UNIVERSITY OF PORT HARCOURT

OUT OF SIGHT, OUT OF MIND: BUT IN PLAIN SIGHT!

An Inaugural Lecture

By

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ORDER OF PROCEEDINGS

2.45 pm. Guests are seated

3.00pm. Academic Procession begins

The Procession shall enter the CBN Centre of Excellence auditorium, University Park, and the Congregation shall stand as the Procession enters the hall in the following order:

Academic Officer
Professors
Deans of Faculties/School
Dean, School of Graduate Studies
Provost, College of Health Sciences
Lecturer
University Librarian
Registrar
Deputy Vice Chancellor Research and Development
Deputy Vice Chancellor Academic
Deputy Vice Chancellor Administration
Vice Chancellor

After the Vice Chancellor has ascended the dais, the Congregation shall remain standing for the University of Port Harcourt Anthem.

The Congregation shall thereafter resume their seats.

THE VICE CHANCELLOR'S OPENING REMARKS.

The Registrar shall rise, cap, invite the Vice Chancellor to make his opening remarks and introduce the Lecturer.

The Lecturer shall remain standing during the Introduction.

THE INAUGURAL LECTURE

The Lecturer shall step on the rostrum, cap and deliver his Inaugural Lecture. After the lecture, he shall step towards the Vice Chancellor, cap and deliver a copy of the Inaugural Lecture to the Vice Chancellor and resume his seat. The Vice Chancellor shall present the document to the Registrar.

CLOSING

The Registrar shall rise, cap and invite the Vice Chancellor to make his Closing Remarks.

The Vice Chancellor's Closing Remarks.

The Vice Chancellor shall then rise, cap and make his Closing Remarks. The Congregation shall rise for the University of Port Harcourt Anthem and remain standing as the Academic [Honour] Procession retreats in the following order:

Vice Chancellor
Deputy Vice Chancellor Administration
Deputy Vice Chancellor Academic
Deputy Vice Chancellor Research and Development
Registrar
University Librarian
Lecturer
Provost, College of Health Sciences
Dean, School of Graduate Studies
Deans of Faculties/School
Professors
Academic Officer

DEDICATION

I dedicate this great landmark victory to God Almighty who has lifted me and set me on a rock to stay.

Thank You, Lord, for all your good gifts.

I thank You for enabling me to live my life thus far for Your praise and glory and trust that You will continue to satisfy me with a long life and show me your salvation.

ACKNOWLEDGMENTS

I want to appreciate the leadership of the University of Port Harcourt currently being administered by the 9th Vice-Chancellor, Professor Owunari A. Georgewill who has given me the privilege to present the 184th Inaugural lecture of this unique University. My series of training was in Paediatric Ophthalmology, Strabismus, Low Vision and Neuro-Ophthalmology was with the kind permission from the Management of the University of Port Harcourt and the University of Port Harcourt Teaching Hospital, Port Harcourt. I remain grateful to them.

I also appreciate the Management of the University of Port Harcourt Teaching Hospital led by Prof Henry Ugboma, I remain grateful for providing an environment conducive to training, research, and clinical practice.

I am deeply grateful to the late Dr Ayo Bello, who taught us Ophthalmology back in medical school in Kwara State and made it very fascinating, and Dr BGK Ajayi, my mentor who taught and allowed me to do my first solo cataract surgery. I remain grateful to you, Sir. You stabilized my focus in Ophthalmology and encouraged and defended me when things went sideways while holding my hands till I was able to hold my own.

With Dr BGK Ajayi, the Ophthalmic Expert, my mentor

To my University College Hospital (UCH), Ibadan family, Prof. Bopo Osuntokun, Prof. Ronke Baiyeroju, Prof. Ayotunde Ajaiyeoba, Prof. Adeyinka Ashaye, Dr Toyin Fafowora, my Senior Registrar, Dr (now Prof.) Charles Bekibele and the nurses in West 1 Ward and in the Clinic and Operating Room, thank you for all you taught me. Your roles in my life will not be forgotten. I love you all. I want to specially appreciate Prof Bekibele for being a pioneer faculty in the Portharcourt low vision course. May God bless you sir.
My fellow Ophthalmology Residents, Dr Simisola Adaramola and Dr Bade Ogundipe: we had a great time together for which I am grateful.

The entire staff and Reverend Sisters of St. Mary's Eye Hospital, Ago-Iwoye where I "cut my teeth" in cataract surgery, I appreciate you all.

Also, I appreciate Dr Kirupananthan of ECWA Eye Hospital, Kano, under whose watchful eyes my surgical skills during my leave period in my Residency were honed.

I won't forget the Reverend Sisters and Fathers, especially Sis. Dr Helen Oko of the Mercy Eye Centre, Abak, Akwa Ibom State where I spent two delightful years immersed in rigorous daily clinic duty and very long theatre sessions which were properly managed as a high-volume centre should with a conveyor belt-like efficiency. I gained a lot within those years and made a lot of friends for life among the patients and staff. Late revered Prof Marilyn Miller (RIP) encouraged me till I started training in Paediatric Ophthalmology, and nurtured and mentored me through it right from when I met her at the Mercy Eye Centre, Abak, Akwa Ibom State as a wide eyed resident till she helped to broaden my international network in Paediatric Ophthalmology.

My beloved Dr Linda Lawrence (who gave me my first box of loose prisms and sealed my interest in the discipline!!!) is highly appreciated. She has been my good friend and teacher and supported my vision and work in Low Vision and rehabilitation of the blind right from when we met decades ago through many meetings organised by Dr Kunle Hassan of Eye Foundation, another timeless mentor, in Ijebu Mushin, Ogun state to establish this subspecialty in Nigeria in collaboration with these two great ladies.

Dr Ramesh Kekunnaya, Dr Linda Lawrence and Late Prof Marilyn Miller in 2016 in Port Harcourt, Nigeria, my guests at our hugely successful National Ophthalmology conference where I was the LOC Chairperson

She has taught every single year during the Port Harcourt Low Vision Courses which I coordinate every year, no matter what she was doing or where she was. One year she even taught virtually when she was on the road travelling and also consulted with patients. She's phenomenal! She has donated Low Vision devices and guide canes once and again. Thank you for the roles you have played and are still playing.

I also want to appreciate the highly respected Prof. Lea Hyrvarinen whom I met in Port Harcourt when I was Head of the Department of Ophthalmology when she visited Port

Harcourt in the company of Dr Linda Lawrence at an event in town aimed at evaluating vision in special children with visual disabilities. I learned so much during those 2 days of interactions that I got so interested in helping this group of patients. Prof. Hyrvarinen also gave me a whole box of her trademark tests among so many other things which I have been using since then to evaluate children and teach Low Vision to eye care workers yearly. We later met in Spain and India and also had close interactions and she impacted considerably in my career. We even wrote a review paper together. Thank you so much Prof. Lea Hyrvarinen.

Dr Gordon Dutton of Edinburgh, Scotland, I thank and appreciate you too. You hosted me in your home even when you were already retired and taught me for 2 whole days on a one-on-one basis how to evaluate children who have cortical visual impairment. You also took me hiking and rowing and gave me many invaluable books which I'm still studying till this day and test kits for free. I am highly indebted to you. You have moulded my perspective in so many areas.

I appreciate my friends at the Princess Alexandria Royal Eye Hospital, Edinburgh, Scotland, Dr Alan Mulvihill and co, for your part in my growth.

I am also indebted to my teachers, Dr Ramesh Kekunnaya, Dr Preeti Patil, Dr Gangaprasad of LV Prasad Eye Institute, Hyderabad, India, the phenomenal Dr Subhadra Jalali, Dr Milind Naik of Plasty, Dr Sirisha Senthil and Dr Anil K Mandal of Glaucoma, Dr Divya of Retina, Colonel Vijaya and Dr Deepak Bagga of Low Vision and Dr Pravin Vaddavalli and Dr Bhupesh Bagga of Cornea, for taking the time to teach me so well and ensure I rotated through all important areas during my Fellowship training. I can't thank you all enough.

I thank Dr Virender and Dr Merle Fernandes of LV Prasad Eye Institute, Vishakapatnam and my good friends in that centre where I had a month's Community Ophthalmology experience. Thank you all so much, without your tremendous and selfless input in my life under God this journey may have been impossible.

My dear "fellow Fellows" in India from various parts of Africa with whom I trained, one of whom is the current HoD of Ophthalmology, University of Port Harcourt Teaching Hospital, Prof S. Ejimadu, I thank you all for the great companionship and camaraderie we had. May we continue to impact our respective countries positively in line with the marvellous training we each received from LV Prasad eye institute.

With six of my African fellows in LV Prasad eye institute, India during my fellowship in Pediatric Ophthalmology, Strabismus and Neuro-Ophthalmology in 2013-2014.

I also want to thank all my teachers many of whom have also become lifelong friends.

Prof. Alice Nte for her invaluable friendship and mentorship-I love you ma. Thank you for trusting me with your kids too.

Prof. Felicia Eke, Late Profs. Rollings Jamabo and Nze Jebbin (may their souls rest in perfect peace), Prof. J.O. Odia, Prof. P.C Stanley, Prof. A. Ihekwaba, Prof. Adeola Onakoya, and Prof. Hannah Faal. I am so grateful for your immeasurable contributions to my academic success and constant encouragement and push.

All members and staff of the ROP screening team and the neonatology unit are appreciated.

The Department of Anesthesia of UPTH with whom I actively work together is very well appreciated.

My fellow Medical women, Rivers state chapter through whom I heal with the love of a mother and give expression to my peculiar talents, I thank you all for your support.

My dear colleagues and friends in Nigerian Pediatric Ophthalmology and Strabismus Society (NIPOSS), Medical and Dental Consultants Association of Nigeria (MDCAN), Ophthalmological Society of Nigeria (OSN), Stop Infant Blindness In Africa (SIBA), World Society of Pediatric Ophthalmology Societies (WSPOS especially Dr Sherwin Isenberg who supported the UPTH project 101%), International Pediatric and Strabismus Council (IPOSC), Nigerian Optometry Association (NOA), International Orthoptic Council (IOA).Thank you all for your support and friendship.

