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TOPIC:

"CHANGING THE WORLD ONE SMILE AT A TIME"

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By
Professor Mobolanle Olugbemiga Ogunlewe



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"CHANGING THE WORLD ONE SMILE AT A TIME"

An Inaugural Lecture Delivered at the University of Lagos Main Auditorium on Wednesday, 22nd of June, 2016

BY

PROFESSOR MOBOLANLE OLUGBEMIGA OGUNLEWE

BDS (Lagos), FWACS, FIAOMS, MNIM
Professor of Oral and Maxillofacial Surgery
College of Medicine
University of Lagos

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Protocol

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Ladies and gentlemen.

PREAMBLE

I warmly welcome you to this inaugural lecture, the 11th in the 2015/2016 Session of the University of Lagos and the 5th to be delivered from the Department of Oral and Maxillofacial surgery.

Today's lecture is being delivered, by the first female maxillofacial surgeon in Nigeria and the only one in the department.

Delivering an inaugural lecture is considered as one of the obligations of a University Professor and a significant occasion in the career of an academic. This provides one the opportunity to inform colleagues and the general public of ones works. The Professor is considered to be a debtor until he/she fulfils this obligation.

Today marks another milestone in my academic career, which started twenty-two years ago when I was appointed to the post of Lecturer 1 in the University of Lagos.

My being a dentist was accidental, as I had never heard of the course until I was ready to enter the University. I wanted to do a 3-year course, but my uncle Dr. Onalapo Soleye, a former Minister of Finance under General Muhammudu Buhari's government, suggested to my father that I should apply to the University of Lagos for Dentistry.

While my being a dentist was by accident, my specialisation in Oral and Maxillofacial surgery was my choice and I have not regretted it. After completing my Residency training programme, I was not sure of which career path to pursue, either to go into academics or continue enjoying my clinical practice, which I still very much enjoy. However some well-meaning individuals encouraged me to take up the academic appointment. Having enjoyed clinical work for some years, I later discovered that it will not be appreciated and will not take me far in an academic environment if it does not translate into publications; the 'publish or perish syndrome' will catch up with me! If there are no clinical works I wonder how a maxillofacial surgeon and in fact any clinician will be able to publish articles. The ideas and data for research are generated from the patients who are treated on the wards, clinics and theatres. The medical educators still need the hospital to make academic progress! make a cademic progress! make a cademic progress!

Since I did not perish in the academia, I therefore consider it a privilege to stand before you today to deliver this lecture.

The title of my lecture "CHANGING THE WORLD ONE SMILE AT A TIME" is borrowed from the slogan of Smile Train an international children's charity organisation based in the United States of America that has been partnering with us to provide free surgeries for cleft lip and palate patients in Nigeria for some years. This aptly describes what I have been doing as an oral and maxillofacial surgeon for the past 22 years.

Today marks another milestone in my academic career, which started twenty-two years ago when I was appointed the post of Lecturer 1 in the University of Lagos.

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Fig. 1: Smile Train International Logo Isrd Territory of belseppus

'Making one person smile can change the world, may be not the whole world but their world'

The first and most recognisable feature in any human being is the face, a vital component of one's personality. An individual's self-image and self-esteem are often derived from his or her facial appearance; it is the first port of call in identifying another person.

It is also the first part of the human body that is associated with the beauty characteristic of a person, and an entity, which is admired.

Physical attractiveness affects human life in various ways, and to a significant extent it has been proven that the face is a slight indicator of overall attractiveness compared to the body. Attractive people are regarded as friendly, intelligent, interesting, more social, and have more positive personalities.

The mouth can sometimes be the most dominant feature of the face, and it generates a smile, which is a reflection of our inner feeling.

Just like any work of art, the face over the years can suffer various forms of defects and accidents either contributed to by an act of nature or by our own deliberate faults. This can lead to an unpleasant asymmetry.

Irregularities in the position of the teeth and jaws have a significant impact on the attractiveness and aesthetics of the smile as well as on quality of life. These irregularities can disrupt social interaction, interpersonal relationships and psychologic wellbeing. All these can lead to inferiority complex.

A smile is an international form of nonverbal communication that conveys mood, attitude and general wellbeing. It is a symbol of happiness and warmth. It can have a distinct impact on our psychosocial wellbeing and our self-esteem. Smiling also makes one approachable and creates a winning first impression. Without saying a word our smile can convey a confident, optimistic and friendly personality. This makes people respond positively to us.

In humans, two types of smiles are recognised: the Duchenne and non-Duchenne smile (named after the French neurologist Duchenne de Boulogne who first identified them). The Duchenne smile is the genuine, honest and wholehearted smile, which gives one pleasure. The non-Duchenne smile is the fake smile used to satisfy others but doesn't give one the good feeling associated with a true smile. It may be difficult to distinguish between the two types of smiles. The real smile uses both the muscles of the eye and the lips.

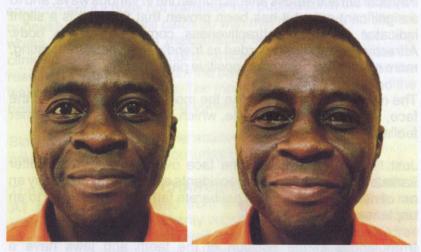


Fig. 2a: Fake Smile

Fig. 2b: Real Smile

The oral and maxillofacial surgeons (OMFS) give their patients the real smile!

The smile of an individual can be wiped off by different conditions such as bereavement, hunger, disaster and disease. Living with a change in the appearance of one's face as a result of injury, disease, burns or trauma is always a challenging task. Some diseases may not kill but they can mutilate an individual and alter the landscape of the face, thereby removing the smile and psychological wellbeing. The individual may have to hide in displeasure but after surgery he/she can display his/her beautiful smile.

In the course of this lecture, I will be discussing the different ways in which the oral and maxillofacial surgeon can restore the smile to some individuals' faces, thereby making their world better.

The Practice of Oral and Maxillofacial Surgery (OMFS)

Oral and Maxillofacial Surgery is a clinical specialty that overlaps two professions - Medicine and Dentistry. It can either be a specialty of dentistry or medicine. Due to the overlap between other medical specialties, such as the ear, nose and throat, neurosurgery and plastic surgery, oral and maxillofacial surgery is considered as a bridge between dentistry and medicine.

The oral and maxillofacial surgeons manage individuals with diverse and complex diseases within a well-defined anatomical area - the maxillofacial region and the oral cavity, which occupies the lower two thirds of the facial skeleton.

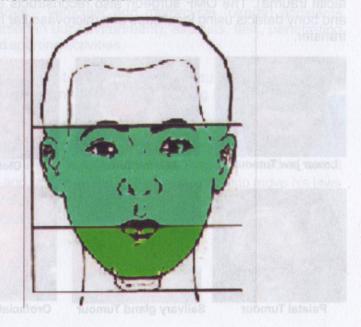
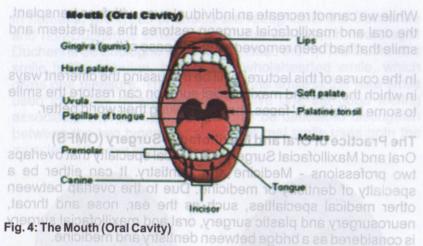


Fig.3: The Maxillofacial Region : I labeled live M been land to account the later of the second of the later of the later



Apart from tooth extraction and dento-alveolar surgery, the OMF Surgeon attempts to restore the symmetry of the face that has been distorted by either a congenital craniofacial disorder, (like cleft lip and palate) or an acquired disorder (like tumours and facial trauma). The OMF surgeon also reconstructs soft tissue and bony defects using local flaps and microvascular free tissue transfer.



Fig. 5: Scope of Oral and Maxillofacial Surgery A laissfollixsM edT : E.pi3

The goal of Oral and Maxillofacial Surgery is to improve a patient's ability to chew, speak, breathe and improve the appearance of the individual.

Maxillofacial Injuries

Injuries to the maxillofacial region may involve the skin, the soft tissues as well as result in fractures of the facial bone.

