

## Public Awareness and Magnitude of Oral and Maxillofacial Surgery

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### Abstract

I have conducted a survey about the awareness of people towards their oral health.

The sole purpose of this survey is to analyze the percentage of people who are aware about the various types of treatments and conditions related to oral health.

The survey is followed by analysis and then articles written briefly about the most prevalent problems seen related to oral cavity and their reflective treatment plan.

This makes it easy for the general population to have an understanding about the treatment options which in turn makes it easier for all the dentists, as this would help the patient in self-motivation, especially when it comes to the implant therapy or orthognathic surgery or Root canal therapy etc.

Along with that it also helps us understand the knowledge of the general public about the treatments that a dentist can offer. As we know that most of the public are not aware of the latest advancements and procedures, from this survey we can evaluate the extent of their knowledge.

**Keywords:** Oral Health; Maxillofacial Surgery

### Introduction

Usually, the impressions that most of the people have about the dental surgeons are limited because they are not aware of the latest advancements in the field of dental surgery, which has been focused in making the treatment procedures patient friendly. The survey had been focused on understanding the mentality of the patient and assessing the psychology that patients tend to have towards dental surgeons, and to appraise the awareness that people have about the specialty. Most of the people were not aware of most of the treatment options that were available, for example if there is a treatment like an orthodontic surgery, vast majority of the people who are not aware of these treatment options would just ignore the problem or would try to find out the information about such treatments bit by bit which would ultimately result in waste of time, as we all are familiar with a saying "a stitch in time saves nine" this can be applied in such cases, as finding out the right information at the right time could prevent further exacerbation of the problem. The point that I want to present is that, educating the people about various surgical procedures would create

a great impact; this can be achieved by conducting awareness campaigns. This would have the effect of a double edged sword, where the patients can acknowledge the latest advancements of dentistry as well as be prepared psychologically to undergo the corresponding procedures.

Bias in surveys is undesirable, but often unavoidable. The major types of bias that may occur in the sampling process are

- o Selection bias
- o Response bias
- o Participation bias
- o Coverage bias
- o Non-response bias
- o Non-response bias

Apart from the normal individuals we have also made similar questionnaires for the doctors of various specialties to assess the understanding of the treatment procedures performed by the oral and maxillofacial surgeons, as it plays a significant role in the cycle of referrals.



Figure 1

We have conducted a cross-sectional study taking a sample population ranging from 900 to 1100, the sample has been taken from the local area where the study has been conducted. The type of sampling method that has been used during the survey was probability sampling. The probability sampling is the method in which a probability sample (also called "scientific" or "random" sample) each member of the target population has a known and non-zero probability of inclusion in the sample.

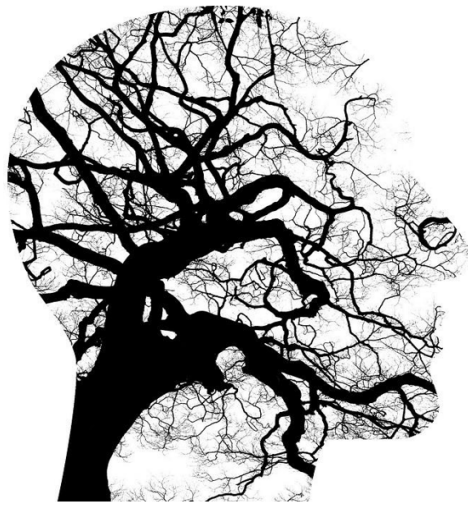


Figure 2

A survey based on a probability sample can in theory produce statistical measurements of the target population that are:

unbiased, the expected value of the sample mean is equal to the population mean  $E(\bar{y}) = \mu$ , and

Have a measurable sampling error, which can be expressed as a confidence interval, or margin of error.