I also want to thank Prof Hakeem Fawehinmi, past DVC, Uniport who encouraged me throughout the years when my promotion seemed unattainable. You are highly appreciated. God bless you indeed.

Prof Aniekan Ekere, who was gentle with me as the Editor of the Nigerian Health Journal for my first paper which I published in that journal. Who knows, I may have probably stopped writing if he had thrown out that first paper.

I also want to thank the staff, consultants, residents, optometrists (specially thanking Mrs Anyaegbu, one of the best optometrists I know and who taught me refraction), admin staff and nurses within the Department of Ophthalmology, UPTH and my Rivers State Ophthalmology family with whom I have worked over the years. We grew and matured together and worked together to train Ophthalmologists to improve eye care in the State and beyond from where referrals came from as far as 2 or 3 States away, before eye care became better developed in these areas. Many of our residents with whom we laboured together to train have gone on to work in these neighbouring States and other parts of Nigeria and beyond, many with outstanding clinical and surgical skills. I have learnt a lot working with all of you, and though there were many difficulties, we have stayed together to build the practice of Ophthalmology from scratch to the present enviable standard in the state. God bless you all abundantly.

With some members of my Ophthalmology family here in Rivers State, picture taken in 2016.

I also want to appreciate the theatre nurses of ophthalmology theatre who have been working with me over the years especially my dear sister, Matron Celestina Anucha who left her family to come to India for the last 3 months of my training to understand the new way things need to be done following my specialized training. She has done a marvellous job of this since then despite numerous challenges. May God bless and keep you healthy for us, ma.

A strong surgical team and foundation was formed with Matron Celestina Anucha in India

With some of my ophthalmic nurses during a children's day celebration in UPTH

I want to acknowledge The Albino Foundation, Rivers State Branch, Nigerian Association for the Blind (National and Rivers State branch), The Joint Association of People Living With Disabilities (JONAPWD), friends both sighted, with low vision and visually impaired and all my adopted friends in the West African subregion and beyond are very well appreciated.
I also want to appreciate the royal fathers of the day here present, Thank you for your support and belief in the work I am doing. Your presence is evidence of the impact it is making.

My special gratitude goes to my late father, Mr. Ademola Olayiwola Omoni Esq.

Late Deacon Ademola Olayiwola Omoni Esq

How I wish he were here to see me now. However, brief, I was able to adequately show him how much I loved and appreciated him and his teachings when he was alive. The way he lived his life was exemplary. A man of God and a great

father. When I was growing up, he ensured I never lacked for anything. He was always extremely proud of me.

May his dear soul continue to rest in perfect peace.

My mother Mrs. Adekiitan Olajoke Omoni whose principles of discipline and hard work brought me to this beautiful place. Thank you to my brothers, Engr. Ademola Omoni (Jnr.) and Mr. Adedapo Omoni and my sister Dr. (Mrs.) Adetayo Adeyemo for your quiet encouragement and the great joy you have over my success and for being physically and emotionally there to support me whenever I need you. You three made being "first born" a very easy task for me. God bless you all and may you experience a new order of success in all your endeavours in Jesus' name.

I appreciate the entire Omoni family, chief among whom is my uncle and his wife, Revd Lekan Johnson Omoni and Mrs. Olaitan Omoni who have cheered me on all through, especially stepping in as a father figure when my dad passed on. My 'Aunt' and friend Mrs. Adekemi Adeniran whose friendship, support, and constant encouragement have been invaluable to me over the years from when I was very tender.

My in-laws, chief among whom is my sister in-law, Mrs. Ronke Babarinde who has been calling me 'PROF' even before it ever looked like it and my brother in-law, Oloye Ayo Alfred Adio. "Eshe" oh!. I thank my Late Mother-In law also, Chief Mrs MB Adio (RIP) for the role she played.

I specially want to thank my children Dr. Oluwatunmayowa Adio, Mr. Olayiwola Adio, Mr Opeyemi Adio and of course,

my beloved husband, Pastor Engr. Adegboyega O. Adio, who has been walking with me in this journey of life. He has encouraged, prayed and stood in the gap with me all the way through my career since we met as fledgling corpers. Dear Gboyega, I love and appreciate you. We will live long to eat the fruit of our labour, in Jesus Name.

Thank you all so much.

I also want to thank my family in my church, The Winners Chapel, and my unit members, the Gilead Medical squad many of whom have been friends for years, some for decades. Thank you for cheering me on and praying for me and with me. God bless you all real good.

I also acknowledge all my paediatric patients both past, present and future. I pray for complete and permanent healing for all of you. You are our beautiful future. May you all be blessed.

My beloved patients

Finally, to my Lord Jesus Christ, my Saviour, my heart overflows with words of thanksgiving to you, for dealing

wondrously with me. Thank you for never letting me down. To You be ALL the glory and honour forever and ever. Amen. With a grateful heart…

Adedayo Omobolanle Adio (nee Omoni) MD
14th March 2024

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PROTOCOLS

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- PREVIOUS DEPUTY VICE- CHANCELLORS
- MEMBERS OF THE GOVERNING COUNCIL
- PRINCIPAL OFFICERS OF THE UNIVERSITY
- PROVOST, COLLEGE OF HEALTH SCIENCES
- DEAN, GRADUATE SCHOOL
- DEANS OF FACULTIES
- HEADS OF DEPARTMENTS
- DISTINGUISHED PROFESSORS
- DIRECTORS OF INSTITUTES, CENTERS AND UNITS
- VISITING ACADEMICS AND COLLEAGUES
- ESTEEMED ADMINISTRATIVE STAFF
- REVERED TRADITIONAL RULERS
- CAPTAINS OF INDUSTRIES
- CHERISHED FRIENDS AND GUESTS
- UNIQUE STUDENTS OF UNIPORT
- MEMBERS OF THE PRESS
- DISTINGUISHED LADIES AND GENTLEMEN

1.1 INTRODUCTION

Thank you, Sir, for such a wonderful Introduction. It is well appreciated.

Distinguished and erudite guests, I thank you all for coming to be with me today from far and near.

This is a surreal moment. Standing before you and giving this most important lecture.

It is literally a once- in- a- lifetime opportunity given to a professor to showcase her/his works to the University community and the public.

Mr Vice-Chancellor Sir, history is therefore being made today. This1 is the very first time in our University, an Ophthalmologist, especially a paediatric ophthalmologist, where I am proud to have been appointed the very first professor, would deliver an inaugural lecture.

For this, I give praise to God!

Thank you for the opportunity, Sir.

I will be speaking to us on a subject often taken for granted, not thought about, not often spoken about even in hallowed medical circles, and which some people, especially those who live a sheltered life, quite frankly, may never encounter throughout their lives but which never the less is of monumental importance staring us in the face as it affects an unprecedented number of Nigerians as well as other people all over the world.

I will start with a story, in fact, several short stories that keep being played out like a broken clock on almost a daily basis!

Hence the title: "**Out of sight, Out of mind: but in plain sight**" as it relates to the discipline of Ophthalmology.

1.2 Preamble

Case 1: ES, a 27 year-old male, was rushed into my consulting room in 2001 by family members and friends with acid burns involving both eyes caused by an unknown assailant the previous evening as he was returning from a church programme. The face, including parts of the mouth, nose and eyelids were burnt off and the corneae looked dry and white like the white part of the eyes. He was said to be a peace-loving man, loved by all, at home, in the church and at the university where he was studying, and he apparently had neither quarrels nor any known issue with anyone. ES, a highly cerebral fellow studying for a Masters' degree, laid at the hospital with a shattered life!

Case 2:

A young woman brought TK, her 3 year- old daughter with a very large unsightly, smelly and offensive mass over the left eye to see me at the hospital in November 2019. She had noticed a whitish 'glow' from that eye in the preceding 18 months. She lived on an island deep in the mangroves. She and her husband were peasant fishing people whose business had been affected by oil spillages. She could no longer afford to travel as much as before and cash was hard to get as there was not as much fish as before. When the 'glow' in the eye burst out and started growing quickly, she did not know what to do. The community/village chief and her neighbours had to contribute funds to sponsor her visit to the hospital far away in the capital. When she got to

the capital of her State (Bayelsa) she was referred to the University of Port Harcourt Teaching Hospital (UPTH) as there was no Paediatric Ophthalmologist there to help her. When she got to me, I told her, her daughter had cancer which required urgent treatment to save her life. She required to purchase life-saving chemotherapy medications. She had visited 2 hospitals before referral to UPTH. Unable to raise additional funds and with no provision for indigent patients, the child was returned to the village with the mother crying in expectation of the worst for her child!

Case 3: is… MS, a 9- month-old female, one of a set of twins, presented in March 2023 with grossly enlarged eyes, looking like those of an ox. She was not looking up but burrowed her face in the mother's neck in avoidance of the bright lights of the consulting room. She was very small for age. Her twin brother who was looking chubby and about twice her size, played quietly with a sibling. The mother came with 4 other children aged less than 10 years, all looking tired and harassed! She had been told that her child had gone blind from 'galakoma', but was told to see me to know if her child's vision could be saved.

Case 4: Yet another, precious female child, the only surviving child of a set of quadruplets, TD, conceived by assisted conception and delivered by an emergency caesarean section at 28 weeks' gestational age to a 35-year-old woman was brought to see me in April 2023 from the neighbouring Imo State. The baby was said to have been saved by a private neonatologist to whom she was referred after delivery. After staying on admission for 2 months, she was discharged healthy, breathing and feeding well. The mother however noticed a few weeks later that there was

something white showing in one eye and later in the other eye. After examination of both eyes, I informed her the baby required urgent surgery to save the sight in the second eye since she had lost sight in the first eye. She was devastated and asked why no one checked her baby's eyes on time to prevent this.