Fracture of the facial bone is defined as a break in continuity of the bone. Such fractures may involve the mandible (lower jaw), the maxilla (upper jaw) the nasal bone, the orbital bone (eye), or the zygomatic (cheek) bone. They may occur in adults and children. Each of these bones can fracture in isolation or in association with other bones. Mandibular fracture is the most common fracture in the maxillofacial region. This is because it occupies a prominent position on the face.

The aetiology and incidence of fractures of the facial bone vary from country to country and within one country it varies from season to season. Maxillofacial fractures can result from road traffic crashes - vehicular and motorcycle (okada) accidents (most common in our environment), assaults, falls, penetrating injuries and sporting activities.

The clinical presentations of these fractures depend on the degree of displacement, the force causing the trauma, and the bones involved.

The facial injuries can impart a high degree of emotional as well as physical trauma to the individual. This may often lead to social withdrawal and isolation. The individual is unable to move his jaws and is therefore unable to chew, swallow, speak and breathe properly. Maxillofacial fractures can occur with serious concomitant injuries to the brain, the eye or the chest. The life of the individual is put on hold for this period because he/ she cannot function optimally as the quality of his/her life has been affected. Interventions are therefore necessary to prevent these sequelae and restore the smile.

Treatment of Facial Fractures

The goal of treating a jaw fracture is to restore an occlusion, and ensure that the patient can chew, speak, carry out the normal range of movement as well as restore the facial contour of the individual. To achieve these objectives the displaced segments must be brought together and maintained in this position for a period of time. The jaws are therefore immobilised to prevent further movement.

The traditional method (mandibulo-maxillary fixation) of treating jaw fractures is by using stainless steel wires. The lower jaw is wired to the upper jaw (immobilised) for a certain period of time, between 4-6 weeks (minimum of 4 weeks). It can however be longer depending on certain factors such as age, the type of mandibular fracture and the severity of displacement of the fracture. This means that for this period the patient will be unable to open and clean his mouth, chew, talk, and will also lose some weight. This will consequently reduce the quality of life of this individual.

With the advent of modern biomaterials, significant advancement has been made in the treatment of jaw fractures. This has changed the treatment from wiring of the jaws to surgical placement of plates and screws across the fracture site. This is the 'gold' standard in the treatment of jaw fractures today. This ensures early restoration of functions unlike the traditional method where restoration of functions is delayed for another 4-6 weeks. With the modern method, the patient can start to

chew almost immediately. While we have also moved along this line we cannot completely abandon the traditional method for obvious reasons. The plates do not come cheap and have to be applied under general anaesthesia for better results. This means that the poor will not be able to benefit from the modern treatment modality. The mandibulo-maxillary fixation is still reserved for this group of people.

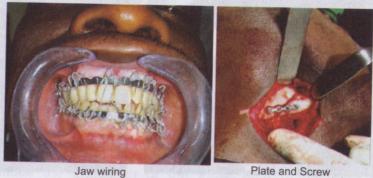


Fig. 6: The Traditional and Modern Method of Jaw Fracture Treatment

Penetrating Injury from an Impacted Knife (Jael syndrome): This type of injury is rare in the maxillofacial region and can pose a lot of challenges to the surgeon due to the locating the exact position of the knife, close proximity to vital structures and the size of the foreign object.

Sometime in 2007, I led a team of maxillofacial surgeons and otolaryngologists to remove an impacted knife from the face of a young man, an Arsenal football club fan. He was stabbed with a kitchen knife by his friend who was a supporter of a rival team (Bolton Wanderer football club) during an argument that ensued while they were watching a match at a viewing centre.

The knife passed between the bones of the eye and the nose, through the upper jaw to the roof of the mouth and impacted behind the bone of the lower jaw. The knife was successfully removed without the patient having any complications. To our amazement, after the surgery, the victim still raised his victory sign and said "Arsenal forever". You will agree with me that we

not only put a smile on his face but also restored his world, as he will still be able to support his club.

This type of injury is similar to the one that occurred in the Bible when Jael murdered Sisera hence the name Jael syndrome. Jael impacted a tent peg on the temple of Sisera. (Judges 4: 21).



Fig. 7: Penetrating Facial Injury

MANDIBULAR RECONSTRUCTION IN NIGERIA - THE JOURNEY SO FAR

The **mandible**, **or lower jaw** is the bone that forms the lower part of the skull and along with the maxilla (upper jaw), forms the structure of the mouth. The mandible serves several important functions in the head and neck region. Movement of the lower jaw opens and closes the mouth.





Fig. 8: The Mandible (Lower Jaw)

The mandible provides a stable platform for the oral cavity and a structure to which muscles attach. Most importantly, it allows mastication by providing a stable counterpart to the maxilla (the upper jaw) and serves as a base for attachment of the lower set of teeth. It facilitates speech, swallowing, and breathing by maintaining space within the oral cavity and allowing the tongue to function. It also forms a major aesthetic highlight of the face. It defines the projection of the lower third of the face and contributes to the profile of an individual.

Defects requiring reconstruction of the mandible are commonly encountered and may result from trauma (gunshot injuries), infections, tumours, and congenital defects. The most common reason for loss of a segment of the mandible in our environment is tumour resection (which can be benign or malignant) associated with soft tissue loss.

When the mandible is removed there is need to restore mandibular continuity, function, and normal distance between the upper and lower jaws.

Without reconstruction, the resultant defects are most often functionally disabling and aesthetically displeasing such that the smile of the individual is wiped off. It is therefore important to reconstruct that segment of the mandible to improve the aesthetics and restore the psychosocial wellbeing of that individual.

Whatever material to be used must be able to restore form and functions.

Over the years different techniques have been employed to fulfil the above stated objectives.

Options for Mandibular Reconstruction

No Reconstruction: Thirty years ago, when we resected the mandible no reconstruction was done because the facilities (armamentarium) were not available. Patient awareness was low and there were very few surgeons who could perform mandibular reconstruction.



Fig.9: Mandibular Resection without Reconstruction

Reconstruction with Arch Bar/Kirchner Wire: Apart from maintaining the continuity of the mandible it does not quite improve the aesthetics of the individual where the defect is large.

Reconstruction with Acrylic Implant: The acrylic implant provides a better aesthetic value than the arch bar. It is fabricated from the processing of chemical material (methylmetacrylate), which is not 100% biocompatible. It can thus elicit allergic reaction and can be extruded from the mouth. Although it preserves a wider surgical bed that minimises the need for much dissection at the secondary surgery, it is not strong enough to withstand the masticatory force.



Fig.9: Mandibular Reconstruction with Acrylic Implant

Reconstruction with Reconstruction (RECON) Plate Alone: This is an alternative to bony reconstruction of mandibular defects. Although the use of bone grafts is often considered as being optimal in mandibular reconstruction, it may not be feasible in some cases of mandibular defects that result from cancer surgeries. It also presents some challenges to the Oncologists when patient requires radiotherapy. These titanium plates are therefore used as alternatives to bridge the defects.





Fig. 10: Reconstruction Plate Alone

We have used these plates to reconstruct the mandible in extensive comminuted fractures and when the environment is not conducive for immediate reconstruction with autogenous bone graft after tumour surgeries.

Plate exposure is the most common complication associated with this type of reconstruction.

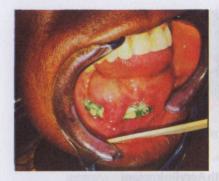




Fig. 11: Reconstruction Plate Exposure

Reconstruction with Autogenous Bone Graft – Bone can be taken from a part of the body (donor site) to reconstruct the mandibular defect (recipient site) in the same individual. Autogenous bone grafting is the mainstay of mandibular reconstruction.

A variety of donor sites have been used for this purpose. This includes the calvarium, rib, ilium, tibia, fibula, scapula, and radius. When the bone from the donor site is harvested with its blood supply to the recipient site, it is referred to as a vascularised or free flap.

But when the bone is harvested without its blood supply it is known as a **non-vascularised flap**. However the free fibula microvascular flap is the main reconstructive modality for mandibular resection.

