Awareness of Oral and Maxillofacial Surgery Among Healthcare Professionals in Kanpur – A Questionnaire Based Study

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Abstract:-

Introduction: Oral and maxillofacial surgery (OMFS) is a specialty of dentistry dealing with the surgical aspects of head and neck. It is considered to be a bridge between medical and dental specialties. However, little is known regarding this field among the medical practitioners.

Method: A survey was conducted among 200 health care professionals in KANPUR to check for awareness regarding the field of OMFS, and its scope in the medical field.

Result: Most of the dental professionals were found to be more aware of range of work done in Oral and Maxillofacial Surgery, in contrast to medical professionals. The difference in perceived knowledge was not significant for nose fractures, cleft lip and/or palate, removal of wisdom tooth and temporomandibular joint problems. Most of the respondents referred cases to OMFS for mandibular, maxillary and zygoma fractures. OMFS was also preferred for dento-alveolar trauma, maxillary cysts, benign mandibular tumors, removal of wisdom tooth, orthognathic surgeries, TMJ problems and maxillofacial infections. There was a difference of opinion for others. Dental professionals preferred OMFS for biopsy of oral lesions, lump in the mouth, mandibular reconstruction and bone graft in mandible, while medical professionals referred less number of cases for these conditions. There were more referrals to OMFS from medical professionals' side for dental implants, as compared to dental professionals. There were overall less number of referrals to OMFS for cancer of the mouth, removal of salivary glands, cleft lip and/or palate, and problems with facial appearance.

Conclusion: The knowledge of health care professionals regarding specialty referrals in oro-facial conditions is average. Many health care professionals still associate our specialty mostly with intraoral conditions and tooth removal only. Health care professionals still lack information regarding the advances and new procedures being done in Oral and Maxillofacial Surgery, Dental Practitioners were more aware about the range of work done and referrals to OMFS than Medical Practitioners of all specialties

Keywords:- Oral and Maxillofacial Surgery, Dental Personnel, Medical Practitioners, Awareness.

I. INTRODUCTION

During World War I, there was a large number of destructive facial wounds led to an increased demand for facial surgeons. At that time, the specialties of plastic surgery and oral and maxillofacial surgery did not exist and very few general surgeons were prepared to treat these patients.¹ 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 patients' management. Equally the public would benefit from knowing what OMFS offers them so that they can request an appropriate referral.² However, the recognition of our specialty and all that we can offer patients is still a mystery to a large number of the general public at large. A greater progress must be made in educating the medical and dental students as well as the laypersons if the specialty of Oral and Maxillofacial Surgery (OMFS) is to be practiced in its full scope. The aim of the present study was to find out current levels of awareness of the specialty of OMFS among Dental professionals, Medical professionals & Paramedical professionals in KANPUR region.

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II. MATERIAL AND METHODS

This questionnaire study was carried out by Department of Oral and Maxillofacial Surgery Rama Dental College Hospital and Research Centre, Kanpur **regarding awareness** of the oral and maxillofacial surgery among health care professionals in Kanpur region.

The sample size were randomly divided in three groups i.e., Group: A 100 dental professionals, Group: B 50 medical professionals and Group: C 50 paramedical professionals,

Questionnaires were randomly distributed to a total of 200 dental, medical and paramedical professionals. The questionnaire was contained on one side of A4 paper and it included 9 vertical columns and 4 main horizontal columns. The vertical columns contained specialist's (surgeons) and the horizontal column contained four major treatment procedures:

- 1. Trauma
- 2. Maxillofacial pathology
- 3. Reconstructive surgery
- 4. Cosmetic surgery.

