Are People Aware of Oral and Maxillofacial Surgery in India?

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Abstract

Introduction Maxillofacial surgery is one of the most rapidly expanding specialities in India. There is however a very poor understanding of the scope of the speciality. This paper attempts to find out the awareness of the speciality in India.

Materials and methods A questionnaire was given to 50 medical, dental undergraduate students, 50 medical and dental practitioners, and 50 lay persons giving us a total of 250 responses. 10 common anomalies were chosen and they were asked to choose the most appropriate speciality which they would ask to treat the problem.

Results While trauma and facial deformity correction were recognised to be mainly treated by maxillofacial surgeons, the other maxillofacial problems were poorly recognised to be treated by our speciality.

Conclusion This study highlights the need to promote our speciality among the dentists, doctors and general public. and if need be even change the name of our speciality from oral and maxillofacial surgery to a more simple but more easily understood facial surgery.

Keywords Oral and maxillofacial surgery · Awareness · Dental and medical doctors · General public · Facial surgery in India

Introduction

Oral and maxillofacial surgery is a relatively new specialty but is one of the fastest growing specialties. In India to

qualify as an oral and maxillofacial surgeon, one needs to have a dental undergraduate degree followed by a 3 year program in oral and maxillofacial surgery whereas in some European countries and certain states of the USA, one needs to have both medical and dental undergraduate degrees prior to embarking on training in oral and maxillofacial surgery.

The scope of the specialty has also increased vastly as compared to earlier years where it was restricted to mainly dento-alveolar surgery and basic maxillofacial trauma. Currently dento-alveolar surgery, maxillofacial trauma, pathology of head and neck (both benign and malignant), cleft lip and palate, bone grafting, facial deformity correction, craniofacial surgery, aesthetic facial surgery, TMJ surgery, implant surgery are just some of the sub-specialties being treated by maxillofacial surgeons in India.

In spite of all these advances in maxillofacial surgery, it is still vaguely or sparsely understood by both the dental and medical fraternities. The awareness is even worse among the general public. Previous studies conducted in the USA and the UK have reported that the medical and dental fraternity and the general public are largely unaware of the scope of maxillofacial surgery and the type of work being done by maxillofacial units. [1, 2]

If the awareness even in developed countries is lacking, the situation in a developing country like India is bound to be worse. We therefore did a study to check the awareness of maxillofacial surgery in India.

Materials and Methods

The study was done in Rajah Muthiah Institute of health science, Annamalai University, Chidambaram, Tamilnadu State, India to assess the current awareness levels of the

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specialty (maxillofacial surgery) in the Indian society. Rajah Muthiah Institute of health sciences is a teaching hospital and a tertiary referral centre having 1,000 beds with both undergraduate and postgraduate medical and dental specialties with a combined outpatient strength over 1,000 patients a day.

The entire range of maxillofacial surgery including dento-alveolar surgery, maxillofacial trauma, pathology of head and neck (both benign and malignant), cleft lip and palate, bone grafting, facial deformity correction, TMJ surgery, craniofacial surgery, aesthetic facial surgery and so on is being performed by the Maxillofacial Unit in Rajah Muthiah Institute of health sciences currently and has been so for the past 25 years. Facial lacerations coming through the accident and emergency department were routinely referred to the oral and maxillofacial surgery unit.

We prepared a written questionnaire and this was given to 5 groups (Medical students, Dental students, Medical doctors, Dental doctors, General public). Each group consisted of 50 people each thus giving us a total of 250 replies.

The written questionnaire consisted of 10 common anomalies and the subjects were asked to mark with a tick, the specialty they thought was most appropriate to deal with the problem. The general public had the written questionnaire in Tamil (the local language) to make sure that there was no misunderstanding about the questions asked/choices given. Illiterate people were excluded from this study. The entire groups were chosen randomly.

An example of the written questionnaire is shown below:

Please tick the speciality which you think is appropriate to treat the problem

S.no	Surgery	ENT surgeon	Plastic surgeon	Oral and maxillo-facial surgeon	General dentist	Others including family physician
1.	Wisdom tooth removal					
2.	Facial laceration closure					
3.	Fracture of maxilla and mandible					
4.	Facial deformity [Orthognathic correction]					
5.	Cleft lip and palate					
6.	Oral cancer					
7.	Facial abscess					
8.	Implants					
9.	TMJ disorders					
10.	Sinus problems					

For example

Mode of problem	Orthopedic surgeon	Oral and maxillo-facial surgeon	Ophthalmologist	General surgeon	Others
Fracture of leg [femur bone]	✓	–	–	–	–
Loss of vision	–	–	✓	–	–

Results

Responses from dental students, medical students, dental doctors, medical doctors and general public are depicted in Tables 1, 2, 3, 4 and 5, respectively.