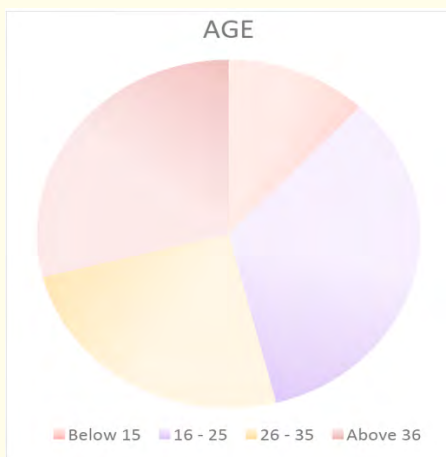


Figure 3

The sample population has been grouped into 4 age groups. The grouping has been performed while considering various factors, as most of us have heard of the terms like Generation X, Millennials, Generation Z etc. These are the terms used to refer to the groups of people who belong to different age groups, various studies have been conducted to determine the psychology of the groups of people born in a specified period of time, and more information can be found if you search for generational kinetics. The most significant purpose of such segregations is to have an effective marketing tactics streamlined to focus each group for optimal results. This gives us the diversity of thought and knowledge that the people have from different age groups.



Figure 4

From the entire sample 12% were below 15 years old, 34% belonged to the age group of 16 to 25, 25% were aged between 26 and 35 years, whereas 29% of the people were above 36 years old.



Figure 5

The awareness needs to be created among the other healthcare sectors along with the general population for better results.

Referrals from other healthcare professionals plays a significant role on the number of patient visits in a clinic. There are various benefits of having a good referral management system. Some of the advantages are,

On asking the people whom we have interviewed only 32% of the people had the proper information about the specialty in Oral and Maxillofacial surgery, whereas the majority of people almost 68% were either not aware of this specialty or had an impression that the specialty was same as a general dentist.

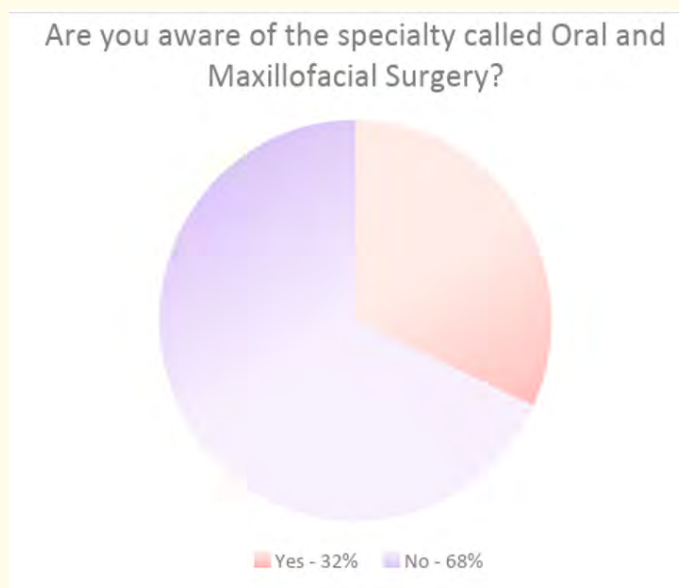


Figure 6

The time spent on generation of new leads will greatly decrease.

Better understanding and faster treatment because of the sound communication between different specialties, which cannot be achieved without collaboration.

Time can be saved, which would otherwise be used for recording the patient details.

All the factors are interlinked with each other, for example the time that is saved can be allocated towards the patient care which has a very positive impact on the patient.

The patient gets a feeling of comfort because of the fact that he has been sent to someone whom his regular doctor knows compared to visiting someone entirely new.

We have even interviewed few of the physicians as well, to find out the impressions that physicians had because most of the physicians tend to refer patients to others if necessary. The results were almost similar to the once that we have acquired from the survey of public. That means the people or the doctors referring patients to dentists have to be given proper information about the treat-

ment options that are available to ensure that all the patients will have their concerns addressed.

Then we have asked the patients if they were aware of various treatments that an Oral and Maxillofacial Surgeon performs.

