al. [9] in Manipal Teaching Hospital, showed that medical professionals would like to consult OMFS for fracture of mandible, maxilla and zygoma. Also, OMFS scored an absolute majority in clinical situations like dental implant and removal of wisdom tooth and around 76 % for mandibular reconstruction.

Greater progress needs to be made in the education of medical and dental students as well as the general public if the specialty of OMFS is to be practiced to its full potential [5, 10, 11].

Regional variations exist, and surgeons are responsible for educating their own community and referral circles about the scope of their practice, which will depend on the training, experience and areas of interest. It is clear that greater progress needs to be made in the education of general practitioners, if the specialty of OMFS is to be practiced to its full potential.

Vadodara district, is the most central part of Gujarat state, and a hybrid of urban and rural areas, survey shows that even though there is much awareness of oral and maxillofacial branch amongst the medical consultants, their attitude towards referring the cases to oral and maxillofacial surgeons is quiet low. This can be increased by organizing, awareness and educational programs via continuing dental education programs and publishing various treatments done by oral surgeons to get good response and building confidence in them for oral and maxillofacial surgery. In our study also, we found the need of public awareness and practitioners awareness for exploring full potentialities of the oral and maxillofacial surgeons in Gujarat.

Conclusion

Awareness of the scope of OMFS should lead to improved access and efficient delivery of a quality service. Our

medical and dental colleagues need to have the necessary knowledge to make informed decisions about their patient's management. Equally, the public would benefit from knowing what OMFS offers them, so that they can request an appropriate referral.

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