The summary of percentage of people opted for OMF surgeon is given in Table 6

For wisdom teeth we found that 40% of the dental students thought that general dentists were most appropriate to treat wisdom teeth rather than an oral and maxillofacial surgeon. However the dental practitioners thought that only 22% of GDP were capable of removing wisdom teeth. Again 46% of medical students thought a general dental practitioners (GDP) would treat wisdom teeth, but among medical practitioners only 32% thought a GDP was most appropriate to perform wisdom teeth removal. In both these groups they may have been influenced by past experience. Among the general public however 78% of them thought wisdom teeth removal would be performed by GDP's.

Even though facial lacerations were exclusively done by the maxillofacial unit at our hospital for the past 25 years, only 28% of the dental students and dental doctors, 12% of the medical students, 16% of the medical doctors and 38% of the general public thought we were the appropriate specialty to treat facial lacerations. This is one area where education of the study groups may improve the visibility of the specialty.

For facial trauma and facial deformity (Orthognathic surgery) more than 72% of the general public and greater than 85% of all study groups opted to be treated by a maxillofacial surgeon. In both facial trauma and facial deformity, the stellar work done by maxillofacial surgeons in most units in India have displaced the plastic and ENT surgeons as the primary care provider.

Among the dental profession 60–76% and the medical profession 26–28% have opted for an oral and maxillofacial surgeon for management of cleft lip and palate, where as 50% of medical students and 72% of medical doctors feel that plastic surgeon would be appropriate.

Table 1 Responses from dental students

S.no	Surgery	ENT surgeon	Plastic surgeon	Oral and maxillo-facial surgeon	General dentist	Others including family physician
1.	Wisdom tooth removal	–	–	30	20	–
2.	Facial laceration closure	–	35	14	1	–
3.	Fracture of maxilla and mandible	–	–	49	1	–
4.	Facial deformity [Orthognathic correction]	–	–	49	1	–
5.	Cleft lip and palate	3	9	38	–	–
6.	Oral cancer	–	–	47	1	2
7.	Facial Abscess	–	5	29	15	1
8.	Dental implants	–	–	38	10	2
9.	TMJ disorders	1	–	49	–	–
10.	Sinus problems	31	–	19	–	–

Table 2 Responses from medical students

S.no	Surgery	ENT surgeon	Plastic surgeon	Oral and maxillo-facial surgeon	General dentist	Others including family physician
1.	Wisdom tooth removal	–	–	27	23	–
2.	Facial laceration closure	–	44	6	–	–
3.	Fracture of maxilla and mandible	–	1	49	–	–
4.	Facial deformity [Orthognathic correction]	–	3	47	–	–
5.	Cleft lip and palate	10	25	13	2	–
6.	Oral cancer	5	–	20	24	1
7.	Facial abscess	1	23	11	2	13
8.	Dental implants	–	5	20	24	1
9.	TMJ disorders	–	2	47	1	–
10.	Sinus problems	33	–	16	–	1

Table 3 Responses from dental doctors

S.no	Surgery	ENT surgeon	Plastic surgeon	Oral and maxillo-facial surgeon	General dentist	Others including family physician
1.	Wisdom tooth removal	–	–	39	11	–
2.	Facial laceration closure	–	33	14	2	1
3.	Fracture of maxilla and mandible	–	–	50	–	–
4.	Facial deformity [Orthognathic correction]	–	5	45	–	–
5.	Cleft lip and palate	–	20	30	–	–
6.	Oral cancer	–	2	44	0	4
7.	Facial abscess	1	1	40	3	5
8.	Dental implants	–	–	39	3	8
9.	TMJ disorders	–	–	48	1	1
10.	Sinus problems	30	–	20	–	–

In oral cancer, none of the medical students thought maxillofacial surgeons treat oral cancer. All the oral cancer cases are done exclusively by the maxillofacial unit. Medical students do not come to the maxillofacial operating list

and were therefore unaware of our competency in this field. Medical doctors (all PG trainees, anesthetists and the like) however regularly come to the maxillofacial operating lists and are aware of our competencies.