1.3 WHAT IS VISION?

Sight is a very important asset and must not be toyed with. Sight and vision are important because they allow us to connect with our surroundings, keep us safe, and help maintain the sharpness of our minds. The average person develops his/her eyesight as a newborn and uses it throughout his/her life, rarely giving it much thought. Indeed, vision is incomplete at birth (Popa DP et al 1995, Clark-Gambelunghe MB, 2015)!

The sense of sight is responsible for most of the information we absorb from the other five combined senses! Many of the movements we perform, tasks we complete and the personal interactions we make, rely on vision in some way (Fig 1).

Fig. 1: The visual bond between a mother and her child

Even our sleep schedules are affected by the light we see during the day. Humans in most modern cultures value their eyesight way above all their other senses. The human brain is actually the organ of sight. Without the eyes, the brain would have nothing to interpret!

1.4 How does vision come about?

Vision can be explained best in a simplified way into the following steps:

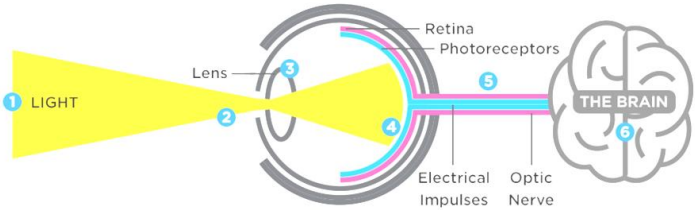


Fig. 2 A cross section of the eye showing how light rays from an object pass through the optical elements to land on the light sensitive retina and on to the brain. [*https://www.essilorindia.com/sites/default/files/inline-images/how-do-we-see.jpg]*

Light from an outside source, such as the sun or an artificial light, either travels directly towards you or bounces off another from another object and then travels towards you. The light traveling towards your eye passes through the cornea (the clear, outer layer in the front of the eye) and enters through the pupil. [no 2 in fig 2] (the small, black opening in the middle of each eye) The light passes through the eye's natural lens [no 3 in fig 2], a clear structure behind the pupil, and through the eye's vitreous fluid and lands on the retina, [no 4 in fig 2] a thin layer of photosensitive tissue in the back of the eye

Millions of light-sensitive cells called rods and cones along the retina react to the light Nerve impulses from the rods and cones "exit" each eye through the optic nerve [no 5 in fig 2] and travel towards the back of the brain to visual cortex [no 6 in fig 3] through different important structures the brain sends this raw information to other parts of the brain, allowing one to interpret the batch of light a meaningful image. This complicated process is incredibly fast and happens within fractions of a second. The brain is able to fully process images in as little as 13 milliseconds (about one –eightieth of a second) That's about 10 times faster than the amount of time it takes to blink (https://www.allaboutvision.com/eye-care/eye-anatomy/vision/)

Normal visual functioning is related to cognitive, motor, and emotional development since typical children learn to use visual communication to move, talk and develop many activities they observe others using (Adio AO, Bodunde BO, Hyrvarinen L, 2015). Therefore, all must be done to ensure nothing untoward happens to this system and if anything happens, it must be picked up early so it can be addressed in a timely manner.

2.0 Epidemiology of blindness

Imagine losing your vision!

If care is not taken, vision can quite easily be lost (da Cruz Escaleira ALR et al, 2021, Adio AO 2023) especially if there is a coexisting systemic medical issue like hypertension and diabetes mellitus. Despite concerted preventive efforts, blindness has remained a public health problem that is feared and dreaded by all (Adio AO, 2023, https://borgenproject.org/blindess-in-africa). Approximately 10 per cent of the world's population is blind and Africa, with

19% per cent of the world's blind population (Kovin Naidoo, 2007), carries a disproportionate responsibility in terms of blindness and visual impairment.

In the sub-Saharan region, West Africa has the highest proportion of blindness compared with the other SSA subregions (Naidoo K, Vision loss expert group et al 2020). Blindness, disabling visual impairment and an overall lack of eye-care services are too often the result of social, economic and developmental challenges of the developing world (Adio AO, 2023). The state of eye care in Africa stands in alarming contrast to that in the rest of the world. Poor practitioner-to-patient ratios, absence or inadequate numbers of eye-care personnel, unavailable or inadequate facilities, poor state/federal funding, and a lack of educational programmes to raise awareness are the hallmarks of eye care in Africa, with preventable and treatable conditions being her leading causes of blindness (Adio AO, Komolafe R, 2013).

Eye diseases causing preventable blindness are often the result of a combination of factors such as poverty, lack of education and inadequate health-care services (Naidoo K, 2007). Vision is however very powerful and must be strenuously maintained because, sometimes when it is lost, it cannot be regained.

Sometimes, even with the very best efforts by the eye care worker, patients can neither be helped to see better or nor stopped, nor prevented from losing vision (Adio AO, Bekibele CO, 2023) especially in cases of glaucoma when they present late as affirmed by 97.7% of respondents of a survey.

Nigeria’s population is currently approximately 224 million and about 2,000,000 (https://wwwworldometers.info/world-population/nigeria-population/) plus numbers are currently

blind either from birth or at various points of their lives with 84-94% of the blindness being avoidable (Rabiu MM et al, 2012, Adediran OA et al, 2022). This means that when 10 people who are blind are examined for the cause, about 8 or 9 out of 10 of them would have become blind from avoidable causes (Omoni AO, 2005, Ejimadu C.S, Adio A.O, 2012), Adediran OA et al, 2022, Adio AO, 2023).

THIS loss of vision CAN BE REFERRED TO AS BEING "OUT OF SIGHT"

"Prevention" they say "is better than cure"! Happily, many causes of visual impairment can be prevented or treated (GBD 2019 Blindness and Vision Impairment Collaborators; Vision loss expert Group of the global Burden of Disease Study, 2021) With an ageing global population, the demands for eye health care services are increasing. However, the health-seeking habits of our people are still very poor. Unless there is pain or an unsightly condition that refuses to go away, they may not come to the hospital (Adio AO,2023). Many of these patients live in rural or riverine areas with a few eye specialists, so there is little or no access. As a result, very little is planned for them by the government and other stakeholders (Adio AO, Bekibele CO, 2023).

IS THE POOR ACCESS OF PEOPLE TO EYECARE NOT LIKE SAYING THEY ARE "OUT OF MIND EVEN THOUGH THEY ARE IN PLAIN SIGHT?"

Sometimes even with pain, they may still not come, expecting that it will soon stop by itself or through the use of local traditional remedies which may harm the eye itself or cause irreversible loss of vision (Adio AO, 2005). Unfortunately, some of the most sight-destroying conditions are completely painless and relentlessly progressive (Omoni AO, 2007). When the cornea is destroyed by the use of harmful traditional eye

medication (HTEM), there's precious little that can be done to restore vision without a corneal transplant when there are donors (which are very few), with even fewer available specialists! Also, there is no such culture encouraging such, as anyone who advocates such, is looked upon with great suspicion and accused of mutilation. In addition, there is hardly any eye banking facility available (Adegbehingbe B, Adio AO et al, 2011).

There are quite a number of eye conditions that require to be treated in a timely manner, **OTHERWISE, THEY WOULD BE "OUT OF SIGHT (i.e. lose their vision) IF NEGLECTED".**

My Vice Chancellor Sir, There's a limit to what eye doctors can do if people don't come to the clinics to have their eyes checked on time or regularly. People working in health facilities can suffer similar fate if they don't come for eye checks. Thus, from the study I did among UPTH drivers, I reported that 1 in 5(22.2%) of the drivers at the time did not meet minimum visual standards for driving. About half of the visual impairment was of glaucomatous origin (Adio AO, 2010). In the Port Harcourt hospital glaucoma study we did also, similar findings were made (Awoyesuku E, Chinawa NE, Adio AO, 2017). In these 2 studies, about 25% of those examined had glaucoma which causes irreversible loss of vision if not detected on time and controlled. Even those whose livelihoods depended on vision, like commercial drivers, (especially those in the 50-59 years age group), had vision-related problems (Adio AO, Pepple G, 2014); 1.8% with visual impairment with 50% of this number blind from untreated cataract. As people age, visual functions deteriorate due to increase in the incidences of age-related conditions such as cataract, macular degenerations and open angle glaucoma.

This means that the regulation that all drivers should have their eyes checked properly on a yearly basis as provided in the 2004 National Road Traffic Regulations when obtaining or renewing their driver's license should be enforced.

2.1 Causes of blindness in adults.

I did some studies looking at this critical issue from which I noted that cataract (Fig. 3) was the commonest cause of treatable blindness, especially in adults (43% of blindness) (Omoni AO 2007; Adio AO and Sokolo J,2010). Even as far back as 1998, in one of my earliest studies of the causes of blindness, in a fishing community in Andoni LGA, the burden of blindness and visual impairment has remained as devastating and far reaching, with cataract being responsible for over half (55.6%) of the blindness in the area (Omoni AO, 2005). In another study of the elderly with little social support in an old people's home, cataract was also responsible for about half (47%) of the blindness (Adio AO, 2006). Also, women were found to be more at risk of being marginalised in terms of access to vision-saving surgery in my study with 26.3% of females compared with 34.4% of males (Adio AO, Chinawa NE, Chukwuka IO, et al 2017) being able to access surgical services.

JUST ANOTHER CASE OF BEING OUT OF MIND EVEN THOUGH ONE IS IN PLAIN SIGHT

Fig: 3 Cataract causing blindness

In a study, where I carried out free eye care outreach service in Port Harcourt, a decade plus ago, cataract was responsible for a third (27.5%) of those with visual complaints (Adio AO, 2011).

In the Nigerian National Blindness and Visual Impairment Survey, it was found that those of older ages, females, illiterates or residents in the North West geopolitical zone were more likely to be blind from cataract (Rabiu MM et al 2012). This has not changed even when the famous year 2020's VISION 2020 rolled by, as a comparative analysis I made between 2011 and 2020 still showed that cataract remained the commonest cause of blindness among adults (Adio AO, Nathaniel G, 2013; Nathaniel GI, Eze UA, Adio AO, 2022). Thus, as the population of Nigeria and their life expectancy continue to increase, cataract may still continue to be a leading public health issue (Asbell PA et al 2005).

