



A SURVEY ON AWARENESS & KNOWLEDGE AMONGE MEDICOS IN CENTRAL MP, BHOPAL FOR MAXILLOFACIAL PROSTHODONTICS AS A PART OF DENTAL SPECIALITY

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KEYWORDS :

INTRODUCTION

According to St. Jerome¹, "the face is the mirror of the mind," our faces play a special function in social and emotional expression, communication, and most significantly, self-reflection. Any flaws in the face and related structures have a significant emotional impact on the people who are affected. Defects in the maxillofacial region, in particular, cause severe sadness that frequently necessitates therapy since "to appear human is a fundamental entitlement of every individual."² Patients who have undergone an accident and/or had sick tissues surgically removed need to have the function and appearance restored. To lessen the patient's psychological damage, it is advised that restoration in these situations be done ideally as soon as feasible³

Although not all deformities may be corrected through surgery, reconstructive surgery is generally thought to be the best course of action in many situations.⁴ It is dependent on a number of variables, including the patient's overall state of debilitation, the size, location, and type of lesion. The rehabilitation of the abnormalities with prosthetics is a viable therapy option in such circumstances. The prostheses restore form, function, and aesthetic by artificially replacing a portion of the human body.⁶

The restoration and/or replacement of the stomatognathic and craniofacial structures with prostheses, which may or may not be removed on a routine or elective basis, is the focus of maxillofacial prosthodontics. Maxillofacial prosthodontists are specialists with the knowledge and training to create personalized prostheses to correct maxillofacial abnormalities.⁷ They should participate in a multidisciplinary team that typically includes plastic surgeons, oral and maxillofacial surgeons, and In order to treat individuals with tertiary disease, the medical team's main objective is to cure the illness or get rid of the underlying pathology.⁸ However, care also includes replacing and treating the missing tissue or defect.

A maxillofacial prosthodontist is trained to create a prosthesis to repair the functional, cosmetic, and psychological lacunae associated with the defect, and rehabilitation is the crux of the service they give. To better meet the patient's needs, this necessitates the participation of medical and dental professionals in collaboration. It has been noted that the majority of patients in India who have these anomalies are not sent to a maxillofacial prosthodontist and do not receive

treatment. Primary cause for this could be that the medical practitioners like surgeons, ophthalmologists, ENT surgeons, plastic surgeons themselves may not be aware about the specialty responsible to treat such patients for the residual defects after surgery.

Therefore, the present study was undertaken to seek information about the awareness and knowledge of the medical practitioners towards the maxillofacial branch of dentistry as a specialty to restore maxillofacial defects.

MATERIAL AND METHODOLOGY

This descriptive cross-sectional study was conducted amongst the institutional and private medical practitioners of Madhya Pradesh after institutional ethical approval. The study duration was from February 2022 to October 2022 .

Inclusion Criteria

1. Medical practitioners associated with hospitals or practicing individually.
2. Postgraduate students studying in medical college.

Exclusion Criteria

1. Engineering college students.
2. Undergraduate medical and dental students.

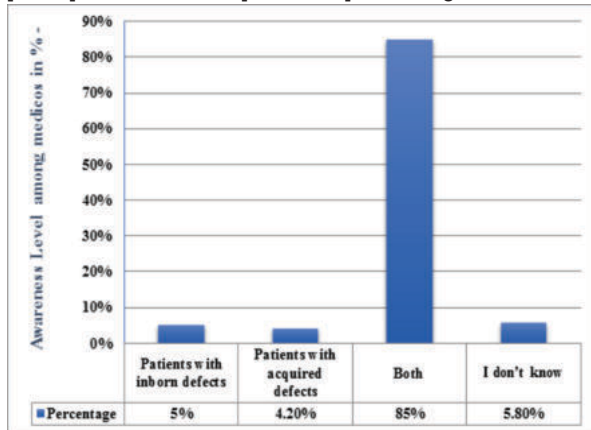
The purpose and nature of the study was explained to each participant fitting in the inclusion criteria and the willing participants were requested to complete a comprehensive closed ended, self-administered questionnaire. Of 720 participants are willingly participated in the study.