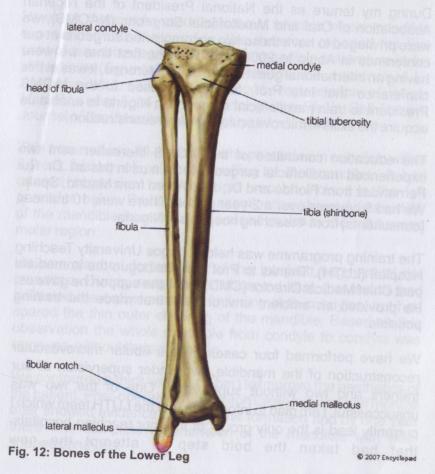
Reconstruction with Free Fibular Microvascular Flap

Mandibular reconstruction has been experiencing amazing evolutions over the years in the more developed world. There has been refinement of techniques and improved technology, which has continued to improve the quality of life of the patients.

The free fibular microvascular flap is the preferred reconstructive modality for the mandible today. The fibula bone was first used to reconstruct the mandible in 1989 but by 2009 it has become the most popular flap for reconstruction of

extensive defects of the mandible. The first free fibula reconstruction of the mandible was performed at the Lagos University Teaching Hospital (LUTH) in 2013.

The fibula is the smaller of the two bones of the lower extremities. It is a long thin non- weight bearing bone. It can provide up to 25cm of bone for harvest and adequate bulk to support dental implants. The entire mandible can be reconstructed with this amount of available bone without compromising the integrity of the leg. The strength of the bone can effectively withstand the masticatory force.



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Just as mandibular reconstruction has made amazing evolution in the developed world so have we also made significant improvements in our reconstruction techniques over the years despite our numerous challenges, though at a slower pace.

We have moved from no reconstruction at all to reconstruction with free fibula microvascular flap. Thanks to Prof. Nabil Samman, the past President of International Association of Oral and Maxillofacial Surgeon (IAOMS) and late Prof. A.L Nwoku; my teacher and mentor.

During my tenure as the National President of the Nigerian Association of Oral and Maxillofacial Surgeons (NAOMS), we were privileged to have these two accomplished surgeons at our conference in Abuja in 2008. This was the first time we were having an international guest attend our conference. It was at this conference that late Prof. Nwoku proposed to the IAOMS President to train maxillofacial surgeons in Nigeria to enable us acquire the skills in microvascular surgery reconstruction.

The education committee of the IAOMS thereafter sent two experienced maxillofacial surgeons to train us in this art. Dr. Rui Fernandez from Florida and Dr. Julio Acero from Madrid, Spain. We had 8 courses over a 2-year period. There were 10 trainees (consultants) from 4 teaching hospitals in Nigeria.

The training programme was held at Lagos University Teaching Hospital (LUTH). Thanks to Prof Akin Osibogun the immediate past Chief Medical Director (CMD) for all the support he gave us. He provided an ambient environment that made the training possible.

We have performed four cases of free fibular microvascular reconstruction of the mandible, two under supervision of our trainers and two without supervision. One of the two was unsuccessful. I am glad to inform you that the LUTH team which I currently lead is the only group, of the four teaching hospitals, that had taken the bold step to attempt the new

technique. We have moved from trainee to trainers, having passed the skill to our resident doctors.

SPONTANEOUS REGENERATION OF THE MANDIBLE

The mandible can in some circumstances regenerate itself without reconstruction. The mandible has an outer covering (the periosteum) that has potential to grow (regenerate) again.

There have been previous reports of extensive bone regeneration of 50% or greater than 50% of the mandible following resection or injury especially in children.

However, there is no reported case in which a whole mandible regenerates with the condyle. We therefore reported the first case of extensive regeneration of the mandible in literature as far as we know (**Ogunlewe, M.O.**, Akinwande, J.A., Ladeinde, A.L., Adeyemo, W.L. (2006) Spontaneous Regeneration of Whole Mandible after Total Mandibulectomy in a Sickle Cell Patient. Journal of Oral Maxillofacial Surgery; 64: 981-984).

This occurred in a 10-yr old boy who presented in our clinic with a 3-week history of painless swelling of the mandible. It had caused expansion from the right second incisor to the left premolar region. Radiographic examination showed destruction of the mandible from the right second molar to the left second molar region.

He was planned for removal of the involved segment of the mandible. During surgery we observed that the lesion had infiltrated the entire mandible including both condyles, but had spared the thin outer covering of the mandible. Based on this observation the whole mandible from condyle to condyle was removed, without the periosteum.

We contoured a thick wire (arch bar) to improve the aesthetics of the patient. Post-operative radiograph taken two and half months after showed evidence of new bone formation and by one year there was complete regeneration of the mandible with wellshaped condyles. This case was presented at the European Association of Cranio-maxillofacial surgery in Zurich in 1994.

We are still not sure of what stimulates the periosteum to regenerate in some individuals and not in others.

This new mandible could only be described as an act of God. Science does not seem to have the answer to every question!



Fig. 13a: Diseased Jaw before Surgery



Fig. 13b: New Bone Formation a Year after Surgery

Corrective Jaw Surgery

Dentofacial anomaly is a condition in which the jaw deviates from normal in form, function or position. This results in discrepancy between the upper and lower jaw with malalignment of the teeth. Corrective jaw surgery is performed to address this anomaly.

Birth defects, injuries to the jaws and tumours of the temporomandibular joint (TMJ) may cause this malalignment. Individuals with such severe jaw discrepancy may have difficulty with speech and ability to chew properly while the appearance is also affected. They may also experience recurrent headaches and temporomandibular joint (TMJ) pain. This can severely affect the psychosocial function of the individual. The impact to the individual can be quite significant.

The Orthodontist may not be able to correct the severe malocclusion (improper bite) that may result from this discrepancy, the oral and maxillofacial surgeon therefore

performs the corrective jaw surgery to reposition the misalign jaws. This not only improves the facial appearance but also ensures that the upper and lower teeth meet correctly and function properly.

I led our team to perform such a surgery on a 23-year-old female patient who presented with a severe discrepancy of the upper and lower jaw. This was caused by a tumour at the jaw joint (TMJ), which caused continuous growth of one half of the lower jaw such that the upper and the lower jaws were not aligned at all. There was also severe asymmetry of the jaws. This seriously affected the appearance of the lady.



Fig. 14a: Pre-Operation



Fig. 14b: Post-Operation

We restored her smile and changed her world.

Distraction Osteogenesis

This is a modern technique of regenerating a missing part of the mandible. The new bone is obtained by gradually moving apart two vascularised bony segments with the aid of a distraction device. It is a less invasive surgical procedure than the standard bone grafting techniques. The main advantage of this technique over the traditional reconstructive techniques is that it expands the overlying soft tissues simultaneously with the formation of the new bone. The soft tissue expansion results in a more natural appearance and greater stability.

We used this technique to correct an asymmetrical jaw that resulted from a congenitally missing head of the condyle in a 10-year-old boy.

OROFACIAL CLEFT (OFC)

Orofacial cleft is a group of congenital anomalies occurring around the face and the oral cavity. It is the most common congenital malformation of the head and neck region. When it occurs in the oral cavity, it is referred to as cleft lip and palate but when it involves the face, it is known as facial cleft, which is less common.

Cleft lip and/or palate (CLP) are non-life-threatening birth defects. They may present as a narrow opening, a split or an obvious gap in the skin of the upper lip, which may involve the floor of the nose (cleft lip), gum ridge (cleft of the alveolus) or the roof of the mouth (cleft palate).

In some children, a cleft palate may involve only a tiny portion at the back of the roof of the mouth (soft palate); while in others, it can present as a complete separation that extends from front to back (hard and soft palate).

The Cleft lip and Palate can be classified according to their location as complete or incomplete. In unilateral cases, only one side of the lip is involved while in bilateral cases, both sides of the lip are involved. They may present as isolated cleft lip or isolated cleft palate. When the lip and palate deformities occur together, they are known as cleft lip and palate. Affected individuals may present with other associated birth defects that may affect other organs such as the eye, the ear, the head, hands and legs, or may be part of a syndrome. The syndromic ones are usually associated with genetic mutations.