We have asked the sample people whether they knew about the procedures like:



- Extraction
- Orthognathic Corrective surgery
- Apicectomy
- Gingival Surgeries
- Tumor Surgeries
- Fracture Fixation
- Cleft lip and Cleft palate
- Alveoloplasty

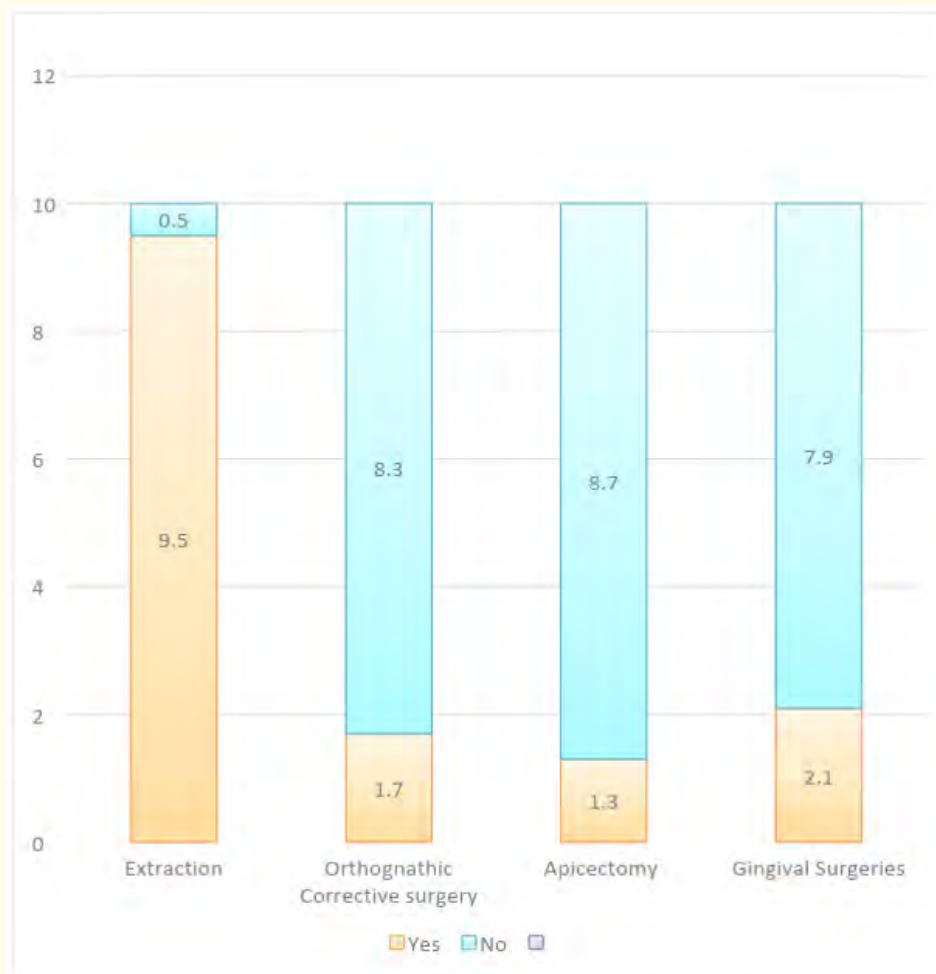


Figure 7

## Extraction

Out of all the procedures the most recognized one tends to be the extraction (simple extraction), which almost 95% people knew about. But they were not familiar with the complicated surgical extraction procedures.

When questions were asked about the Orthognathic corrective surgery, most of the answers that we got were negative, only few people knew about the different types of orthognathic surgeries. This might sound to be illogical, but the most vital point that most of the dentists miss is that, although people visit the dentist to get to know about the treatment options that are available, but there are few people who would not prefer going to a dentist to discuss about the treatment options, such people might remain to live with their problem just because of the lack of awareness that their problem can be solved. There might be cases where the patient even after visiting the dentist for information regarding the treatment options and finds out about invasive procedures like Bilateral Sagittal Split Osteotomy or Genioplasty where the bone is surgically exposed and modified by dissecting and then fixed by plates, that is when most of the patients take a second thought and would prefer to consider all the factors, they even end up taking opinions from the close ones, who would probably discourage the idea of getting the surgical correction done. All this happens because of the lack of awareness and the amount of meticulous care taken while the surgery is performed. Few individuals who have an adamant will to get the treatment done take their time and eventually get it done, If the awareness of such treatment options and the corresponding measures that are to be taken to ensure optimal recovery, the entire treatment.