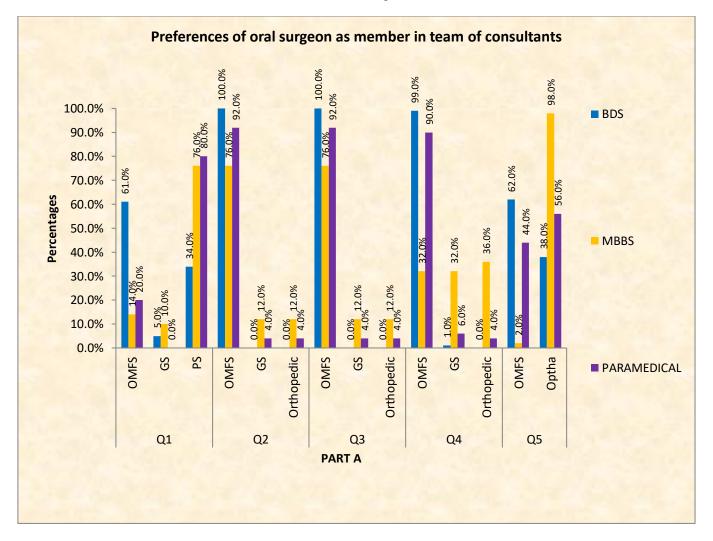
Finally, the participants were asked to indicate, from a list of eighteen conditions and treatments, which or all of the eight specialists they would expect to deal with them.

The specialists included: ENT surgeon, plastic surgeon, oral and maxillofacial surgeon, general surgeon, orthopedic surgeon, neurosurgeon, dental surgeon and others.

The eighteen different conditions and treatment included: **Trauma**- cut on face, fractures of upper and lower jaw, fracture of frontal bone, fracture of cheek bone and nose, fracture of orbit. **Maxillofacial pathology**- TMJ dysfunction, cancer of tongue, mole or lump on face, removal of salivary gland, cysts and tumors of jaws, infection of facial space. **Reconstructive surgery**- sleep apnea surgery, sinus surgery, cleft lip and palate, dental implants and reconstruction of jaws and face. **Cosmetic surgery** - cosmetic surgery of nose, orthognathic surgery of face and jaw

III. RESULTS

In the present study, 200 questionnaires were distributed to the dental, medical and paramedical professionals in kanpur. All respondents gave a completely answered the questionnaire.



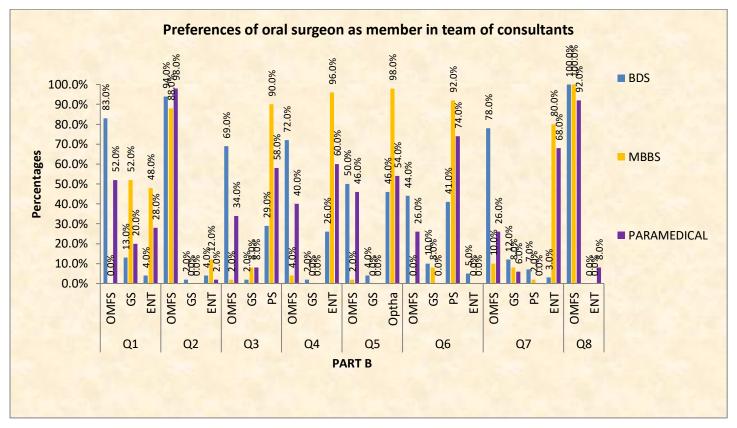
	references of oral su	0							
Question	Referred to	BI [N=1		MBBS [N=50]		PARAMEDICAL [N=50]		P value	
		n	%	n	%	n	%		
	OMFS	61	61.0	7	14.0	10	20.0		
Q1. CUT ON THE FACE	GS	5	5.0	5	10.0	0	0.0	< 0.001*	
	PS	34	34.0	38	76.0	40	80.0		
	OMFS	100	100.0	38	76.0	46	92.0	<0.001*	
Q2. FRACTURE OF LOWER JAW	GS	0	0.0	6	12.0	2	4.0		
	Orthopedic	0	0.0	6	12.0	2	4.0		
	OMFS	100	100.0	38	76.0	46	92.0	<0.001*	
Q3. FRACTURE OF UPPER JAW	GS	0	0.0	6	12.0	2	4.0		
	Orthopedic	0	0.0	6	12.0	2	4.0		
Q4. FRACTURE OF CHEEK BONE	OMFS	99	99.0	16	32.0	45	90.0		
	GS	1	1.0	16	32.0	3	6.0	< 0.001*	
	Orthopedic	0	0.0	18	36.0	2	4.0		
	OMFS	62	62.0	1	2.0	22	44.0	<0.001*	
Q5. FRACTURE OF ORBIT	Optha	38	38.0	49	98.0	28	56.0	<0.001*	