Fig. 14: Orofacial Clefts (OFC)

According to the World Health Organisation, one out of every 700 babies is born with a cleft lip and/or palate. The prevalence varies from country to country and within ethnic groups. A recent study estimated the prevalence rate to be 0.5/1000 OFC in Nigeria. (Butali, Adeyemo, Mossey et. al., 2014)

Aetiology of Cleft Lip and Palate

Cleft lip and palate deformities are caused by errors in the growth process when the different parts of the face are formed in the womb. The tissues of the lip and/or palate of the unborn baby do not come together very early in pregnancy, leading to discontinuity of the affected structures.

Normal lip development occurs between 4-6 weeks of gestation while the palate develops between 6-12 weeks. The upper lip develops from the fusion of two different processes. Failure of fusion of these processes results in cleft lip deformity. Likewise the palate develops from the fusion of the right and left palatal shelves. Cleft palate results from failure of fusion of these shelves.

The causes of these failures of fusion are not fully understood but it is believed to result from interplay between many genetic (internal) and environmental (external) factors rather than a single factor (genetic or environmental), because the cause is not fully understood, we regard them as risk factors. The risk factors can be classified as environmental and genetics. The environmental factors the babies are exposed to while in the mother's womb trigger the development of the defect. These are the factors that increase the likelihood of an individual developing it. Some risk factors are considered as strong while others are weak.

Genetic Factors: Some babies are believed to have inherited the genes that cause cleft lip and palate deformities from either of their patents. Parents who have a family history of cleft have a high risk of giving birth to babies with the deformities. I have a patient who gave birth consecutively to three babies with cleft lip and palate. There was history of the deformity in her family.

Environmental Factors: can be classified as:

- Drugs exposure to certain drugs during the first three months of pregnancy may predispose the baby to developing the defect e.g. anti-epileptics, oral contraceptives, some medicines used to treat acne (pimples).
- Folic acid deficiency it is believed that folic acid deficiency during the first three months of pregnancy increases the risk of developing cleft.
- Infections rubella, syphilis, chickenpox.
- Habits smoking and alcohol; evidence supporting this is weak.
- Exposure to ionising radiations. Diabetes - there are some evidence that some mothers who develop diabetes before pregnancy are likely to have babies with cleft lip and palate deformities.
- Parental age this may also play a role in the development of orofacial clefts.

Effects of Unrepaired Cleft Lip and Palate on the Child

While the mortality associated with cleft lip and palate deformity might be low, the morbidity may be high, particularly where reconstruction cannot be carried out.

Patients with cleft lip and palate deformities experience different types of challenges depending on the severity and type of defect.

- Social Stigmatisation: social stigmatisation is the main challenge Individuals born with cleft lip and/or palate deformities have to contend with. They are often stigmatised and face psychosocial issues. They often experience low self-esteem and have difficulties in social interaction. They present a source of embarrassment to their parents. The babies are usually left to die or are in some cases killed. Such acts of infanticides are mostly unreported but are real. The lucky babies are kept indoors away from the public until the repair is done, or are covered up when taken out.
- Feeding: babies born with cleft palate experience more difficulty with feeding than those with only cleft lip. They are unable to suck because of the split palate. Also the risk of aspirating food is high because there is a communication between the windpipe and the oesophagus. Poor feeding can lead to failure to thrive and impaired survival in countries like ours where health resources are suboptimal.
- Speech: some of these children may develop nasal speech if the defect is not repaired before they start to talk. This is why it is advisable to have the palate repaired between age one and one and half years. Once the baby develops nasal speech it is difficult to correct.
- Ear Infection and Hearing Loss: some of these children are at risk of developing ear infection and hearing loss because of the abnormal attachment of one of the muscles of the palate.

Dental Problems: children with cleft of the gums (alveolus) usually have some missing or malformed teeth or deranged occlusion.



Fig. 16: Dental Problem

Cultural Beliefs about Cleft Lip and Palate

A lot of cultural beliefs surround the cleft lip and palate deformities. This varies from country to country and within the same country, from region to region. Every child born with cleft lip and palate deformities is considered to be a curse to his/her family in most African countries. Most people believe it is as a result of some evil spirits or the child is an evil spirit. This is why in the Yoruba culture, a pregnant woman is advised not to go out at night so that evil spirit do not possess the unborn baby, or she should attach a safety pin to her dress. Others believe the unborn baby can contact it when a pregnant woman looks at such babies. I have a mother whose new born baby with cleft of the lip was tied to the tree and flogged because he is believed to be evil; this child survived and was named OLUWAJUWONLO i.e. 'God is greater than them'.

All sorts of evil are done to these children to exterminate them. We have heard of a baby that was covered up in a pot and put by the riverside so she can be washed off. Some may be poisoned or force-fed so that they can aspirate and die.

Sometimes the birth of these children creates conflict within the family, setting husband against the wife and mother in-law against daughter-in law. Some people tend to believe that the

defect is a result of a sin from past life particularly of the woman or her wayward activities might be responsible for the birth of the child, not realising that the genetic imperfection may come from either parent

The husband therefore leaves the mother to care alone for the child. This can be very tasking because the baby needs more attention and love than other babies that do not have these challenges. This may threaten the marriage. I have had to perform the duty of a marriage counsellor to a couple whose baby has a cleft of lip and palate.

Such are the agonies of these mothers!

I invited the father to the clinic and counselled both of them. I was glad to see the husband accompanied the wife to the next clinic carrying the baby's bag while the wife carried the baby. We restored the smile to the family.

Management of Cleft Patients

In the more developed countries most patients have their defects repaired within one year of birth. Repairs can be delayed for several reasons such as fear of death, lack of fund to pay hospital fees, inadequate facility, where facility is available, (long distance from their place of abode), lack of skill and lack of awareness. This explains why we still have some individuals carrying the defect till adulthood.

Over the years, I had searched for an area of maxillofacial surgery that will meet my patients' expectations and at the same time give me feelings of fulfilment and satisfaction.

I could not achieve this with cancer surgery. This is because 90% of our patients report very late, when 'their mouths have already killed them' as alluded to by my colleague and friend (Prof. Ladeinde). At this stage there is very little the surgeon can do other than watch them die slowly but peacefully. This is very disheartening! When the surgery is carried out and the lesion is not completely eradicated, the outcome is not good and the patients' appearance is worse off, despite that, the patient will still move to greater beyond.

I was therefore delighted when Smile Train came to Nigeria in 2007. We were encouraged to attend a meeting with them at Ibadan by Dr. Butali who further encouraged us to apply for treatment grant from the organisation for cleft lip and palate repairs. Dr. Butali was one of my former undergraduate students who was doing his doctorate degree programme in the USA at that time.

In the last nine years, I have concentrated most of my practice on cleft care.

Smile Train is an international children's charity organisation based in the United States of America. They came to Nigeria in 2007 and have been providing treatment grants for sixty-five (65) health facilities for the surgical repairs of cleft lip and palate deformities in affected children. Since then, they have put smiles on the faces of 13,850 children, their worlds have been changed so also the world of their parents. SMILETRAIN CHANGING THE WORLD ONE SMILE AT A TIME! They are also providing funding for free cleft care in 87 countries. They also support training of health care personnel. I know of a Nigerian nongovernmental organisation (NGOs), H.E.W.S foundation who is replicating what the SmileTrain is doing in Nigeria. They have also funded the surgeries of some of our patients with benign jaw tumours. Where are the other NGOs? There was a time I read in the newspaper that an Orphanage was going to take a baby with cleft lip deformity to a hospital abroad. We visited the Orphanage and they promised to bring the baby but they never showed up. I am sure we all know why they did not turn up. Tremendous progress has since been made in the area of cleft care due to the partnership with the SmileTrain.

This partnership, which started in 2007, has also increased the awareness of these congenital anomalies in our country. Before then, we had thought that cleft lip and palate deformities were not a common occurrence in our environment. Going through our records, we were treating an average of 15 patients in a year before the partnership with SmileTrain but now we have treated over 530 patients from

2007 putting smiles on the faces of the parents and the babies.





Fig. 16a: Before Treatment

Fig. 16b: After Treatment

We have indeed transformed the lives of these patients and their families.