## Orthognathic Corrective surgery

When we asked the patients about the orthognathic corrective surgery most of the patients you are not aware of the procedure. The people who knew about orthognathic surgery were less than 20%, most of the patients who had the necessity to undergo an orthognathic surgery felt pleasant after being told that the condition could be corrected.

The anesthetic-surgical intervention is perceived as an unpleasant experience by those who undergo it, as it tends to instill the fear of the unknown; the performance of invasive and painful procedures, the anxiety of being in a strange environment, and the concern at the clinical evolution of the treatment are also pertaining hardships. When patients are supplied with reasonable guidelines and information, their insecurity level is reduced, thus favoring the creation of adequate and positive relationships and establishing a trust bond, which is an indispensable aspect toward the success of the treatment.

Generally, during this entire tedious process of educating the patient and motivating the patient takes a lot of time and effort, which is one of the most common issues that we come across in the practice. In order to prevent such issues and create a better understanding of the complications and limitations of the procedures to the common population the information has to be made accessible to all categories of people ranging from urban to rustic. This not only saves time, but also can help people identify their condition as one among the conditions that can be treated, especially for those who are in remote locations.

## Apicoectomy and Gingival surgeries

The results were similar in the case of these procedures as well most of the patients were not aware of these procedures - apicoectomy, gingivectomy, crown lengthening etc. An apicoectomy is usually necessitated when a conventional root canal therapy had failed, and a re-treatment was already unsuccessful or is not advised [1]. State-of-the-art procedures make use of microsurgical techniques, such as a dental operating microscope, micro instruments, ultrasonic preparation tips and calcium-silicate based filling materials.

In the same way gingival surgeries have their respective indications, being aware of these would help the general healthcare practitioners and normal people to have a rough idea on the types of treatments available.

The results obtained from the remaining questions were similar, most of the people were not aware of the latest advancements in the treatment methods.

There is a lack of information available to the people through the media that is accessible to them, especially when we consider people from rustic background.

## Tumor Surgeries

Oral cancer has been one of the most prevalent conditions, this is the condition where survival rate increases if it is diagnosed in early stages.

There are diverse factors that induce oral cancer, most of which are not known to the people as a result they tend to embrace certain habits which trigger the cancerous activity within the cells.

Few people who intentionally happen to acquire deleterious habits are occasionally aware of the damage that can be caused in a period of time, they usually have the tendency of negligence and develop an assurance by themselves that nothing would happen to them.