Table 4 Responses from medical doctors

S.no	Surgery	ENT surgeon	Plastic surgeon	Oral and maxillo-facial surgeon	General dentist	Others including family physician
1.	Wisdom tooth removal	–	–	34	16	–
2.	Facial laceration closure	–	31	8	5	6
3.	Fracture of maxilla and mandible	1	1	43	3	2
4.	Facial deformity [Orthognathic correction]	–	8	41	1	–
5.	Cleft lip and palate	–	36	14	–	–
6.	Oral cancer	3	6	36	–	5
7.	Facial abscess	–	13	8	12	17
8.	Dental implants	–	1	35	12	2
9.	TMJ disorders	–	2	43	4	1
10.	Sinus problems	31	4	9	1	5

Table 5 Responses from General public

S.no	Surgery	ENT surgeon	Plastic surgeon	Oral and maxillo-facial surgeon	General dentist	Others including family physician
1.	Wisdom tooth removal	–	–	11	39	–
2.	Facial laceration closure	–	28	19	–	3
3.	Fracture of maxilla and mandible	2	6	36	7	–
4.	Facial deformity [Orthognathic correction]	–	1	47	–	2
5.	Cleft lip and palate	7	22	14	4	3
6.	Oral cancer	3	1	16	22	8
7.	Facial abscess	5	3	19	7	16
8.	Dental implants	–	–	16	33	1
9.	TMJ disorders	5	3	25	10	7
10.	Sinus problems	17	–	–	–	33

Table 6 Summary of percentage of people opted for OMF surgeon

	Dental students	Medical students	Dental doctors	Medical doctors	General public
Fracture of maxilla and mandible	98	98	100	86	72
Facial deformity [orthognathic correction]	98	94	90	82	94
Cleft lip and palate	76	26	60	28	28
Oral cancer	94	NIL	88	72	32
Facial abscess	58	22	80	16	38
Dental implants	76	49	78	70	32
TMJ disorders	98	94	96	86	50
Sinus problems	38	32	40	18	NIL

Discussion

Most of the findings in this article would not surprise older and practicing oral and maxillofacial surgeons. It does bring home a reality- our specialty is not easily recognized by either the public or by the medical fraternity. We are mainly known as “dentists” to the medical fraternity and surgeons to the “dental fraternity” [3].

In our study we found that all study groups were not clear about the scope of the specialty and its capabilities. All groups were aware that facial trauma and orthognathic surgery is being treated by maxillofacial surgeons. This may be due to an emphasis placed during training on maxillofacial trauma management during the postgraduate MDS course. All of our 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.

Oral and maxillofacial surgery initially it started as a branch of surgical dentistry by dentists who had a special interest in surgery. They were then known as oral surgeons. In World War II, the specialty increased its remit to include maxillofacial trauma by a few dedicated units in the UK and the USA. Then over a period of time, they increased their scope to include facial deformity correction, pathology and so on to reach its current position. By this time the specialty was known as oral and maxillofacial surgery. In certain countries it is now mandatory to get both a medical and dental qualification before becoming a maxillofacial surgeon. Whether this dual qualification is needed to practice maxillofacial surgery or whether it is used as a “political” weapon to remove the tag of a “dentist” is still under debate. Our association hears this topic on a regular basis in nearly every conference.

In India, lately there has been a vast increase in the number of trainees in Oral and maxillofacial surgery and this has improved the visibility of the specialty. This is mainly due to the increase in the number of college seats available at a postgraduate level lately.

This study shows that it is very important to promote the specialty among the general population and also in the media. Having a simpler name could be the first step in making the specialty well known. Otolaryngologists have now changed their name to ENT surgeons, making it easier to pronounce and remember. Plastic surgery on the other

hand gives the impression of very fine and meticulous surgery with no scars (which is actually not true), which may be the reason why all groups in this study choose them over maxillofacial surgeons to treat facial lacerations. This is in spite of the maxillofacial unit handling facial lacerations exclusively for the past 25 years in our teaching hospital. We suggest oral and maxillofacial surgical specialty be known as “Facial Surgery” or “Oral and Facial Surgery” as this gives a clear idea of type of work done and is easy to pronounce and remember. A lot of people find pronouncing “maxillofacial” difficult.

In addition our training needs to be upgraded and revamped so that our trainees have a greater “hands-on” exposure during their postgraduate training. They will then be able to handle increasingly complex cases in a multi-specialty setup when they graduate and earn the mutual respect of the medical and dental fraternity and also the general public.

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