Some persons become blind when native surgery which has traditionally been used to treat cataract (locally called couching) is carried out on them (Adio AO, Nathaniel G, 2013). Since it is cheaper and more affordable, the "surgeons" come around where the victims live and offer the surgeries with very little protocol observed unlike in modern hospitals (Adio AO,2023; Adio AO, Bekibele 2023; Nathaniel GI, Eze UA, Adio AO,2022). Anyone who has an uncomplicated cataract can undergo modern eye surgery in our hospital, UPTH and recover vision that was impaired instead of going this route and run the risk of losing vision permanently.

However, the most common cause of irreversible loss of vision is glaucoma. It is responsible for 16.7% of cases of blindness generally (i.e. One out of 5 of those who are blind will be due to glaucoma) (Rabiu MM et al 2012). Similar findings were

made when majority of the staff of the UPTH were screened for glaucoma (Awoyesuku E, Adio AO 2017). In this study approximately 1 in 10 (8.4%) participants had glaucoma with 0.8% already blind from it. Early detection is therefore important. I examined the productivity losses attributable to glaucoma and demonstrated significant losses to the contributory and participatory potentials of affected individuals running into thousands of US Dollars. This can be prevented if everyone checks his/her eyes periodically whether there is any perceived issue or not, especially from the age of 35 years (Adio AO, Onua O, 2012). It is not by mistake that this lecture is taking place right in the middle of Glaucoma awareness week. Therefore have your eyes screened for free at UPTH eye clinic this period and let it be regular.

Many people are unaware of the possibility of blindness from diabetes (a lifestyle disease) as we found in our study that up to 50% of those attending the outpatient clinics were not aware that all diabetics need to see an eye doctor once the diagnosis is made (Nathaniel D, Adio AO 2015). A little attention to detail by visiting the eye doctor immediately and periodically when diagnosed will go a long way to prevent blindness later in life from long standing diabetes!

Mr Vice-Chancellor Sir, I am a Paediatric Ophthalmologist; therefore, I will be dwelling more on this subset for the remaining part of this Lecture.

2.2 Causes of blindness in children

In children, becoming blind or being born blind is related very closely to their deaths so it's more devastating with 60% affected children dying within a year of becoming blind **(**Adio AO, Bekibele CO, 2023). Becoming blind as a child is more worrisome, because the number of life years lived as a blind

person is longer compared with adults. The most common cause of blindness in children is again cataract (6.15%(n=52) of 846 patients seen) as I established from a study in UPTH (Adio AO, Awoyesuku E, Alikor EAD, 2011)(Fig. 4).

Fig 4 Parents waiting with their children to be seen at UPTH eye clinic.

In another study, (Duke R, Adio AO, et al, 2016), three quarters of children who presented with blindness had cataract (Fig 5). We developed a surgical guide based on international best practices on how to manage this condition in Africa which has remained a reference material till date (Adio AO, Nwachuku H, 2016). Some may denigrate healthcare services in developing countries but despite the overall lack of state and federal funding, while studying the visual outcome after surgery to evaluate the sort of services available in our public health facilities, we found that a significant number were able to achieve full visual potential following cataract surgery especially if the centre was **adequately equipped** (Duke R, Adio AO, 2016).

2.3 Why do babies develop or are born with cataract?

Simple immunisation of school girls and women in the childbearing age (15 - 45years) with measles, mumps and rubella vaccine (MMR) could have prevented most cataracts in the babies of these women as many were probably related to congenital rubella syndrome (diagnosis could not be confirmed due to lack of adequate affordable diagnostic facilities. This vaccine is not currently part of the Expanded Programme of Immunisation and has to be paid for. This may be why women are not accessing it. Lack of access to these vaccines designed to protect from the rubella virus infection leads to the devastation of the developing human eye and systems, causing congenital cataract and glaucoma as shown by my collaborative study on the comorbidities found in children with cataracts (Duke R, Oparah S, Adio AO, 2015).

Furthermore, a child born with anything obstructing vision like cataract or anything leading to significant injury of the eyes, (Adio AO, Bodunde BO, Hyrvarinen L, 2015; Omoni AO , Nwachukwu H, 2012) within the 1st 6 to 8 weeks of life can lead to severe and possibly permanent loss of vision. They may need to have surgery very early to regain or develop close to normal visual experience (Adio AO, Bodunde BO, Hyrvarinen L, 2015). Early detection and, most importantly, early intervention are crucial (Fig 5). However, the health care system is not set up to consistently allow for subsidised early surgery and as a result, most are only able to access surgery relatively late, with relatively high out-of-pocket payment (Omoni A.O., Nwachukwu H, 2012). Congenital cataract could lead to varying degrees of low vision or even visual loss as it was found to be responsible for 10% of those with low vision and blindness in my study of those who presented themselves to be rehabilitated (Adio AO, 2023) (Fig 6)

Fig. 5: Examining a child on the slit lamp biomicroscope.

However, the health care system is not set up to consistently allow for subsidised early surgery and as a result, most are only able to access surgery relatively late, with relatively high out of pocket payment (Omoni A.O., Nwachukwu H, 2012).

Fig.6 An infant blind from bilateral congenital cataracts

3.0 Eye injuries, especially in young males is also a significant cause of vision loss and removal of the eye, (Etebu EN, Adio AO, 2008) especially when they are allowed to play

unsupervised (Omoni A.O, Nwachukwu H 2012). Ocular trauma represents one of the most frequent and challenging clinical presentations confronting eyecare providers. Once the cornea is injured and a corneal opacity forms, the vision drastically reduces and, in our environment, once this happens there is little that can be done to restore it. (Fig 7) as it requires a corneal transplant.

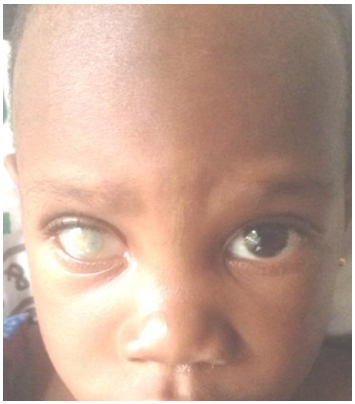


Fig 7: *A child blind in one eye from corneal opacity*

Severe corneal injury and scarring from harmful eye practices is another cause of blindness as we found in another study (Adio AO, 2005; Adio A.O, Awoyesuku E, Alikor EAD, 2011). However, this seems to be reducing as people are becoming more aware of the implications of doing such to their children, as this is an eminently avoidable cause of blindness.

3.1 Anticonvulsion/red eye remedies

One of my case reports highlighted, common and uncommon anticonvulsion remedies used by women to ignorantly attempt to "stop" febrile convulsions" (using the painful effect they exert, to jolt the person to consciousness) but at the same time causing irreversible damage to their children's eyes (Adio AO 2005). The chemicals instilled into the eyes include "crude

oil," "scent leaf," "lime juice," "onions extract," alligator and chilli pepper, maternal urine, crude oil etc. Even adults can go blind from this. (Fig 8) More community education is required to discourage this practice by highlighting the destructive effect of these applications on the sensitive parts of the eye.

Fig 8: An adult that went blind in both eyes after instilling urine into both eyes to treat "Apollo"(epidemic keratoconjunctivitis).

Fig 9:A child blind with congenital corneal opacities in both eyes

Some are born with congenital opacities which are currently difficult to manage in the absence of donated cornea. (Fig 9).

3.2 Congenital glaucoma

Another important cause of visual loss in children is congenital or developmental glaucoma, an essentially surgical condition (Adio AO, Awoyesuku E, Alikor EAD, 2011) with good outcomes especially at 4 weeks post operatively if properly managed early, as I highlighted in another study (Adio AO, Ejele IOI,2016). Poor hospital follow-up by most parents did not allow for longer data collection to check outcomes at recommended 6 months follow-up. (Fig 10). It is important to understand that follow-up is lifelong however.

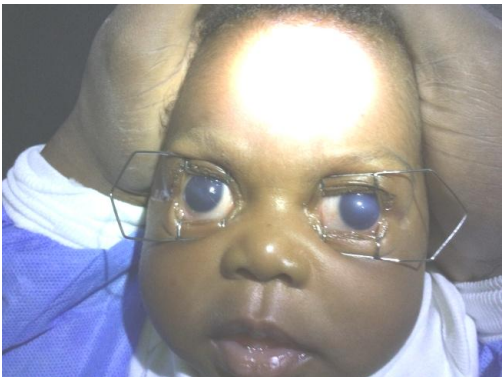


Fig 10: Congenital glaucoma in both eyes in an infant

Neonatal eye infections, ocular trauma (Omoni A.O, Nwachukwu H 2012) and uncorrected refractive errors (Osunde EA, Raymond O, Adio A.O, 2010) are also documented as causes of visual impairment. Simple interventions such as a pair of corrective glasses when they are needed have far-reaching effects on a child for a condition which can adversely affect education (Osunde EA, Raymond O, Adio AO, 2010; Adio AO, Koroye A, Ovenseri A,2010; Opubiri I, Adio AO, Megbelayin E, 2013).

3.3 Retinoblastoma

Cancers are very formidable in children and mothers need to be very aware of this and look out for its early signs and chief among the worrisome ones in children is retinoblastoma.

Fig. 11 Advanced retinoblastoma

This has been a very great challenge to us. Our study showed delay in presentation in an average of 60% sometimes as long as one year in some cases and the deep poverty of the caregivers who are unable to afford more than two cycles of chemotherapy at the time. (Adio AO, Komolafe R, 2010). (Fig 11) A follow-up study, 10 years later after our initial study, however showed a better outcome. Even though there was still late presentation, more were now completing their chemotherapy than before, with the emergence of bilateral disease (with one more advanced than the other) than in the previous study (Eke GK, Adio AO 2019; Adio AO, Eke GK,2020) suggesting a genetic change in all the body cells. This may mean that there is increased risk of developing other cancers outside the eye.