Table 1: Preferences of oral surgeon as member in team of consultants

Statistical Analysis: Pearson's Chi-square test. *denotes statistically significant at the 0.05 level.

Table 2: Preferences of oral surgeon as member in team of consultants QUALIFICATION										
			I							
Question	Referred to		DS	MBBS [N=50]		PARA	P value			
Question	Kelerreu to	[N=	=100]			[
		n	%	n	%	n	%			
	OMFS	83	83.0	0	0.0	26	52.0			
Q1.CANCER IN THE MOUTH AND JAWS	GS	13	13.0	26	52.0	10	20.0	< 0.001*		
	ENT	4	4.0	24	48.0	14	28.0			
	OMFS	94	94.0	44	88.0	49	98.0			
Q2.TEMPPOROMANDIBULAR PROBLEMS	GS	2	2.0	0	0.0	0	0.0	0.106		
	ENT	4	4.0	6	12.0	1	2.0			
	OMFS	69	69.0	1	2.0	17	34.0			
Q3.MOLE OR LUMP ON THE FACE	GS	2	2.0	4	8.0	4	8.0	< 0.001*		
	PS	29	29.0	45	90.0	29	58.0			
	OMFS	72	72.0	2	4.0	20	40.0			
Q4.SALIVARY GLAND DISEASES/SURGERY	GS	2	2.0	0	0.0	0	0.0	< 0.001*		
	ENT	26	26.0	48	96.0	30	60.0			
	OMFS	50	50.0	1	2.0	23	46.0			
Q5.SWELLING AROUND THE EYE	GS	4	4.0	0	0.0	0	0.0	< 0.001*		
	Optha	46	46.0	49	98.0	27	54.0			
	OMFS	44	44.0	0	0.0	13	26.0			
Q6.SWELLING ON THE FACE	GS	10	10.0	4	8.0	0	0.0	< 0.001*		
Q0.5 WELLING ON THE FACE	PS	41	41.0	46	92.0	37	74.0	<0.001		
	ENT	5	5.0	0	0.0	0	0.0			
	OMFS	78	78.0	5	10.0	13	26.0			
Q7.SWELLING IN THE NECK	GS	12	12.0	4	8.0	3	6.0	< 0.001*		
Q7.5 WELLING IN THE WEEK	PS	7	7.0	1	2.0	0	0.0	<0.001		
	ENT	3	3.0	40	80.0	34	68.0			
Q8.THIRD MOLAR SURGERY	OMFS	100	100.0	50	100.0	46	92.0	0.002*		
Castistical Analysis Desease's Chi	ENT	0	0.0	0	0.0	4	8.0	0.002		

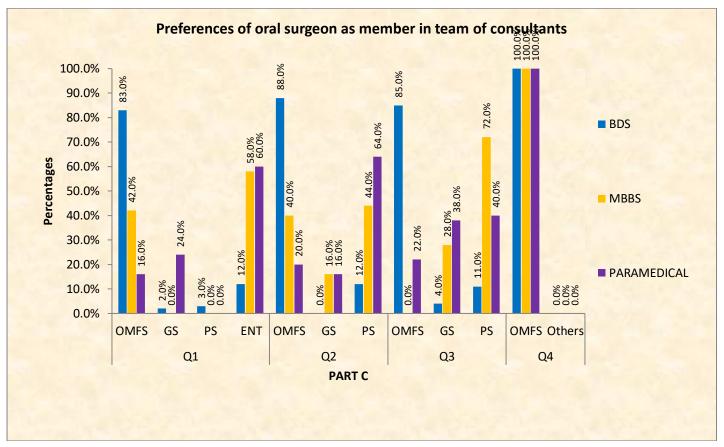
Statistical Analysis: Pearson's Chi-square test. *denotes statistically significant at the 0.05 level.