With the Smile Train grant we have been able to improve our surgical skills, train more doctors and provide better care for cleft patients. During my Residency training programme only the consultants operated the cleft patients but today my resident doctors can carry out surgical repairs on their own. We have also been able to provide a holistic approach to the care of these patients incorporating other specialties like Orthodontics, Paediatrics Cardiology, audiology and paedodontics

Treatment of Cleft Lip and Palate Deformity

The main objective of the management of cleft deformity is to achieve functional and anatomic repair of bony and soft tissue defects such that the child's ability to speak, hear, and eat will be improved. Facial appearance will also be improved. We advocate early treatment before the child begins peer interaction. This will minimise the social discomfort such children may experience as they grow. The lip is thus repaired at three months and the palate between one and one and half years.

The management of babies with cleft lip and palate deformities is best provided by an interdisciplinary team of specialists. This is because of the multiple and complex problems associated with this deformity as earlier enumerated.

The standard comprehensive cleft unit should include an oral and maxillofacial surgeon, plastic surgeon, pediatrician, orthodontist, nutritionist/dietician, anaesthetist, paedodontist, clinical psychologist, nurses, otorhinolaryngologists and the speech pathologists all working together in a coordinated system.

The treatment protocols vary between centres and among surgeons. There is no standard protocol, but whichever one we adopt must provide a clear vision of care from infancy to adulthood. It must address early feeding and nutritional concerns, middle ear disease, hearing deficiencies, speech defects, dentofacial and orthodontic abnormalities, and psychosocial challenges.

Diagnostic Challenges in Oral and Maxillofacial Surgery

While it is always the desire of the maxillofacial surgeon to restore the smile to the faces of our patients, it sometimes comes with challenges. One of the challenges is arriving at the diagnosis of the disease.

Treatment may be delayed when the nature of the disease is not fully understood, coupled with lack of appropriate facility to aid diagnosis. Some rare cases pose diagnostic challenges.

This is exemplified in the case of a 17-years old boy that presented with a rapidly spreading ulceration of the face that started from the Sino nasal tract (Nose). The ulcer presented like a typical carcinomatous lesion (cancer) but it was not. It was a cancer of the blood related tissue manifesting in the maxillofacial region, which is very rare. The molecular diagnostic facility required to confirm the lesion was not available. We therefore had to depend on high level of suspicion in treating the young boy. He has been free of the disease for over 10 years now! The boy's life was put on hold

by this rare disease. It was one of the most challenging cases I have ever treated; we reconstructed his lost facial tissues. Hence my joy and happiness with the outcome and management of this case. I recognise the contributions of Prof. Akanmu and Prof. Ajekiigbe in the management of this case.

We have changed his world and put a smile on his face.



Fig. 17: Diagnostic Challenge in Maxillofacial Surgery

HOW ELSE CAN WE CHANGE THE WORLD?

I have enumerated how maxillofacial surgery has been changing the world of many individuals and putting smiles on their faces. How about you? How are you changing the world? Are you putting smiles on the faces of the people you come across or you are wiping away their smile. When you give them a smile is it a fake one or a real one?

We are all in this world for a purpose, to add value to life. You may be wondering how as an individual you can change the whole world. In the words of mother Teresa

"I alone cannot change the world, but I can cast a stone across the waters to create many ripples." -Mother Teresa

Why not cast the stone today and create the ripples that will make the world a better place for us all. Do not think your effort cannot make an impact; it is our collective effort that will make the world a better place.

WAYS TO CHANGE THE WORLD

Focus on inner renewal day by day: Let us renew ourselves and have a better relationship with God. If we can change our ways and allow God to change us then the world will change through us.

Start where you are: You don't have to be a Doctor, a Governor, or a President neither do you need billions of Naira or foreign currency before you can touch lives. Wherever you reside, work or play, at any particular moment, once you have people around you that is a world in itself. There is hardly any one that lives in isolation.

Identify the specific problem in your environment: if you want to make a change in your community, identify what is wrong. Figure out what you can do to change the situation. Find people of like minds who feel the same pain and have a passion for that issue. Team up with them and effect the change. In the words of Charles Eames:

"Choose your corner, pick away at it carefully, intensely and to the best of your ability and that way you might change the world." - Charles Eames

You cannot change everything but you can change something **Speak up!** Let your voice be heard at meetings. Contribute while you are at the meeting and not after the meeting is over. Do not sit on the fence. Don't "**siddon look**".

My Contributions to Knowledge

I have collaborated with my colleagues in my discipline to carry out researches that span through different fields of oral and maxillofacial surgery. In this regard, I have published 58 articles in national and foreign peer reviewed journals. Some of these have been cited and are still being cited by other researchers at home and abroad.

Clinical Evaluation of Early Release of Mandibulo-maxillary Fixation in the Management of Fractures of Mandibular Tooth Bearing Area

In the area of trauma, I was part of the team that compared the outcome measures of immobilisation of jaw fractures for two weeks with immobilisation for four weeks. This study was carried out amongst 43 patients with sixty-eight minimally displaced fractures.

The patients were allocated into two groups - one group (control) had the jaws immobilised for a period of between four to six (4-6) weeks while the study group had the immobilisation for two (2) weeks with the splints retained.

We compared the following outcome measures in the two groups – complication rate, mean healing time, loss of body weight, oral hygiene status, fracture site infection, and degree of maximal mouth opening.

Malocclusion that was amenable to selective grinding was the only complication seen in both groups and this was comparable. Inter- incisal mouth opening and the oral hygiene were better in the study group than the control. More patients had weight loss in the control group than in the study group. The rates of complications in the two groups were comparable.

The outcome of this study suggests that a short period of immobilisation in the management of minimally displaced mandibular fractures of tooth bearing area in young adults is a suitable alternative to conventional method in terms of healing outcome.

Evaluation of Surgical Outcome of Unilateral Cleft Lip with Two Surgical Techniques

I also supervised and participated in a study that compared the treatment outcomes of surgical repair of unilateral cleft lip and palate using two different techniques - Tennison–Randell (TR) and Millard Rotational Advancement Technique (MR).

This was a prospective randomised controlled study conducted between January 2013 and July 2014. The subjects were randomly allocated to two surgical groups A (TR) and group B (MR). The important land marks on the upper lip were marked pre-operatively. Surgical repair was carried out by myself and other Consultant Oral and Maxillofacial Surgeons under general anaesthesia.

The symmetry of the nose, flattening of the alae, and deviation of the collumellae as well as the horizontal and vertical heights of the lip were assessed in the two surgical groups.

We observed that there was no statistically significant difference in the outcome of the two surgical techniques.

We therefore concluded that the expertise of the surgeon should be the important factor in the selection of the technique for the repair of unilateral cleft lip and palate.

Contributions to my Community

My immediate communities are the College of Medicine of the University of Lagos and the Lagos University Teaching Hospital (LUTH).

I have been a member of several committees and have chaired several investigative panels. I had been the acting head of my department in the past and I am the current substantive head of the department.

I was appointed as Deputy Chairman, Medical Advisory Committee (DCMAC) and the Chairman, Medical Advisory Committee (CMAC) in 2007 and 2008 respectively by Professor Akin Osibogun the immediate past CMD. With all sense of humility, I made a lot of positive impact on the clinical services of the hospital during my tenure. Some of my modest achievements are listed below.

I introduced the orientation programmes for new intakes of house officers and resident doctors in the hospital. I am glad this is still sustained. With the support of my friends in the diaspora Drs. Bukola Ogunkua and Adejoke Fatunde I established a dental clinic at our primary health care centre in Pakoto. Dr. Ogunkua facilitated the donation of 10 fairly used dental chairs from the New York dental school. The provision of these chairs also enabled us to expand the maxillofacial outpatient clinic from one unit to six units. Dr. Fatunde provided us with the instruments and consumables to start off the clinic. She did this for many years.

I played a significant role in the establishment of the School of basic dental nursing, which is the first of its kind in Nigeria and Sub - Saharan Africa. I am happy this programme finally took off after a lot of challenges. It has changed the world of many young girls who would not have had a future. I have been nurturing the school since inception.

I was the chairperson of the 50th anniversary committee of LUTH that sourced for the donation of the multimillion Naira Molecular Biology Research Laboratory by Chevron Nigeria Limited. I also supervised the implementation and the smooth running of the laboratory after the project became operational.