3.4 Retinopathy of prematurity

In recent years, the causes of childhood blindness in developing countries are slowly changing to show much higher

proportions of genetic and congenital causes which can cause blindness from birth or within a short period after birth.

More women who would have remained infertile are now more willing and financially capable of accessing assisted fertility services e.g. invitro fertilisation (IVF). However, the babies may be born too early due to multiple gestation from multiple fertilisation of ova (Adio AO, Ugwu RO et al,2014). With current improvements in neonatal care, many more preterm babies are being kept alive but many still do not get screened to prevent or detect **retinopathy of prematurity** (ROP)-a devastating retinal condition linked to unmonitored oxygen use (Ademola-Popoola DS, Adio AO et al ,2021). Many babies who are conceived through assisted reproduction have a higher tendency to develop ROP. (Dabir S, et al 2023) There is a possibility that there might be an epidemic of blindness from this in developing countries. (Herrod S, Isenberg S, Adio A**,** Lambert S, 2022) A lot is however being done globally and regionally to improve this situation through training and advocacy to avert this.

Fig. 12: With Dr Subhadra Jalali, my ROP teacher par excellence

To prevent an epidemic here, I have worked very hard to improve the awareness about ROP: writing papers, collaborating internationally and locally, speaking at regional conferences of neonatology and ophthalmology and teaching eyecare workers of every category, midwives etc about it and anyone who handles babies both in public and private hospitals especially those born too early or that are very sick in the first month of life. Thanks to the good training from Dr. Subhadra Jalali, my ROP teacher par excellence (Fig. 12). However, one of my studies showed many neonatologists may not be aware of the need to screen at-risk newborns within 4 weeks of life (Adio A, Aliyu SS, Balarabe AH et al, 2021) and most focus (rightly so) on ensuring the child survives, sometimes forgetting to ask for the eyes to be screened in a timely manner. Like case four in my Preamble suggests, all preterm newborns should be screened within **3 to 4 weeks of life** to avoid missing and not treating this condition. To assist at-risk newborns at UPTH, I established and lead the team (Fig13 a &b) that screens all preterm (Fig 14 a &b) and have attracted to the hospital much needed modern equipment like the highly efficient ICON retinal camera(Fig 15) used to screen the baby's eyes, the ALCON laser machine(Fig 16), foetal monitors one for each baby (used to be 1or 2 for the whole ward) (Fig 17) to be individually monitored among others, and also the complete medical air connections with blenders for each bed (to blend oxygen with medical air) (Fig 18) to both INBORN and OUTBORN neonatal intensive care units through donations and collaboration with various international bodies, chief of which is the STOP INFANT BLINDNESS in AFRICA (SIBA) Initiative. Following this, UPTH is the only centre fully equipped to medically handle ROP in Nigeria and West Africa as at this time through this huge effort.

Fig. 13.a&b: Some members of the UPTH ROP Screening Team

Fig 14 a &b: Screening a baby for ROP using the Binocular Indirect Ophthalmoscope

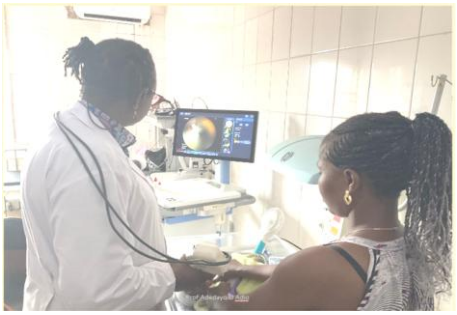


Fig. 15: Screening a baby with the retinal ICON camera(donated by SIBA)

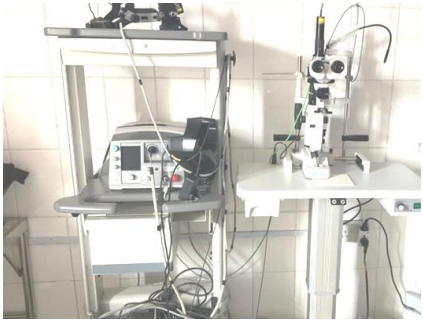


Fig 16: The donated Alcon laser machine

Fig 17: Good quality fetal monitor being used to monitor preterm baby

Fig 18: Blended air -oxygen terminal in SCBU

A collaborative study in African countries with some of my international colleagues published in *Ophthalmic Epidemiology* has begun to report that ROP is being seen more and more frequently and is causing irreversible blindness more than ever before (Scott KS, Adio AO, Isenberg SJ, Lamberg SR, 2021) and must be addressed (Ademola Popoola DS, Adio AO et al, 2021; Adio AO, Ugwu RO et al 2014; Ademola-Popoola DS, Onakoya AO, Adio AO et al, 2021) (Fig. 19). The tortuous and painstaking process of ensuring the child lives despite the comorbidity(ies) can lead to excessive use of mostly unmonitored oxygen from inadequate equipment monitoring which can lead to ROP. However, within a year of the arrival of the equipment in 2022 in addition to the trainings (Fig 20) that have been held by us and in collaboration with friends like the SIBA team and treating any ROP seen(Fig 21) have brought about a 75% reduction in the numbers of newborns going blind from ROP in this centre, from our records meticulously kept by our team members . Such good outcomes (Fig 22) can only be maintained if the medical air connections , the oxygen blenders and the cameras are kept in good working order.

Fig19: A child blind from ROP

Fig 20: Group Photograph at the first ROP screening seminar in UPTH in Nov 2022

Fig 21:Giving a child Avastin injection to treat ROP.

Fig 22: A happy mother whose baby who was at risk for ROP is screened and found not to have ROP following excellent neonatal care enhanced with ability to properly monitor vitals in real time and screen in a timely manner.

3.5 Implications of loss of vision (in children)

Visual loss is more difficult to bear in children and varying degrees of it can lead to seemingly no issues to severe problems with learning and handling daily life and can produce an individual with no experience at all of vision and therefore no opportunity to learn by observation, a skill mostly taken for granted by sighted people. **Prevention is always better**.

However, when irreversible vision loss has happened, there is still what to do.

Low vision rehabilitation is a new emerging subspecialty in developing countries and most of the curricula of our eyecare workers stopped short of details about this (whether Optometry or Ophthalmology) with almost 100% attention given to the optical, therapeutic, and surgical aspects only. This service can be offered to those who have residual vision, with many

becoming able to carry on with activities of their daily life after accessing it.

It is very important to note that prevention, early recognition and prompt treatment/control of diseases that affect sight by regular screening of children will definitely reduce unnecessary visual handicap in the majority of cases (Adio AO, Bodunde BO, Hyrvarinen L, 2015) which in many instances have a systemic component (Duke R, Adio AO et al 2015). These visually impaired individuals can grow up meaningfully contributing to the growth and development of the society if properly guided. However, the traditional way of thinking within the society they find themselves, that they cannot be helped, ensures, their lack of productivity with most becoming dependent on begging for sustenance (Adio AO, Bekibele CO,2023; Balarabe AH et al 2014).

Children with early onset severe visual impairment can experience delayed motor, language, emotional, social, and cognitive developments, with lifelong consequences (Adio AO, Bodunde BO, Hyrvarinen L, 2015). School age children with vision impairment also experience lower levels of educational achievement. (Osunde EA, Raymond O, Adio AO, 2010; Opubiri I, Adio AO, 2011) because proper development of visual acuity depends on an individual having normal visual input at a very young age. Any visual deprivation that occurs over a prolonged period will usually result in a severe and permanent decrease in visual acuity in the affected eye if not treated.

4.0 Refractive errors

In older school age children, refractive errors are a frequent cause of reduced visual acuity with 13.9% prevalence in one of my school studies. (Osunde EA, Raymond O, Adio AO, 2010).

A refractive error can result from an error in the focussing of light by the eye (astigmatism, hyperopia, myopia) causing children to struggle in school, and fall behind in everyday tasks. Since adequate vision is a crucial factor in a child's physical, intellectual, social, and emotional developments, **there is need for visual screening.** Poor school performance, reduced rates of learning may indicate visual problems. Right now, no national preschool or school age screening programme exists, and most children **never** have their eyes examined. The 2006 National Policy on School Health noted that about 20% of students do not have normal visual acuity. This needs to be addressed. Cheap, durable and attractive frames and lenses are required in abundant supply to make the programme sustainable. No child is too young to wear glasses once it is indicated (Fig. 23). Parents /caregivers should understand that children that need to wear glasses need to be allowed to wear them and they must be replaced as they grow. In addition, parents need to observe appropriate screen time guidelines in addition to other behavioural modifications to avoid inducing myopia in their wards which can lead to significant vision loss later. (https://www.wspos.org/swdcore/ uploads /WSPOS-2023-Myopia-Consensus-Statement-.pdf)

Fig. 23: The difference a pair of glasses can make.

Paediatric Ophthalmologists among other eyecare workers like me are trained to be able to know when a child actually needs glasses to forestall those who malinger in an attempt to use glasses like their friend(s). However, we don't have enough numbers to offer adequate service and so, related courses to improve eye services for children in the country need to be expanded to cover this deficiency for other medical staff in training especially those working in rural areas.