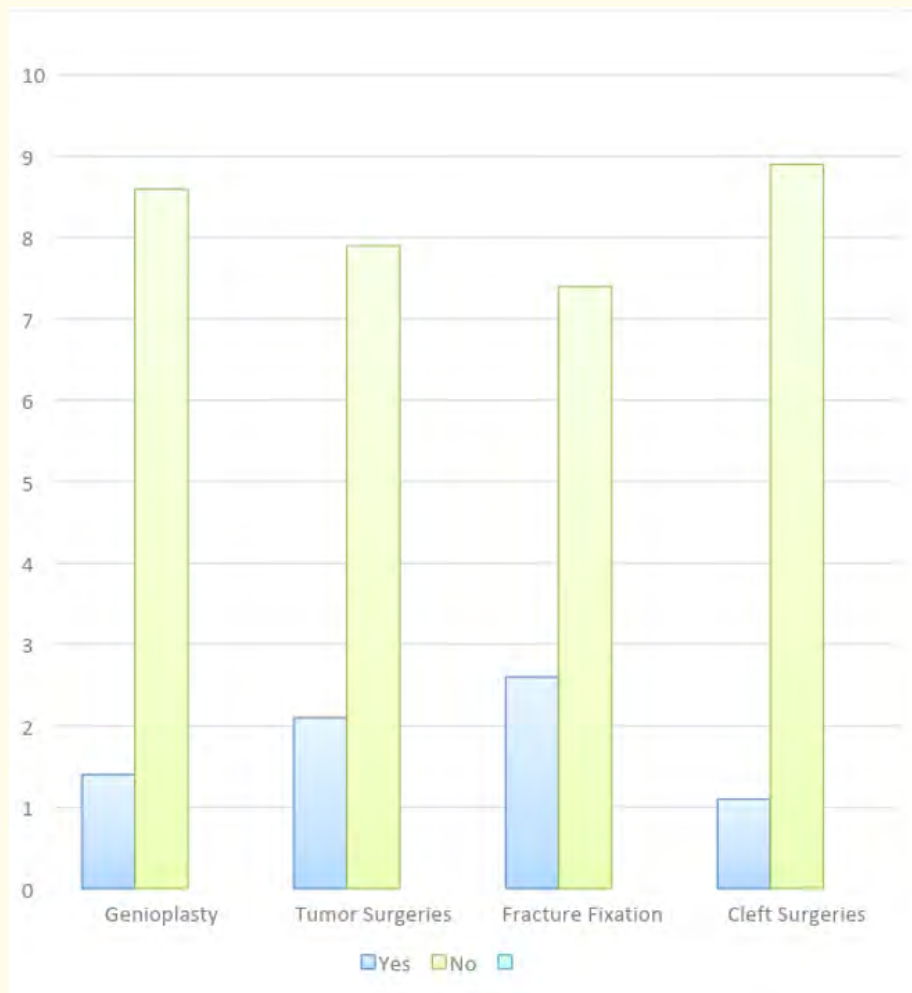


Figure 8

Conducting awareness among the people about the time required for the development of cancer induced by different factors can create a preventive environment.

Some of the factors that cause cancer are genetic vulnerability, widespread use of tobacco, environment, and life-style.

#### The most common symptoms of oral cancer include

- Swellings/thickenings, lumps or bumps, rough spots/crusts/or eroded areas on the lips, gums, or other area inside the mouth
- The development of velvety white, red, or speckled (white and red) patches in the mouth
- Unexplained bleeding in the mouth
- Unexplained numbness, loss of feeling, or pain/tenderness in any area of the face, mouth, neck, or ear
- Persistent sores on the face, neck, or mouth that bleed easily and do not heal within 2 weeks

- A soreness or feeling that something is caught in the back of the throat
- Difficulty chewing or swallowing, speaking, or moving the jaw or tongue
- Hoarseness, chronic sore throat, or change in voice (especially slurred speech)
- A change in the way your teeth or dentures fit together
- Dramatic weight loss
- A lump in the neck.

#### Fracture fixation

Upon questioning people whether they would prefer getting fracture fixation done by an oral and maxillofacial surgeon or someone else. Most of them without being aware of the functional fixation couldn't discern the difference.

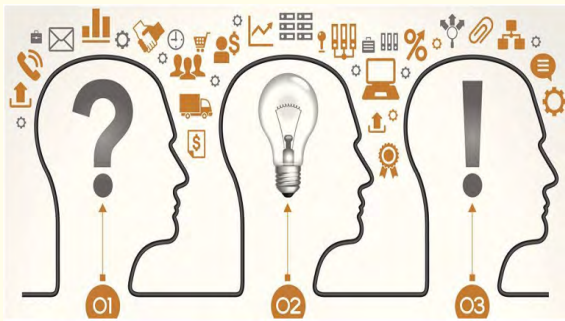


Figure 9

Creating awareness about the factors that induce oral cancer, the signs and symptoms and about the treatment methods where the affected organs are amputated creates a feeling of self-responsibility. Thus, reducing the incidence of oral cancer.

It was the same scenario with the physician as well, who are supposed to refer the patient to the right specialty.

In order to restore the normal functioning of the fractured jaws, the fracture fixation has to be done following certain principles. The oral and maxillofacial surgeons follow a curriculum that especially focuses on such aspects.

#### Cleft lip and cleft palate

Among all the factors that lead to the formation of cleft lip and

cleft palate the most important factor is ignorance. For example, there might be pregnant women who is not aware of the factors that may stymie the formation of lip and palate during the period of gestation.

During normal fetal development between the 6<sup>th</sup> and 11<sup>th</sup> week of pregnancy, the clefts in the lip and palate fuse together. In babies born with cleft lip or cleft palate, one or both of these splits failed to fuse. A “cleft” means a split or separation; the palate is the “roof” of the mouth.