We attracted the Smile Train grant that has enabled us put a smile on the faces of 530 children. I have been coordinating the programme since 2007.

These achievements could not have been possible without the moral, active support and commitment of Professor Akin Osibogun the then Chief Medical Director.

Contributions to my Profession Dentistry and Oral and Maxillofacial Surgery

As the first female oral and maxillofacial surgeon in Nigeria, I have been involved in capacity development of dentists and oral and maxillofacial surgeons training both male and female resident doctors who will take over from me, in fact they have taken over.

Two of my undergraduate students (Drs. Clement Olojede and Michael Adeyemi) are now my colleagues in the department. Also my resident doctors whom I trained (Drs. Lanre Adeyemo, Gbotolorun and James) are now my colleagues in the department.

I have also supervised eleven dissertations. One of the dissertations (Dr. Adeyemo's) I co-supervised won the University best research award in sciences at the University of Lagos research fair in 2006.

I have been an examiner at the Postgraduate Fellowship examinations.

I have been a reviewer for both foreign and national peer reviewed journals.

I have also been an assessor for promotion to professorial positions in some Nigerian Universities.

I successfully coordinated the activities of the Nigerian Association of Oral and Maxillofacial Surgeons at different times. I served as the chairperson of the Lagos state chapter and the president at the national level. I am the first female to serve in this position.

The International Association of Oral and Maxillofacial Surgeons established the Micro vascular surgical training during my tenure. I coordinated the training programme. I was one of the trainees and I have since passed on the knowledge and skill acquired to my junior colleagues.

I have coordinated the SmileTrain — LUTH partnership programme for cleft care in the hospital. With this programme we have been able to put smile on the faces of over 530 patients and their families since inception. In recognition of my contribution I was given an award of compassionate care giver by the smile train in 2007.

I have received several awards in recognition of my contributions to the development and progress of the hospital and my profession. I consider two of these awards as most gratifying, one from the SmileTrain. (Compassionate care giver) and the other from the first kidney transplant patient in LUTH, Mrs. Olufunke Oladeji. I am neither an urologist (surgeon) nor a nephrologist but I used my position as the director of clinical services to assist the medical team to achieve the level of success we had. We can put smiles on the faces of people around us without being a principal actor.

Conclusion

Vice Chancellor sir, I have enumerated how the different types of diseases of the oral and maxillofacial region can wipe off the smile from the faces of individuals.

I have highlighted how the specialty of oral and maxillofacial surgery restores the smile to the faces of these individuals thereby changing their world.

I have also suggested how each one of us can change the world. It is obvious from this lecture that each one of us has roles to play in making the world, and indeed Nigeria a better place. Why not start from here?

Vice Chancellor sir, I have performed all the functions that are expected of me as a Professor in the University of Lagos, University of first choice and nation's pride. I have carried out researches in my area of specialty and have carried out administrative functions at different levels.

To the glory of God I have reproduced myself in many ways in the system. I have produced a Professor, an associate Professor, Senior lecturers in the system and many other clinicians who are working in different tertiary health institutions in the country.

With the delivery of this lecture, I believe I have paid my dues to the university.

I believe you will do the needful at the end of this lecture.

Vice Chancellor sir, I can therefore declare as Apostle Paul said in 1 Corinthians 15:10 that 'by the grace of God I am what I am: and his grace which is bestowed upon me is not in vain'.

Vice Chancellor sir, distinguished ladies and gentlemen, this is my **E-B-E-N-E-Z-E-R-Y**------ hitherto the Lord has helped me!

ACKNOWLEDGMENT

Many people have moulded me at different stages of my life to become what I am today. I have been blessed with loving families, caring friends and many wonderful people that I have met in my life's journey. Many of them have impacted on my life and career. "Tí omodé ò bámo inú rò kò ní mo opé dá." Please permit me to acknowledge them.

I return all the glory to the almighty God for taking me this far. He had ordered my steps. He has never withheld any good thing from me. He is a faithful God! Whatever he says he will do he will do. He has lifted me up! **OLUWAGBEMIGA!** To him be all praises and adoration. May he accept my heart of thanksgiving (AMEN).

I am extremely grateful to my parents - Baami and Maami, Morounkade Ajani and Wuraola Abake Alabi-Oyo of blessed memory. Baami was not rich. He was a civil servant (Not the types we have today), very passionate about education. He sacrificed all he had to educate us and many members of his extended family. Maami was a virtuous woman who taught me how a woman keeps her home. They brought us up in the way of the lord and set our feet on the path to thread. They left us with legacies of love, contentment, honesty, principle, discipline, and integrity. May your souls continue to rest in perfect peace.

I am grateful to the past and present management of the University of Lagos, the Lagos University Teaching Hospital and the College of Medicine. I have spent 39 out of the past 40 years on these two campuses. I had my undergraduate and postgraduate trainings in these institutions and have worked there all my life. I am indebted to you for giving me a rewarding career, professionally and academically.

Vice Chancellor, sir I thank you for the opportunity given me to pay my debts and for finding time to chair the occasion. I also appreciate the purposeful leadership you are giving the University.

The Provost Prof. Folasade Ogunsola; thank you for not disappointing us as the first female provost of the College of Medicine. You have done well!

I appreciate Prof. Tolu Odugbemi, apart from being a past Vice Chancellor and past Provost of the College of Medicine, you were also my teacher. Most importantly I thank you for your words of encouragement and the beautiful smile that radiates from you each time we meet.

Prof. Bode the current CMD of LUTH, I also thank you for the good work you are doing.

I appreciate the unwavering support and cooperation I received from Prof. Folabi Lesi during my tenure as the Chairman, Medical Advisory Committee (CMAC). You served excellently well as the Deputy Chairman Medical advisory committee.

I also thank the top management and staff of LUTH for the support and cooperation I received during my tenure as the Chairman Medical Advisory Committee. I believe I paid my debt by serving in that capacity.

I thank Chief F.A.A. Adewunmi who employed me as a senior house officer in LUTH.

Please permit me to pay special tribute to Prof. Akin Osibogun the immediate past Chief Medical Director who singled me out for appointment first as DCMAC and then as CMAC. It is obvious that without this appointment the tremendous impact and contributions I made to the Lagos University Teaching Hospital (LUTH) would have been impossible. This appointment brought out my administrative abilities and also developed my management skills. This was the fulfilment of my career as a lecturer, clinician and administrator. Indeed, it was the icing on the cake. I learnt a lot from your humane behaviour and management skills. For this, I will forever be grateful.

I appreciate all my aburos Kola and Folake, Mabayomije and Yemisi, Fola and Leye, Gbolahan and Bukola, Tosin and Bola for showering me with so much love and support at all times, and for according me my due respect as your elder sister. I thank you for allowing me lead you. *Omú ìyá kanna ti a mu kò ni kan* AMEN! (The same breast that we sucked will not go sour).

I thank all the members of my extended family, the Alabi-Oyos of Arole Iya Oba Apinni quarters in Oyo, the Adewolus and Soyeles of Owu Abeokuta. Special thanks to my uncle Dr. Onaolapo Soleye who encouraged me to pursue dentistry as a course. Blessed be the tie that binds us together.

To the Fadugba Ogunlewe royal family of Igbogbo, I cannot refer to you as my in-laws for obvious reasons. I have been treated as one of you and not as a wife from the very beginning. For the past 33 years that I have been married to your brother, I have enjoyed so much support, love and care. I thank you for extending the love you have for your brother to my children and I. Most importantly I thank you for not attempting to remove the àpótí onírin (iron stool) I brought from Ibadan to Lagos. You have never interfered in my marital affairs. You are a wonderful family. I remember Daddy Bola (the late Olori ebi) for his love and care; continue to rest with the Lord. I also thank Dr. A.A. Ogunlewe (current Olori ebi) for his unwavering support at all times. God will reward your labour of love.

I appreciate my Ogunlewe sisters, for the special relationship we have had over the years. We are sisters and not in-laws.

I appreciate the efforts of all my teachers from primary through secondary school and the University. I recognise the contributions of Mrs. Christine Bullocks (nee Groves) the principal of St. Anne's School, Ibadan, the oldest girl's school in Nigeria. She laid a solid foundation for us.