Question			QUALIFICATION							
	Referred to	BDS [N=100]			BBS [=50]	PARAN [N	P value			
		n	%	n	%	n	%			
Q1.SINUS SURGERY	OMFS	83	83.0	21	42.0	8	16.0			
	GS	2	2.0	0	0.0	12	24.0	<0.001*		
	PS	3	3.0	0	0.0	0	0.0	<0.001*		
	ENT	12	12.0	29	58.0	30	60.0			
Q2.CLEFT LIP	OMFS	88	88.0	20	40.0	10	20.0	<0.001*		
	GS	0	0.0	8	16.0	8	16.0			
	PS	12	12.0	22	44.0	32	64.0			
Q3.CLEFT PALATE	OMFS	85	85.0	0	0.0	11	22.0			
	GS	4	4.0	14	28.0	19	38.0	<0.001*		
	PS	11	11.0	36	72.0	20	40.0			
		-		-						
Q4.DENTAL IMPLANT	OMFS	100	100.0	50	100.0	50	100.0			
	Others	0	0.0	0	0.0	0	0.0			

Table 3: Preferences of oral surgeon as member in team of consultants

Statistical Analysis: Pearson's Chi-square test. *denotes statistically significant at the 0.05 level.



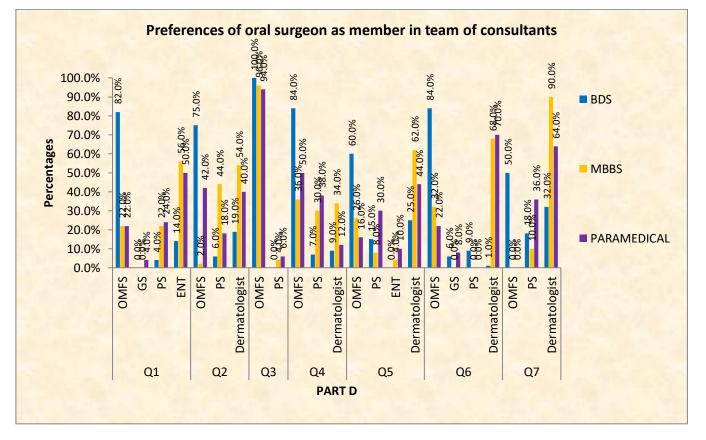


Table 4: Preferences of c	Referred to								
Question		BDS [N=100]		MBBS [N=50]		PARAME DICAL [N=50]		P value	
		n	%	n	%	n	%		
	OMFS	82	82.0	11	22.0	11	22.0		
OI COSMETIC SUBGERY NOSE	GS	0	0.0	0	0.0	2	4.0	< 0.001	
Q1.COSMETIC SURGERY NOSE	PS	4	4.0	11	22.0	12	24.0	*	
	ENT	14	14.0	28	56.0	25	50.0		
	OMFS	75	75.0	1	2.0	21	42.0		
Q2. COSMETIC CORRECTION OF FACE	PS	6	6.0	22	44.0	9	18.0	<0.001 *	
	Dermatologis t	19	19.0	27	54.0	20	40.0		
	OMFS	100	100.0	48	96.0	47	94.0	0.063	
Q3. COSMETIC CORRECTION OF JAWS	PS	0	0.0	2	4.0	3	6.0	0.005	
	OMFS	84	84.0	18	36.0	25	50.0		
Q4.SURGICAL FACE LIFT	PS	7	7.0	15	30.0	19	38.0	<0.001	
	Dermatologis t	9	9.0	17	34.0	6	12.0		
	OMFS	60	60.0	13	26.0	8	16.0		
	PS	15	15.0	4	8.0	15	30.0	<0.001 *	
Q5.NON SURGICAL FACE LIFT	ENT	0	0.0	2	4.0	5	10.0		
	Dermatologis t	25	25.0	31	62.0	22	44.0		
	OMFS	84	84.0	16	32.0	11	22.0		
Q6.HAIR TRANSPLANT	GS	6	6.0	0	0.0	4	8.0	< 0.001	
	PS	9	9.0	0	0.0	0	0.0	*	
	Dermatologis t	1	1.0	34	68.0	35	70.0		
	OMFS	50	50.0	0	0.0	0	0.0		
Q7.TREATMENT OF SKIN PROBLEMS OF FACE	PS	18	18.0	5	10.0	18	36.0	<0.001	
FACE	Dermatologis t	32	32.0	45	90.0	32	64.0		

Table 4: Preferences of oral surgeon as member in team of consultants

Statistical Analysis: Pearson's Chi-square test. *denotes statistically significant at the 0.05 level.

IV. DISCUSSION

OMFS and around 74% did not understand its role and scope. Ifeacho et al (2004) concluded that although most of the medical professionals had heard of this particular specialty, they were not clear about the clinical expertise this branch could offer.² According to a study done by *Ashwant Kumar Vadepally et al*, among the medical fraternity and general public, Oral and Maxillofacial surgeons are commonly known as 'dentists' in medical fraternity and as 'surgeons' in dental fraternity. Despite tremendous increase in awareness regarding personal health in India, the specialty of OMFS is still in its infancy. The results of their study showed that only 7% of the general public and 30% of medical professionals approached an OMS for the clinical situations.⁷