The questionnaire contained a total 13 questions which were attitude-based, knowledge based, regarding awareness about maxillofacial prosthodontics as a specialized branch, various types of maxillofacial defects and materials needed for prosthesis fabrication etc. Professional details of the participants such as area of specialization and years of experience were also recorded in the study. Frequency analysis was done using Statistical Package for the Social Sciences (SPSS) software version 22.0

RESULTS

Amongst the 720 participants the majority of practitioners are aware whether it's an inborn or acquired defects, all needs a prosthetic rehabilitation. The only problem is that very few participants had referred such cases with maxillofacial defects for rehabilitation and had referred them to plastic

surgeons with no follow up, or they referred it for eye and ear prosthesis each and for ear prosthesis, most of the participants referred the patients to plastic surgeons.



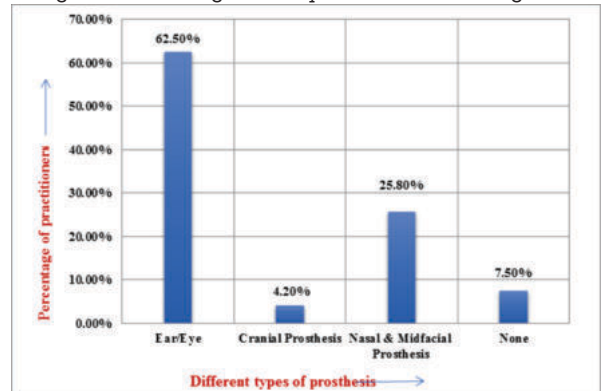
Graph 1- Awareness Percentage Regarding Types Of Maxillo-facial Defects That Require Prosthetic (artificial Substitute) Rehabilitation.

S. no.	Awareness & Knowledge statement	No. of participants n=720	(%)
1.	Do you have any idea about, different types of maxillofacial defects that require prosthetic (artificial substitute) rehabilitation?	Patients with inborn defects	05
		Patients with acquired defects	4.2
		Both	85
		I don't know	5.8
2.	Do you know any of the following type of prosthesis?	Ear/Eye	62.5
		Cranial prosthesis	4.2
		Nasal and midfacial prosthesis	25.8
		None	7.5
3.	Where did you heard about the above prosthesis, kindly specify?	Newspaper	00
		Books	4.2
		Dentist	80.8
		Others	15
4.	Do you come across any person with above mentioned defect & have been rehabilitated with prosthesis?	Yes	67.5
		No	32.5
5.	For the above-mentioned defects have you ever referred any patient for rehabilitation?	Yes	62.5
		No	37.5
6.	Do you think that Maxillofacial prosthetic rehabilitation is an alternative treatment option for plastic reconstructive surgery?	Yes	65
		No	7.5
		Not sure	27.5
7.	Have you referred any patient for which of the following prosthesis?	Ear	00
		Eye	27.5
		Prosthesis for maxilla and mandible	53.3
		Any other	19.2

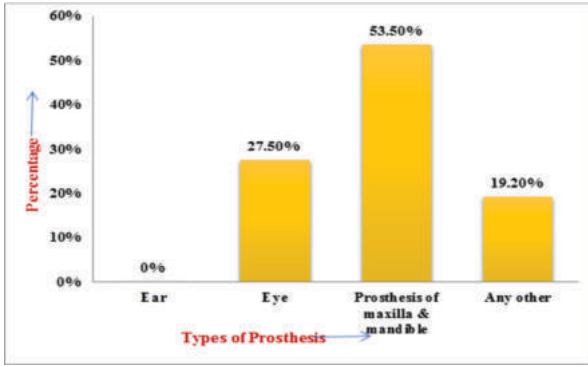
8.	Have you heard of maxillofacial prosthesis such as?	Maxillary Obturators	378	52.5
		Mandibular guidance appliance	36	05
		Palatal lift prosthesis	156	21.7
		None of the above	150	20.8
9.	Do you know the facts that such prosthesis can be better supported and retained by implants?	Yes	570	79.2
		No	84	11.7
		I don't know	66	9.2
10.	Do you have any idea about the average cost which the patient will have to bear for such kind of prosthesis?	yes	360	50
		No	360	50
11.	In your opinion the major limitation of the maxillofacial prosthesis is?	High cost	54	7.5
		Long treatment time	108	15
		Lack of awareness	558	77.5
		Need of surgery	00	00
12.	Which of the following materials are used for fabrication of such prosthesis?	Acrylic resin	84	11.7
		Silicon	78	10.8
		Both	432	60
		I don't know	126	17.5
13.	Do you have awareness and knowledge about the maxillofacial prosthodontics branch of dentistry which deals with restoration of maxillofacial defects?	Yes	678	94.2
		No	42	5.8