The complete loss or the deterioration of existing eyesight even in adults can feel frightening and overwhelming, leaving those affected to wonder about their ability to maintain their independence, pay for needed medical care, retain employment, and provide for themselves and their families. The health consequences associated with visual loss extend well beyond the eye and visual system. Visual loss can affect one's quality of life, independence, and mobility (Adio AO, 2023) and has been linked to falls, injury (Eichenbaum JW,2012; Singh RR, Maury P, 2022; and worsened mental health, cognition (Demmin DL, Silverstein SM,2020) social interactions, employment (Brunes A, Heir T.2020; Adio AO 2023)and educational attainment (Adio AO, 2023) The consequences of visual impairment speaks to the significant role that vision plays in health, vocation, and social well-being. The economic impact of visual loss is also substantial estimated at [USD 3.1 million per annum. for those already blind from glaucoma and another USD 4million per annum for those treating it] in terms of direct medical expenses, loss of productivity, and other direct and indirect costs for visual disorders, time spent by caregivers increases substantially as vision decreases. (Adio AO, Onua O, 2012; Tafida A et al 2015), Additionally, the time for care that very many do not have to devote to anyone! Therefore, they need to become independent. From birth to adulthood, they need to be handled

and prepared for independence and employment in a conscious way. This is not yet widely obtainable in Nigerian and other developing societies and may result in rejection, neglect, and high mortality rates in those affected. It is imperative to offer comprehensive rehabilitation services that can assist this group of individuals to assert/reassert control and independence by designing programmes tailored to meet their individual needs whether old or young (Adio AO,2023). Those who still have residual vision can be helped also to maximise what they have.

Other relevant "OUT OF MIND" BUT "IN PLAIN SIGHT" issues

5.0 Cutting edge Squint surgery/development of new dosage tables for squint surgery

I received specialised training when I was at the LV Prasad Eye Institute, Hyderabad, India for the fellowship programme in handling cases of squint, popularly stigmatised as "half past 4" or " 4:30" eyes (Fig. 24,25). This I have been doing successfully since 2014 (Fig 26) to the point that I carried out the first ever, extra ocular muscle transplantation surgery for extra-large complex squint (i.e. squints larger than 70pd) in the country and West Africa (Fig. 27,28). This was also presented in a well-attended hospital grand round in 2022 and is set to be published in the April issue of Journal of Vision Research (JOVR). In collaboration with my co-authors, I developed a brand-new squint surgical dosage table for such large squints found more commonly in developing countries where squints are left for years (while it gets more and more decompensated) without being operated upon for several reasons. [Table 1]. Before, our table was developed, most squint dosage tables stopped at 50 to 60pd with just one paper showing a table that stopped at 90pd (with muscle transplantation) but ours extended to 130pd(which is not uncommon). The postop

shown for distance and near measurements of ocular alignment is shown in Tables 2 and 3 which showed very acceptable outcomes with p values that were significant. The worldwide acceptable maximum being not more than 15pd (ours was average of 7.7pd) see Table 2 and 3.

Fig. 24::My teacher during my 15month fellowship programme Dr Ramesh Kekunnaya of LV Prasad eye Institute, Hyderabad, India

Fig. 25: With Dr Preeti Patil, another wonderful faculty in LV Prasad Eye Institute, India

Fig. 26 The lecturer, Prof AO Adio performing squint surgery.

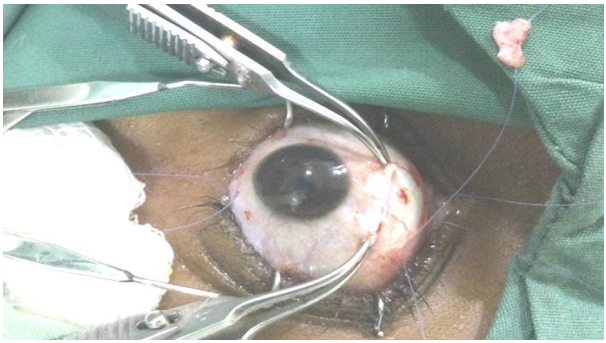


Fig. 27:Extraocular muscle transplantation surgery taking place-first carried out on patients in Nigeria by Prof AO Adio

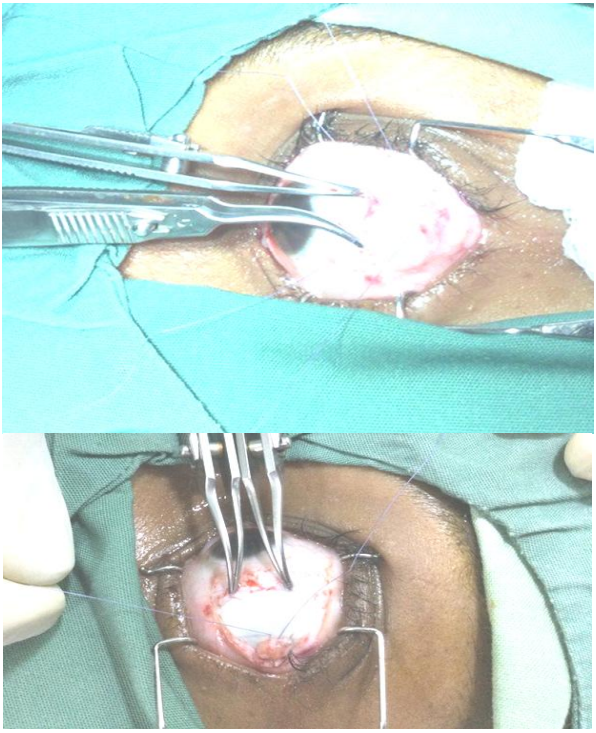


Fig. 28: Extraocular muscle transplantation surgery taking place-first carried out on patients in Nigeria by Prof AO Adio

5.1 Table 1: Recommended Expanded Surgical tables for extra-large strabismus (Adio, Ezisi and Nkanga 2024)

Esotropia PD	**LR resection(mm)**	**MR recession (mm)**	**Transplantation (mm)**	**Second eye MR recession**	**Second (mm) eye LR resection**
70	8	6	4	-	-
80	8	6.5	5	-	-
90	9	6.5	6	-	-
100	9	6.5	6	4	-
110	9	7	7	5	-
120	9	6.5	6	4.5	5.5
130	9	6.5	6	5.5	6.5
Exotropia, PD	**MR resection(mm)**	**LR recession (mm)**	**Transplantation (mm)**	**Second eye LR recession**	**Second eye MR resection**
70	7	8	4	-	-
80	8	9	5	-	-
90	8.5	10	6	-	-
100	7	9	6.5	9	-
110	8	10	6.5	10	-
120	8	9	5	7.5	5
130	8	9	5	8	6.5
Please take note					
MR=medial rectus LR=lateral rectus PD=Prism diopters					
Best to apply transplant surgery to the less dominant eye or eye with less vision					

Table 2: *Comparing pre-op and post-op distance deviation following muscle transplantation surgery.*

Pre-op distance deviation (pd)	Post-op distance deviation (pd)	Mean difference (pd)	t, P-value
89.6±9.3	6.6±1.8	83.1±13.3	23.313, <0.001*

*Significant at 95% t- t test statistic

Table3: Comparing Pre-op and post-op near deviation following muscle transplantation surgery

Pre-op near deviation (pd)	Post-op near deviation (pd)	Mean difference (pd)	t, P-value
89.3±8.9	6.6±1.8	82.7±12.9	23.983, <0.001*

* Significant at 95% t- t test statistic

I am in the process of teaching my Nigerian colleagues, (some of whom I mentor and advice), surgical plans for diverse types of such squint. There is no need for anyone to suffer the disfiguring appearance that this condition gives, both old and young. All can be operated upon to allow for great cosmetic and physiologic alignment (Fig. 29 & 30).

Fig 29: Pictures of Children's eyes before and after squint surgery

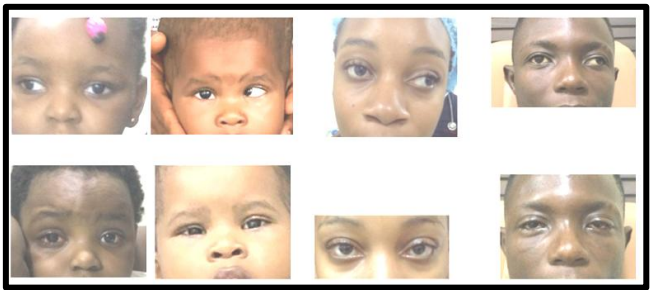


Fig 30: Before and after pictures of some patients whom I have operated upon for (squint surgery)

YOU CAN HAVE YOURS DONE TOO. DON'T BE AFRAID!!

5.2 Ptosis (Droopy eyes)

Other surgical conditions like ptosis where the eyelids droop uncontrollably from a congenital anomaly are my forte especially in children (Fig. 31)

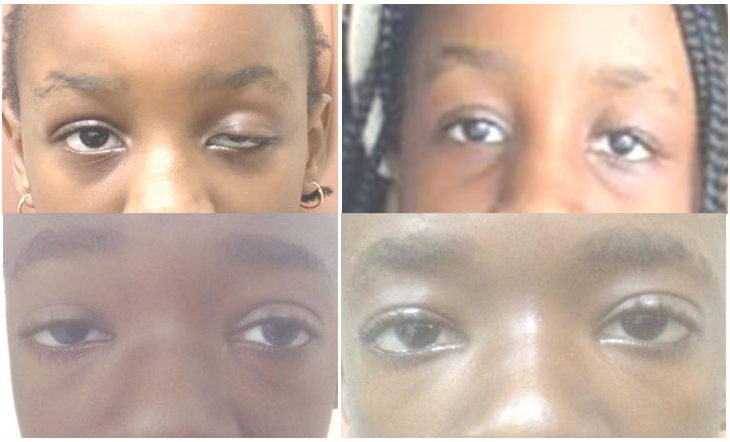


Fig 31: Ptosis surgeries -before and after

6.0 The role of eyecare workers in preventing blindness

The role of an eyecare worker especially the ophthalmologist is imperative and borders on preventive, promotive, curative, rehabilitative, assistive, and palliative services. Two-thirds of all Ophthalmologists live in the developed countries while the rest of the world shares the remaining one third (Resnikoff S, Lansingh VC et al 2020). This is the reason not only for the gross inadequacy in the delivery of safe eyecare in the country but also the higher burden of blindness and visual impairment in our country and those with similar demographics. The situation is worse for Paediatric Ophthalmologists as out of the **six hundred** Ophthalmologists in Nigeria, less than 50 are paediatric ophthalmologists (6.7% of all). Fig 32

Fig 32: With fellow paediatric ophthalmologists at a WSPOS conference in Spain 2015

More than 90% of Ophthalmologists are in the urban area and almost 100% of Paediatric Ophthalmologists are in the capital cities effectively keeping the rural patients OUT OF SIGHT and OUT OF MIND!!!