> Trauma Versus Respondent

In the present study 92.4% of the Dental professionals have chosen Oral & Maxillofacial Surgeons for treating trauma of head and neck, but few of them have chosen ENT Surgeons followed by plastic Surgeons for treating head & neck trauma.

> Pathology Versus Respondent:

Majority of the Dental professionals 73.75% have chosen Oral & Maxillofacial Surgeons for treating pathology of the Head & Neck. 27% Medical & Paramedical have chosen Oral & Maxillofacial Surgeons, where majority of them have opted for surgical oncologists (mentioned in any other category) & Plastic surgeons, General surgeon for treating Head & Neck pathology.

Reconstructive Surgery Versus Respondent:

Oral & Maxillofacial Surgeons was chosen majority of the time by dental professionals 89% reconstructive surgery of the head and neck. 45.5% of medical professionals followed by 39.5% of the paramedical professionals have chosen Oral & Maxillofacial Surgeons for Reconstructive Surgery of Head & Neck, but majority of these respondents have chosen plastic surgeons.

Cosmetic Surgery Versus Respondent:

76.42% of the Dental professionals have chosen Oral & Maxillofacial Surgeons for Cosmetic Surgery. Oral & Maxillofacial Surgeons was chosen 30.57% of the times by Medical professionals and 35.14% of the times by Paramedical professionals for cosmetic Surgery.

Overall it shows that this speciality is still searching for his identity among the medical & paramedical fraternity in Kanpur, Uttar Pradesh.

V. CONCLUSION

Despite advances in OMFS in our country, there are still a large number of patients with untreated head and neck conditions and diseases present since birth who report to Oral and Maxillofacial Surgeons only at an advanced stage owing to lack of awareness, ignorance, or improper referral. The specialty of OMFS is critical for addressing injuries, deformities, and diseases of the maxillofacial region. There is a need to promote and increase awareness regarding the wide spectrum of work being performed by Oral and Maxillofacial surgeons.

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