To my teachers who taught me the art and science of Dentistry Professors J.O. Akinosi, A.L. Nwoku, J.A. Adenubi, F.E.

Okoisor, S.A. Akpata, H.O. Mosadomi, Dr. T. A. Kekere-Ekun and Dr. H. Okpo.

I also appreciate my teachers from basic and clinical sciences. Prof. Bandele, you have always monitored my academic progress from my undergraduate days till now. I appreciate your constant support and words of encouragement.

Mr. Oyeneyin, a retired consultant Plastic surgeon, I thank you for your tutelage and support when a Tsunami drove our trainers to Saudi Arabia.

Permit me to single out Professor Akinosi and late Professor Nwoku who are my mentors and professional fathers. They made me the first female Oral and Maxillofacial surgeon in this country. Prof. Akinosi despite his very busy schedule as the provost of the CMUL at that time still dedicated some time for our trainings. His lectures and clinical sessions were always a delight.

Late Prof. Nwoku was a unique personality, a completely detribalised Nigerian and a fine surgeon. I owe a lot to him for what I have achieved in my career. He always encouraged me to pursue my career with all seriousness. When he was away in Saudi Arabia he constantly monitored my progress. He encouraged me to present a paper at the first International conference I attended. He was there with his wife to support me. I wish he was alive to witness this occasion. May the Lord continue to grant him eternal rest.

I have collaborated with many of my colleagues in patient care and research activities. The LUTH SmileTrain team, Prof. Desalu, Prof. Okoroma, Dr. Ekure, Dr. da-Costa, Gerald Isiekwe. I thank Prof. S. Akanmu, Prof. Ajekiigbe, and Prof. Somefun for their collaborative efforts in patient care.

Dr. Mofikoya, you have been very supportive of the microvascular surgical training, I thank you.

I appreciate the Dean and all other colleagues in the Faculty of Dental Sciences, particularly the Oral Pathologists for their cooperation.

Prof. Akin Ladeinde, Dr. Lanre Adeyemo and Dr. Olutayo James, we have worked together as a team for many years. I am deeply grateful for the collaboration and the team spirit you have exhibited in research and patient care.

Dr. James thank you for allowing me use your photograph for this lecture, and for putting this power point presentation together.

My gratitude goes to all the academic, nonacademic, administrative and dental nursing staff as well as resident doctors in my department - Oral and Maxillofacial Surgery for their support and cooperation. We are the best and most hard working in the Faculty of Dental Sciences. My colleagues Prof. J.A. Akinwande, Prof. G.T. Arotiba Dr. O. M. Gbotolorun, Dr. Adewole, Dr. Michael Adeyemi, and Olojede.

The administrative staff- Mrs. Ojeka, Gladys, Mr. Abiola, Mr. Imoekor, and Mr. Ibe. The technologists Mr. Jokomba, Mr. Araguamen and Mrs. Chibuzor. I thank you all for your contributions towards the success of this occasion.

I also appreciate the contributions of my students and resident doctors, (past and present) to the success of my career. Without you I could not have been a teacher.

I thank all the dental nurses, retired and active. Miss. Aina - the coordinator of the School of Dental Nursing, thank you for the good work you are doing to uphold and sustain the school.

I appreciate the cooperation and support of all the consultant anaesthetists and the resident doctors who have made our surgeries a delight. Without them it would not have been possible to change the world of these individuals.

I am particularly grateful to the 'darling' of oral and maxillofacial surgery Prof. Ibironke Desalu who always bends forward and backward to ensure that we can operate even when there are challenges. She contributed immensely to the success of the SmileTrain programme in LUTH. Together we have put smiles on the faces of many Nigerians with different types of maxillofacial diseases. She is now replicating herself in Dr. Ohuoba who is gradually taking over from her. I thank you too.

The perioperative nurses on K Block Theatre led by Mr. Dada have been very cooperative during the surgical sessions. I thank you all.

SmileTrain deserves special recognition and appreciation. My gratitude goes to the executive members of the Smile Train and all the past and present regional coordinators - Mrs. Anjuna Kalsi, Mr. Remi Adeseun, Mrs. Nkiru Obi, Mrs. Victoria Awaze who have successfully implemented the programme in Nigeria. I am also grateful to Dr. Butali, who introduced me to the SmileTrain.

I appreciate the contributions of the IAOMS towards expanding the scope of oral and maxillofacial practice in Nigeria. I thank our trainers Drs. Rui Fernadez, Julio Acero and the past president of IAOMS - Prof. Nabil Samman for their courage to come to Nigeria on several occasions to train us in the technique of Microvascular surgery despite all the negative information about insecurity in the country.

Without my patients, I would not be here. I thank you for trusting me with your health and life. I am truly grateful. I also appreciate those who gave their consent to use their pictures for this presentation.

I thank Dr. Bukola Ogunkua and Dr. Adejoke Fatunde for their contributions towards the establishment of the Pakoto Dental Units and all my other friends, for their friendship and love. Mrs. Dupe Ogunnowo – Bolaji, thank you for your love and friendship of 53 years.

Prof. Akin Ladeinde, my brother and friend. We have been together for almost 40 years when we started the journey from the college of Medicine as classmates. We were in the residency training programme at the same time. We were also appointed to the posts of Lecturer 1 and associate professor on the same day. It is no surprise that when we were also elevated to the pinnacle of our respective careers, our appointment as Professors happened on the same day. Vice Chancellor sir, had you permitted, we could have given our inaugural lecture on the same day. It is difficult for many to understand our closeness: after all, our offices have been next to each other for the past 22 years. Our relationship has different appellations. Truly there are friends who stick closer than brothers. I can only describe you as my brother from another mother. As the younger ones would say, we are 5 and 6. I thank you for your brotherly love, unwavering support and care from 8.00a.m. to 4.00p.m. Mondays to Fridays.

My classmates, the Centenary 69 set of St. Anne's School old girls association. All of you are accomplished in various professions; we have academicians and Professors amongst us, medical doctors, high court judges, lawyers, and registrars of Universities, accountants, Principals of Schools, directors and successful business women. As we famously sing in our school song, 'May none of us here fall behind'. We thank God, none of us has fallen behind. I appreciate your friendship and sisterly love.

Olumoroti, Ajoke and Adetola, you are my God given children. You made parenting a delight for me. None of you has ever given me any hassles, instead you have always made me a proud parent. *Omo tí wón fi ntoro omo ni yín.* From the depth of my heart I thank you for being a source of joy to me ever since you came into my life. I pray the almighty God will perfect all that concern each one of you and give you all Godly children too.

My husband! My brother, my friend, Adeleke Olusegun Ogunlewe, where do I begin to thank you? I thank God for giving you to me as my husband. You allowed God use you in

taking me to the pinnacle of my career. Not many husbands allow their wives enjoy such professional success rather they create stumbling blocks to keep them at home. You have been the complete opposite. You were never threatened by my achievements. You gave me piece of mind without which I could not have achieved what I have achieved today. I thank you for your love, support, encouragement, patience, tolerance, care and for accommodating my friends and family members.

LET'S KEEP THE SMILETRAIN MOVING UNTIL WE PUT A SMILE ON THE FACE OF EVERY NIGERIAN.

Vice Chancellor sir, distinguish ladies and gentlemen, I thank you for your time and attention.

REFERENCES

Holy Bible, King James Version Judges 4:21.

Holy Bible King James Version 1 Corinthians 15:10.

http://www.wikihow.com/Change-the-World

http://www.huffingtonpost.com/monica-bourgeau/7-ways-youcan-change-the b 5962672.html

http://www.theatlantic.com/health/archive/2013/01/how-smiles-

control-us-all/272588/

Taiwo O. Abdulrrazaq, Adeyemi, O. Michael, Adeyemo, W. L., Ogunlewe, M. Olugbenga, Ladeinde L. Akin. (Oct-Dec., 2013). Surgical Outcome and Complications following Cleft Palate Repair in a Teaching Hospital in Nigeria Afr J PaediatricSurg. 10:(4):345-57.

http://www.theatlantic.com/health/archive/2013/01/how-smiles-

control-us-all/272588/

Avinash De Sousa (Jul-Dec., 2010). Psychological issues in acquired facial trauma Indian J Plast Surg. 43(2): 200–205.