19.2 % of practitioners had knowledge about implant being used as retentive aid for maxillofacial prosthesis. Whereas 80.8 % were not aware about it, and none of the practitioners knew about the average cost of a maxillofacial prosthesis. None of the practitioners were found of any idea about the cost of a maxillofacial prosthesis.

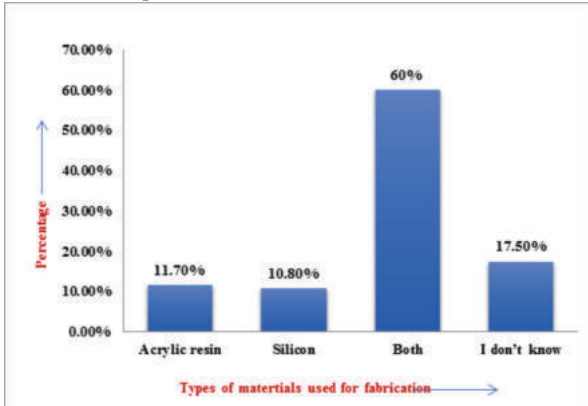
Most of the 18.2 % were ophthalmologists having idea about eye prosthesis. Out of 10.9 %, 8.2 % had read it in medical books sometime and only 2.7 % had known it through dentist acquaintance. Positive response was obtained from about 40 % of participants who wrote that this survey questionnaire itself brought new knowledge and they are keen onto seeking more.



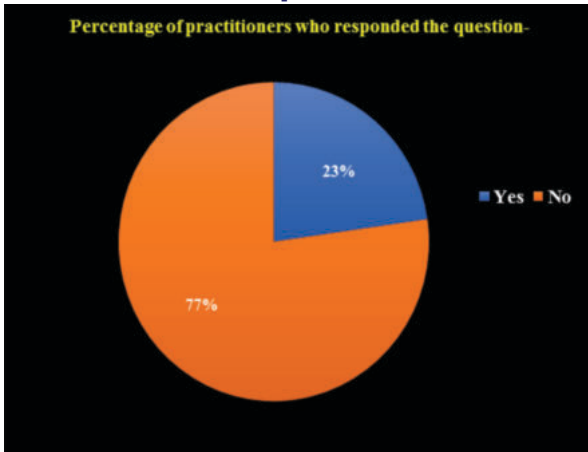
Graph 2- Awareness Regarding Types Of Maxillofacial Prostheses Among Medics



Graph 3- Percentage Of Type Of Prostheses The Patient Had Referred For By Medicos



Graph 4- Awareness About The Types Of Material Used For Fabrication Of Maxillofacial prosthesis



Graph 5- Awareness Regarding Maxillofacial Prosthodontics Being A Branch Of Dentistry Which Deals With The Restoration Of Maxillofacial Defects With An Artificial Substitute-

DISCUSSION

With the use of removable prosthetics, maxillofacial prosthodontics works to restore the form and function of patients who have head and neck deformities, as well as extended appliances such as finger prostheses and vaginal stents. A multidisciplinary team includes prosthodontists for the maxillofacial region. They collaborate closely with speech therapists, occupational therapists, and physiotherapists as well as oral and maxillofacial surgeons, plastic surgeons, ear, nose, and throat surgeons, ophthalmologists, general surgeons, general physicians, oncologists, orthopaedic surgeons, gynaecologists, and paediatricians.