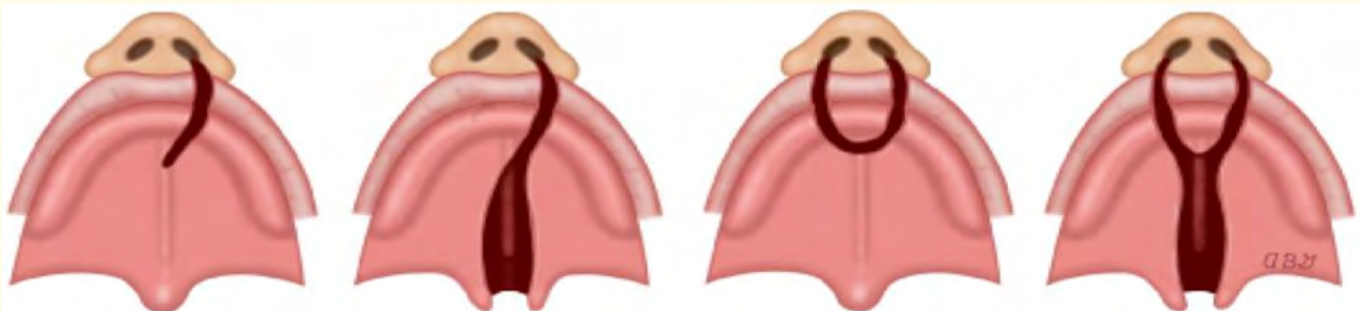


Figure 10

#### Several factors may increase the likelihood of a baby developing a cleft lip and cleft palate, including

- **Family history:** Parents with a family history of cleft lip or cleft palate face a higher risk of having a baby with a cleft.
- **Exposure to certain substances during pregnancy:** Cleft lip and cleft palate may be more likely to occur in pregnant women who smoke cigarettes, drink alcohol or take certain medications.
- **Having diabetes:** There is some evidence that women diagnosed with diabetes before pregnancy may have an increased risk of having a baby with a cleft lip with or without a cleft palate.
- **Being obese during pregnancy:** There is some evidence that babies born to obese women may have increased risk of cleft lip and palate.

After a baby is born with a cleft, parents are understandably concerned about the possibility of having another child with the same condition. While many cases of cleft lip and cleft palate can't be prevented, consider these steps to increase your understanding or lower your risk.



Figure 11

**Consider genetic counselling.** If you have a family history of cleft lip and cleft palate, tell your doctor before you become pregnant. Your doctor may refer you to a genetic counsellor who can help determine your risk of having children with cleft lip and cleft palate.

**Take prenatal vitamins.** If you're planning to get pregnant soon, ask your doctor if you should take prenatal vitamins.

**Don't use tobacco or alcohol.** Use of alcohol or tobacco during pregnancy increases the risk of having a baby with a birth defect.

### Genioplasty

The chin has an important role in facial harmony. Chin corrections are mainly performed for esthetic reasons. However, the functional impact such as the correction of sleep apnea due to a receding chin cannot be underestimated.

Several techniques have been described to enhance chin appearance. Nevertheless, according to Sykes and Fitzgerald, genioplasty is the gold standard.

Trauner and Obwegeser were the first to describe an intraoral approach to perform a chin osteotomy. Several adjustments have been described, all with the aim to improve esthetical outcome, reduce complications and recovery time, and simplify surgical procedures. Overall, patients who underwent genioplasty according to the standard technique with horizontal mucoperiosteal incision and transection of the mentalis may present with temporary or permanent mental nerve damage (neurosensory deficits), and myodysfunction (ptosis, fasciculations).

The aim of the minimally invasive genioplasty (MIG) procedure presented in this article was to reduce postoperative dysfunction and recovery time and promote optimal functional recuperation of the mentalis muscles.

Lindquist and Obeid reported an altered sensation of the lower lip as a complication of genioplasty. Other complications noted were abnormal response to electric pulp testing of the front teeth,

increase in lower teeth show, and unsatisfactory scar at the incision line, a notch at the osteotomy site, lower lip incompetence, retraction, and chin ptosis due to muscle dysfunction.