A study conducted among final year medical students on whether they would want to be Ophthalmologists showed poor interest in this area (Adio AO, 2010) because of better financial gains in other branches of Medicine. There is a need to change the narrative as there are relatively fewer specialists in this area than we should have, which implies that the dearth of Paediatric Ophthalmologists will persist for some time. A potentially dire situation indeed.

Most eyecare workers focus on the curative and therapeutic aspects of the work and neglect those they can no longer help to see. Less than 30% of eyecare workers (ECW) following up on their referral of a low vision or blind person for

rehabilitation (Adio AO, Bekibele CO, 2023). Eyecare workers need to be proactive to be able to change the status quo especially when they can no longer help the patient to see better. (Fig 33) They must help those who have extremely poor vision to keep what is left so they can at least differentiate night and day (Adio AO, Udo U, 2023). Fig 34. They must also demonstrate empathy in the care of the eye patient with chronic eye conditions.

Fig 33: Eye care workers

Fig. 34: Eyecare workers attending to patients in an outreach

6.1 What is Low Vision?

Low Vision is a visual problem that makes it hard to do everyday activities. It cannot be fixed with glasses, contact lenses, or other standard treatments like Medicine or Surgery. You may have low vision if you cannot see well enough to do things like reading, driving, recognizing people's faces, telling colors apart or seeing your television or computer screen clearly.

These are spectra of patients who are not blind but are not able to see well enough to freely perform their everyday duties. They may look like they are able to move around freely but still have difficulty. Quite a number of patients, old and young, including newborns have challenges like this, and sometimes no treatment is available to help them see better.

The most common types of Low Vision are:

- Central visual loss (not being able to see things in the center of your vision)
- Peripheral visual loss (not being able to see things out of the corners of your eyes)
- Night blindness (not being able to see in low light)
- Blurry or hazy vision

Most common causes include Age-related macular degeneration (AMD), Cataracts, Diabetic retinopathy and Glaucoma. Many do not even know they can be helped. Both optical and non-optical means are used. (Fig 35 a &b;36)

Fig 35 a &b: Low vision patients being evaluated.

Fig36: A happy low vision patient

Unfortunately, not much is being done yet by the government and many eyecare workers to help this vulnerable group.

6.2 The albinos are an important example of this vulnerable group. With peculiar problems such as: poor visual acuity, poor colour vision and accommodation due to deficient melanin which is required to ensure proper vision. During my Paediatric Ophthalmology Fellowship training at the LV

Prasad Eye Institute, Hyderabad, India in 2013/2014, I was able to acquire adequate information in this area to start the services and training to bridge this gap for the low vision group as they do very well with low vision devices (Adio AO, Bekibele , Lawrence LM et al 2020). So far, we have been able to train over 170 eyecare workers both within and outside this country who have incorporated these services into their clinics both at tertiary and peripheral levels. Reports are coming in that this has made life so much easier for these vulnerable groups with many now knowing how to offer and where to access low vision services. With this information, I have been taking care of the oculocutaneous albinos within and beyond Rivers State mostly pro bono (in addition to other indigent patients with other diagnoses, like optic atrophy, glaucoma, retinitis pigmentosa etc), with free yearly eye checks, glasses, and surgeries. Most albinos do very well with special glasses and low vision devices. (Fig 37).

Fig 37: Albino kids being evaluated for glare.

Many however require financial support due to social discrimination and lower preference in the job market to set up businesses and arrange skills acquisition for those who are indigent among them including support to access dermatological care to treat associated dermatitis and skin

cancerous conditions. Regular monthly meetings with transport support aimed at sensitizing them under "The Albino Foundation (TAF) Rivers State Chapter encourages and helps them in addition to mentoring. (Fig 38-40) These activities culminated in the award given to me in appreciation for which I thank them. (see fig 41).

Fig 38: Some of the Rivers state Albino Foundation Executives/leaders

Fig 39: With one of my albino patients

Fig 40: Some Members of the "Albino foundation", River's state chapter

Fig 41 *Awards given by the "Albino Foundation", River's state chapter and the Nigerian association of the Blind (River's state Branch)*

My work is currently focussed on rehabilitation of the blind and the severely visually impaired. This is a group that is quite vulnerable. **THEY ARE "OUT OF SIGHT,"** AND BECAUSE WE DO NOT OFTEN THINK ABOUT THEM, THEY ARE "**OUT OF MIND" TOO**
If I may ask…
How many of you have a relation who is blind?
How many of you have thought about what it is to be blind?
Mr Vice Chancellor sir, permit me to illustrate the enormity of the impact of blindness with a small exercise

KINDLY CLOSE YOUR EYES FOR A MOMENT AND TRY TO LOCATE AN APP ON YOUR PHONE.
IT'S DIFFICULT, IS IT NOT?

Unfortunately, a substantial number of Nigerians live like this. Over TWO MILLION of them. It may however interest you to

know that those who are blind **do not need** to live wretched lives anymore and that they can do much better for themselves. FOR THOSE OF YOU WHO KEEP THEM HIDDEN AWAY, OUT OF SIGHT.

6.3 Can something be done for the blind?

The good news is that 80% of visual impairment can be prevented or cured, but the remaining 20% cannot be cured currently (Rabiu MM et al 2012). What to do is to offer the irreversibly blind, visual rehabilitation and those who have low vision, low vision care, both optical and non-optical. (Fig 42)

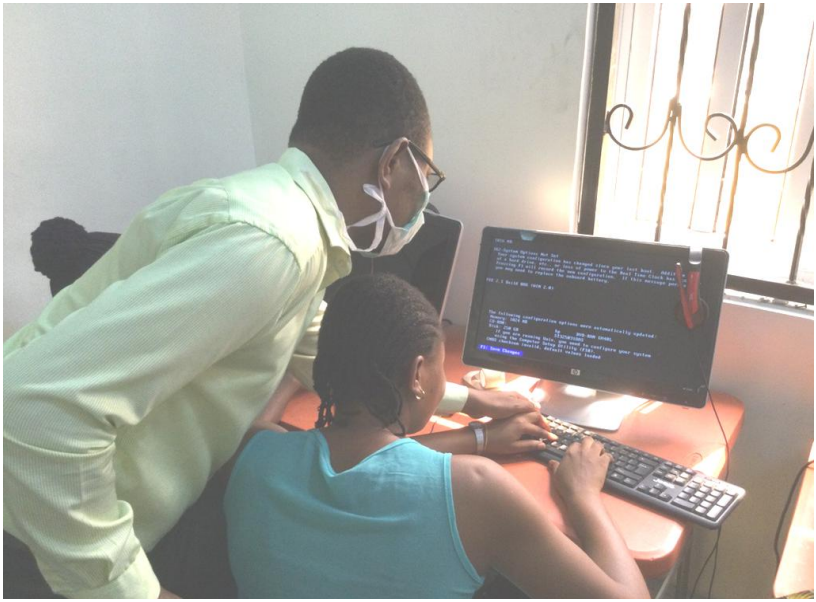


Fig. 42: A rehab student learning the use of the computer.

6.4 THIS IS A GUIDECANE- IT IS IMPORTANT TO KNOW WHAT THIS IS:

Fig 43: A guide cane in use

It is my belief (and that of the international community also) that blind people should not be kept away from those who can see, in a separate establishment for their educational years(i.e. Blind Schools) (Adio AO, 2023) but rather, purposefully taught over a defined period, how to cope with loss of vision and methods of communicating and acquiring information without depending on vision, during which they are given assistive devices and taught how to use them (Fig 42,43)and encouraged to be tutored in an inclusive educational setting where both the sighted and non-sighted are taught together in the same class(Adio AO, 2021). This is the standard worldwide and it is time that we adopt this model in Nigeria at least to a reasonable level.

If you see anywhere labelled a "blind school" in the world, it should either be a rehabilitation centre where blind trainees are kept for a short while to learn how to live their lives and specifically designed to help them access core academics and

address the social and independent living skills their sighted peers learn incidentally or it is a resource centre where assistive devices are kept so that those who need to use them can come for either purchase, training in its use or replacement (Adio AO, 2023). The guide cane should be understood to be a symbol of the visually impaired and must be recognised as such by the community. When someone is holding a white cane with red stripes on it, every assistance should be given to such a person. Do not just walk past especially if the person is flagging it. **All blind or visually impaired persons should own one and use it all the time to ensure they are not accidentally treated like a sighted person.** Facilities also should be made inclusive to allow for someone visually impaired to navigate safely with braille inscriptions and voice descriptions of locations and destinations.

The Guide Cane is an essential mobility aid for blind and visually impaired individuals. (Fig 43)It is a long white stick that typically reaches up to the user's waist or chest and is used to detect obstacles in the environment by sweeping or tapping from side to side. This helps the user navigate their surroundings safely by identifying potential hazards such as kerbs, steps, or other objects in their path. When the visually impaired moves with a guide cane, the cane has three functions: detection, identification, and protection. The distance that the cane extends forward is used to detect the road conditions. When it is identified that the ground has changed or there are dangerous conditions ahead, the visually impaired has enough time to react to protect themselves. Only holding a guide cane is not able to effectively assist the visually impaired to move steadily, it needs the user to accept the mobility orientation training. Training is recommended to use a long or guide cane effectively. After training, the guide

cane will perform its intended function of support and assistance.

There are several types of canes, each serving a specific purpose:
Guide Canes: Used for moving around and detecting immediate obstacles.

Symbol Canes: Shorter canes that indicate to others the user has low vision, particularly useful in crowded areas. One can fold a longer one to achieve the same purpose.

Long Canes: These extend to the chest or armpit, allowing detection of obstacles from a further distance.