Few people outside of the medical community and the general public are aware of the capabilities and range of a

maxillofacial prosthodontist. The practitioners have a basic understanding of this type of treatment and that it falls inside a prosthodontist's scope of practice. Patients with maxillofacial abnormalities are not properly directed and sent to a maxillofacial prosthodontist for rehabilitation, because of a lack of awareness.

Therefore, the current study was done in an effort to gather information about medical professionals' awareness of and expertise of the maxillofacial branch of dentistry as a specialization to correct maxillofacial problems.

The Observations Of This Study Were As Follows

Almost 52.1% of the 720 medical professionals polled said they were aware of both congenital and acquired problems, compared to 29.7% who said they were unaware of any defects. (Graph1)

The knowledge of prosthesis kind and the sources of information related to them was the subject of additional inquiries. The medical professionals surveyed knew about several types of prostheses such as ear, eye, nasal & mid-facial prosthesis, cranial prosthesis, prosthesis for maxilla & mandible, or any other prosthesis like finger in varying frequencies.

In response to the following query, it was discovered that just 2.3% of the 720 practitioners had in fact recommended such patients with craniofacial deformities for rehabilitation (Graph 3).

Such problems have a negative impact on a patient's quality of life. Quality of life is described by the World Health Organization (WHO) as "an individual's perception of his position in life in the context of the culture and value system in which he lives and in relation to his goals, expectations, standards, and concerns"⁹. Mc Grouther¹⁰ comes to the conclusion that even minor facial abnormalities can cause social stigma. The patient's full recuperation must therefore be taken into account when arranging the course of treatment.

The use of extra oral and intraoral implants has recently become more common in the field of maxillofacial prosthodontics in order to improve retention and support for these types of prostheses, which is one of the most challenging and important goals to reach during rehabilitation. Only 19.2% of the practitioners responded positively when asked about the implants' potential to enhance the prostheses' prognosis. Unexpectedly, none of the doctors knew what the typical cost of a maxillofacial prosthesis was!

13.2% of practitioners demonstrated knowledge of acrylic resin as a substance utilized in the manufacturing of such prostheses. 18.2% of practitioners recognized prosthodontists as a dental specialist who deals with maxillofacial prosthesis. Of those who understood it could be made of silicone, 25.6% were aware of it, and 26.9% were aware of both (Graph 4). These dentists were employed by academic institutions that had dentistry programmes linked to the ENT and ophthalmology departments. Private practitioners were largely ignorant. While only 10.9% (Graph 5) of them were aware that maxillofacial prosthodontics is the field that deals with treating maxillofacial abnormalities, they cited textbooks and dentists as their primary sources of information (8.2% and 2.7%, respectively).

The survey reveals the percentage of medical professionals who are aware of different maxillofacial defects, but it also identifies the lack of awareness among them about a person who could be their colleague and be a member of the multidisciplinary team that is in charge of addressing the needs of patients who have various maxillofacial defects.

Oral surgeons who are skilled in treating diseases of the craniofacial region have substantially less recognition among other medical peers, a similar problem has been identified. When Navin et al. performed a study of medical consultants and practitioners in the Vadodara district to determine their knowledge, attitudes, and awareness of the topic of oral and maxillofacial surgery, they found that only a small number of cases had been referred to oral and maxillofacial prosthodontists.

A maxillofacial center being an essential component of hospitals is a typical observation in developed nations. However, India hardly ever sees this kind of approach to the rehabilitation of craniofacial abnormalities. A maxillofacial unit, where a multidisciplinary team of medical and dental practitioners collaborate to treat maxillofacial cases, is only found in a small number of metropolitan cities' health care facilities.

CONCLUSION

Knowledge and awareness about maxillofacial prosthodontics as a specialty is poor. This probably is the reason why a patient in need of maxillofacial prosthesis could not find the correct doctor to treat his / her condition and remains without complete rehabilitation. The survey indicates a need to conduct awareness activities amongst the medical practitioners. An initiative to join hands to form a multidisciplinary team is required to improve the health-related quality of life of individuals with maxillofacial defects.

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