Educating people about few of the basic details of genioplasty can create an environment of better understanding of the procedure, thereby helping the patients decide whether the procedure would satisfy their needs and also prevents patients from having over expectations, as a person who has an over expectation will most probably be unhappy with the outcome [2-14].

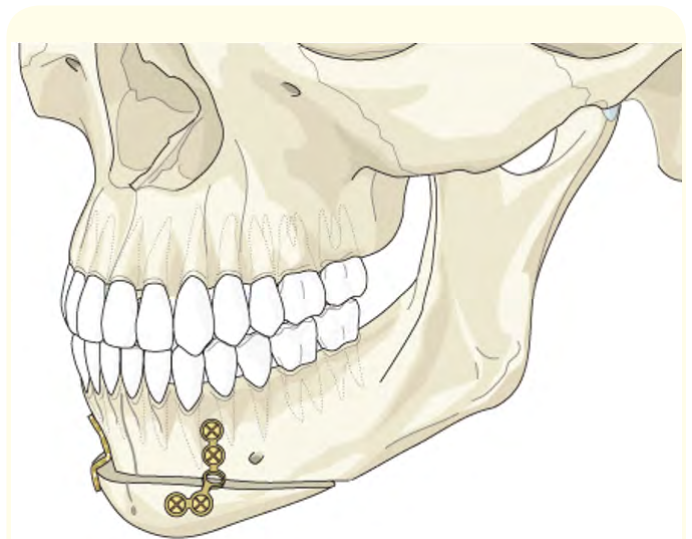


Figure 12



## Conclusion



**Figure 13**

The latest methods have to be followed in creating awareness via all the diverse media such as TV, Social media, radio, newspaper etc., to ensure best results.

## Bibliography

1. Razera APR, Braga EM. The importance of communication during the postoperative recovery period. *Rev Esc Enferm USP*. 2011;45:632-637.
2. Kish L. *Survey Sampling*, New York: Wiley, 1965.
3. Khan Z, Tiwari RP, Mulherkar R, Sah NK, Prasad GB, et al. Detection of surviving and p53 in human oral cancer: correlation with clinicopathologic findings. *Head Neck*. 2009;31(8):1039-1048.
4. Song SA, Chang ET, Certal V, et al. Genial tubercle advancement and genioplasty for obstructive sleep apnea: a systematic review and meta-analysis. *Laryngoscope*. 2017;127(4):984-992.
5. Richard O, Ferrara JJ, Cheynet F, et al. [Complications of genioplasty]. *Rev Stomatol Chir Maxillofac*. 2001;102(1):34-39.
6. Ferretti C, Reyneke JP. Genioplasty. *Atlas Oral Maxillofac Surg Clin North Am*. 2016;24(1):79-85.
7. Sykes JM, Fitzgerald R. Choosing the best procedure to augment the chin: is anything better than an implant? *Facial Plast Surg*. 2016;32(5):507-512.
8. Warren SM, Spector JA, Zide BM. Chin surgery V: treatment of the long, nonprojecting chin. *Plast Reconstr Surg*. 2007;120(3):760-768.
9. Nadjmi N, Stevens S, Van Erum R. Mandibular midline distraction using a tooth-borne device and a minimally invasive surgical procedure. *Int J Oral Maxillofac Surg*. 2015;44(4):452-454.
10. Frodel JL, Sykes JM. Chin augmentation/genioplasty: chin deformities in the aging patient. *Facial Plast Surg*. 1996;12(3):279-283.
11. Lindquist CC, Obeid G. Complications of genioplasty done alone or in combination with sagittal split-ramus osteotomy. *Oral Surg Oral Med Oral Pathol*. 1988;66(1):13-16.
12. Jones BM, Vesely MJ. Osseous genioplasty in facial aesthetic surgery-a personal perspective reviewing 54 patients. *J Plast Reconstr Aesthet Surg*. 2006;59(11):1177-1187.
13. *Endodontic Microsurgery. Compendium of Continuing Education in Dentistry - Aegis Communications*. 2007.
14. Thakur GS, Bag M, Sanodiya BS, Bhadouriya P, Debnath M, et al. *Momordica balsamina: a medicinal and nutraceutical plant for health care management*. *Curr Pharm Biotechnol*. 2009;10(7): 667-682.

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