- Moshood F. Adeyemi, Wasiu Lanre Adeyemo, Mobolanle Olugbemiga Ogunlewe, Ladeinde A. L. (2012). Is Healing Outcome of 2 Weeks Intermaxillary Fixation Different from that of 4-6 Weeks Intermaxillary Fixation in The Treatment of Mandibular Fractures. 2 Journal of Oral and Maxillofacial Surgery 70(8): 1896-1902.
- Devauchelle, B., Badet, L., Lengelé, B., Morelon, E., Testelin, S., Michallet, M., D'Hauthuille, C., Dubernard, J. M. First Human Face Allograft: Early Report. Lancet. 2006 Jul .15; 368(9531):203-9.

Ogunlewe, M. O., Agbelusi, G. A., Gbotolorun, O. M., James, O. A. (2008). Review of Temporomandibular Joint Disorders (TMPD's) Presenting at the Lagos University Teaching Hospital. Nigerian Quarterly Journal of Hospital Medicine. 18: (2) 57-60.

John Loh, Micol Ascoli (2011). Cross-cultural Attitudes and Perceptions towards Cleft Lip and Palate Deformities World

Cultural Psychiatry Research Review. 6(2): 127-134.

Ogunlewe, M. O., W. L. Adeyemo, A. L. Ladeinde, O. A., Taiwo. (2007). Clinical Investigation into the Incidence and Pattern of Presentation of Dry Socket Following Non-Surgical Tooth Extraction. *Nigerian Quarterly Journal of Hospital Medicine*.17: (4) 126-130.

Ogunlewe, M. O., James, O., Ladeinde, A. L., Adeyemo, W. L. (2006). Pattern of Paediatric Maxillofacial Fractures in Lagos. International Journal of Paedeatric Dentistry. 16: 358-362.

- Butali, A., Mossey, P. A., Adeyemo, W. L., Jezewski, P. A., Ogunlewe, M. O., et al. (2011). Genetic Studies in the Nigerian Population Implicate a MSX1 Mutation in Complex Oral Facial Clefting Disorders. Cleft Palate Craniofacial Journal. 48:646-653.
- Ogunlewe, M. O., Akinwande, J. A., Ladeinde, A. L., Adeyemo, W. L. (2006). Spontaneous Regeneration of Whole Mandible after Total Mandibulectomy in a Sickle Cell Patient. Journal of Oral Maxillofacial Surgery 2006; 64: 981-984.

Ladeinde, A. L., **Ogunlewe, M. O.**, Thomas, M. O. (2005). Zygomatic Arch Reconstruction with Autogenous Rib Bone Graft in a Post Irradiated Patient: - A Case Report. The Nigerian Postgraduate Medical Journal 12: (1): 61-64.

Ogunlewe, M. O., Somefun, A. O., Nwawolo, C. C. (2001). Maxillary Antral Carcinoma. A 5yr Study at the Lagos University Teaching Hospital, Nigeria. Nigerian Journal of Clinical Practice. Vol. 4: (2): 80-83.

Okoturo, E. M., Arotiba, G. T., Akinwande, J. A., **Ogunlewe, M.**O., Gbotolorun, O. M., Obiechina, A. E. (2008). Miniplate
Osteosynthesis of Mandibular Fractures at the Lagos University
Teaching Hospital. Nigerian Quaterly Journal of Hospital
Medicine.18: (1) 45-49.

Adeyemo, W. L., James, O., Adeyemi, M. O., **Ogunlewe, M. O.**, Ladeinde, A. L., Butali, A., Taiwo, O. A., Emeka, C. I., Ayodele, A., Ugwumba, C. U. (2013). An evaluation of surgical outcome of bilateral cleft lip surgery using a modified Millard's (Fork Flap) technique. Afr J Paediatr Surg. 10:307-10.

Akinwande, J. A., Taiwo, E. O., **Ogunlewe, M. O.** (1996). A Case of Gigantic Mandibular Fibromyxomain Whom Acrylic Implant Was Used With Acceptable Result. Nigeria Postgraduate Medical Journal. 3: 85-88.

Butali, A., Adeyemo, W. L., Mossey, P. A., Olasoji, H. O., Onah, I. I., Adebola, A., Efunkoya, G., Akintububo, A., James, O., Adeosun, O. O., **Ogunlewe, M. O.**, Ladeinde, A. L., Mofikoya, B. O., Adeyemi, M. O., Ekhaguere, O. A., Emeka, C. I., Awoyale, T. A and the Nigeria CRAN collaboration. (May, 2014). Prevalence of Orofacial Clefts in Nigeria. The Cleft Palate—Craniofacial Journal. 51(3): 320–325.

Rui, Fernandez (2006). Free Fibula Flap in Mandibular Reconstruction. Atlas Oral Max Surg Clin NAM 14. 143-150.

Ogunlewe, M. O., James, O., Ladeinde, A. L., Adeyemo, W. L. (2006). Pattern of Paediatric Maxillofacial Fractures in Lagos. International Journal of Paedeatric Dentistry, 16: 358-362.

Oleg, N., Militsakh, MD; Andreas Werle, MD; Nadia Mohyuddin, MD; E. Bruce Toby, MD; J. David Kriet, MD; Derrick I. Wallace, MD; Douglas A. Girod, MD; Terance T. Tsue, MD (2005). Comparison of Radial Forearm with Fibula and Scapula Osteocutaneous Free Flaps for Oromandibular Reconstruction. Arch Otolaryngol Head Neck Surg. 131(7):571-575.

Rafael de Lima Pedro, D.D.S., Marcelo Daniel Brito Faria, D.D.S., M.S.D., Ph.D., Marcelo de Castro Costa, D.D.S., Ph.D., Alexandre Rezende Vieira, D.D.S., M.S., Ph.D. (Nov., 2012). Dental Anomalies in Children Born With Clefts: A Case-Control Study. The Cleft Palate-Craniofacial Journal 49(6) pp. e64—e68.

Relle, R., Silegy, T. (2004, Oct.). Orthognathic Surgery: Diagnosis and Treatment of Dentofacial Deformities. J Calif Dent Assoc. 32(10):831-6.

Guk-Jin Seol, Eun-Gyu Jeon, Jong-Sung Lee, So-Young Choi, Jin-Wook Kim, Tae-Geon Kwon, and Jun-Young. (Dec., 2014). Reconstruction Plates used in the Surgery for Mandibular Discontinuity Defect. J Korean Assoc Oral Maxillofac Surg. 40(6): 266–271.

Coletti, D. P. 1., Ord, R., Liu, X. Mandibular Reconstruction and Second Generation Locking Reconstruction Plates: outcome of 110 patients. Int J Oral Maxillofac Surg. Sept, 2009. 38(9):960-3.

Ivo Glunèiæ, Zeljka Roje, Mario Tudor, Vicko Glunèiæ. Unusual Stab Wound of the Temporal Region. Croatian Medical Journal 2001. 42(5): 579-582.

Paulo Roberto Dominguete, Bruno Figueiredo Matos, Tufi Neder Meyer, Lucinei Roberto Oliveira. (2013). Jael syndrome: removal of a knife blade impacted in the maxillofacial region under local anaesthesia. BMJ Case Reports 2013; doi:10.1136/bcr-2013-008839.

Muhammad Yaqoob, Farrukh Mahmood, Ghazala Hanif, Saima Mansoor Bugvi, and Muhammad Afzal Sheikh. Etiology and genetic factors in clefts of lip and/or palate reported at children's hospital, Lahore, Pakistan. Indian J Hum Genet. 2013; Apr-Jun; 19(2): 136–143.

Adeyemo W. L., **OGUNLEWE M. O.**, Desalu I., Ladeinde A.L., Mofikoya B.O., Adeyemi M.O., Adepoju AA, Hassan O.O. Cleft Deformities in Adults and Children Aged over Six years in Nigeria: Reasons for late Presentation and Management Challenges.-Clinical, Cosmetics and Investigational Dentistry. 2009; (1) 63-69.