Red and White Canes: Indicate that the user has both a visual and hearing impairment (used in developing countries by the blind even if not deaf)

Everyone including those driving vehicles should respect, give right of way, and help anyone using a guide cane.

Do not just pass by please, without checking to see if the person needs help.

6.5 What has been done for the blind/visually impaired people in the developing world? (What is on ground for the blind?)

At this time, not much is in place for the blind beyond being sent to poorly maintained blind schools established by governments where substandard education is offered at the instance of the parents/caregivers who bring them. If parents do not wish to bring them or cannot afford it, the child remains

at home untutored or poorly tutored. Some decide to hire mercenaries to help the child write exams and thus push them from class to class. This is unbecoming and must be strongly discouraged. Some universities also reject the visually impaired student who apply to study in them and if they do take them, **they rarely put facilities in place to assist them** to make things easier for them such as reading materials in accessible format. This is not encouraging. I found the same situation here in this university also in the Donald Ekong Library. Sometimes they are forced to present mathematics without putting facilities in place to effectively teach it before they can gain admission. When I observed this, I decided to do something about it. Arrangements were therefore made to start mathematics/algebra/science classes for the visually impaired in collaboration with the Kansas state school of the blind, USA. The curriculum has being developed and is available to as many as are interested on zoom. The first held a few days ago. Contact me if interested. It's free.

7.0 My contributions to knowledge (What have I been able to do to help?)

7.1 A. Laying a framework: Papers on the local disease burden to enable a critical look at the challenges of blindness and other eye diseases to enable stakeholders make informed decisions on how best to handle the situation were written More than twenty papers were devoted to this.

7.2 B. Leadership roles drawing up guidelines and preferred practice patterns working with and within various national and international societies and organisations. These include the NIGERIAN PAEDIATRIC OPHTHALMOLOGY SOCIETY, where I was a past chairperson, WORLD SOCIETY OF PAEDIATRIC OPHTHALMIC SOCIETIES (WSPOS), (Fig

44-45) where I sit on the scientific and ethics boards and co-authored the Consensus on Myopia and Digital Eye Strain used the world over to guide practice), INTERNATIONAL PAEDIATRIC OPHTHALMOLOGY SCIENTIFIC COMMITTEE (IPOSC), STOP INFANT BLINDNESS in AFRICA Initiative (SIBA Initiative) where blindness from ROP especially in developing countries in Africa is focussed on and most importantly funds was made available to equip the hospital to combat this impending epidemic.

Fig 44: *Chairing a meeting in Copenhagen, Denmark with World Society of Paediatric Ophthalmology and Strabismus (WSPOS), 2014*

Fig. 45: At a WSPOS subspecialty day in Copenhagen as a scientific bureau member, 2014

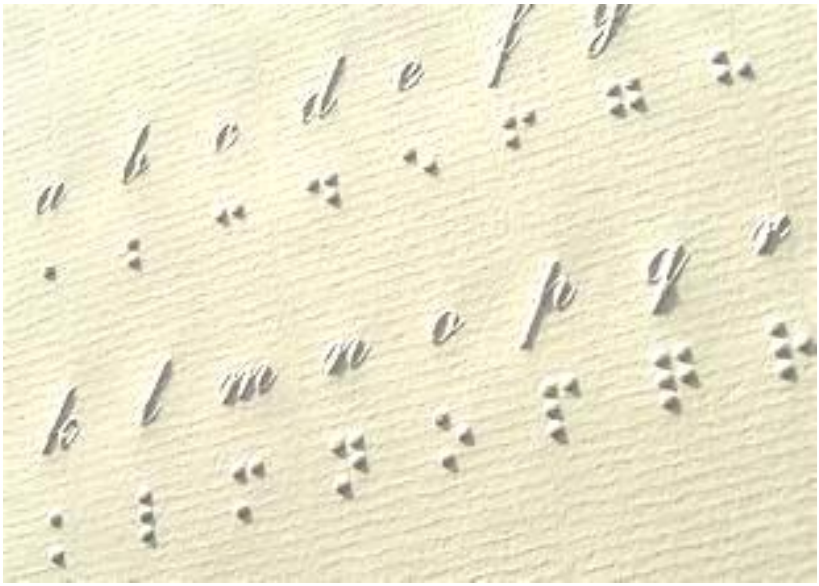
7.3 C. Nigerian Orthoptics Training Course I started the first ever Nigerian Orthoptics training course in 2017 to assist the practice of paediatric ophthalmology and neuro-ophthalmology We developed a program for a 2- week and a 6-month certificate course. We just finished the 2-week training course of a group of four trainees a few months ago. (Fig 46-48) We have had trainers fly in from the International Orthoptics Association (IOA) to help train here in UPTH from Kenya, Belgium and Spain.

Fig. 46: Our guest Orthoptics lecturers from Belgium and Spain in 2018

Fig. 47: Pioneer 2018 Orthoptics class

Fig. 48:2023 Orthoptics class

7.4 D. The “Rehabilitation of the Blind Services” (Adio AO, 2023) is a program designed to support visually impaired individuals, **particularly professionals** who have lost their sight (who otherwise have nowhere else, to go to get rehabilitated- to get back their independence as much as possible) The program offers training for 1 to 2 years or shorter, depending on the individual’s background, to help them continue their education or start it as seamlessly as possible. The training includes teaching Braille, (Fig 49) the use of assistive devices, using modern text-to-speech software, getting on social media using their smart phones, activities of daily living, and orientation and mobility.



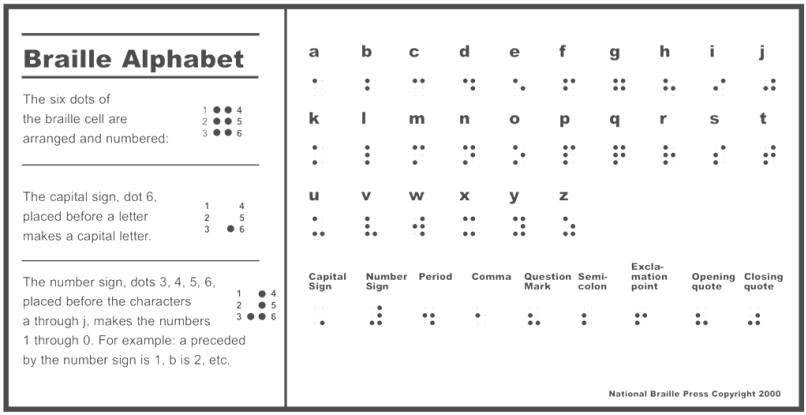


Fig 49: The English Braille system

After this brief period, the individuals are encouraged to attend school where sighted and non-sighted students learn together. (inclusive education)

If visually impaired individuals are identified and it is determined that their sight cannot be improved (very important to do this as many end up in blind schools with treatable blindness due to poor evaluation), they are prepared for government-organized examinations. Those who are unable to attend school are taught how to start profitable businesses.

7.5 E. Active participation in preventing, training staff (see fig 38) and treating Retinopathy of prematurity (ROP) (fig 41) (Adio AO, Ugwu RO et al 2014, Ademola-Popoola DS, Adio AO et al, 2020, Adio AO et al 2021).. The management of UPTH is appreciated for signing a memorandum of understanding to make this possible. (Fig 50)

Fig. 50: ROP training in UPTH organized under my leadership.

7.6 F. The Primary Eye Care (PEC) training in collaboration with the Rivers state primary healthcare board, (Fig 51,52)and weekly primary eyecare outreaches in collaboration with TLEC rehab Nig were initiated in Rivers State, South-South Nigeria, on July 21-22, 2023. The program aims to improve access to PEC at the grassroots level, identify individuals with treatable and untreatable blindness, and provide a spectrum of services from prevention and treatment to appropriate referral and rehabilitation. Every week, the NGO staff visit a primary healthcare center in Obio-Akpor and Port Harcourt LGAs. Since its inception in June 2023, the program has had a significant impact, treating over six thousand people, distributing over five thousand glasses and giving out over four thousand eyedrops in addition to offering free/subsidised eye surgery to the indigent.

The program also focuses on education, seizing every opportunity to educate the populace on various important eyecare topics, particularly those geared towards prevention. The program is grateful to its donors for their support.

Fig 51: Facilitating the first ever class in primary eyecare in Rivers State sponsored by River's state Primary health care Management board. July 2023

Fig. 52: Teaching the first primary eyecare class in Rivers State at the Rivers State Primary Health Care Management Board's Conference Room, Waterlines, Port Harcourt-close up view.

7.7 G. The "School Eye Health " initiative, led by Adio AO since September 2021, advocates for compulsory eye checks

and legislation to be made by eyecare professionals for pupils before they are admitted to schools. This is to prevent children from suffering visual problems and with proper and regular screening. Collaborations are ongoing with the Rivers State Primary Health Care Management Board to start sustainable school eye health care services. I have presented several papers on this topic at various fora, providing a framework to draw from (Fig 53-54) The management of UPTH led by Prof Henry Ugboma has already approved the training of teachers to help screen students, which will increase the reach of the program while waiting for funding. This initiative is the very first significant step towards ensuring the visual health of students in schools in Rivers state.

Fig 53: Giving a health talk in a secondary school in Port Harcourt

Fig 54: Examining the eye of a student during one of our school eye health outreaches.

7.8 H. I have been involved in training eyecare workers across the West African subregion on the evaluation of low vision since 2017. (Adio AO 2018). The training program has had a significant impact, with recent efforts including training Gambians in 2022 and ongoing training for Cameroonians in 2024. These training programs aim to equip these countries with the skills to set up low vision and rehabilitation services for the first time, further expanding the reach and impact of this initiative. (Fig 55)

Fig 55: Teaching low vision to eye care workers

7.9 I. WhatsApp groups have been established since 2017 to disseminate information, solve clinical challenges, and facilitate group procurement of ophthalmic equipment, consumables and assistive devices for training eyecare workers across the West African subregion. It continues to provide training and campaigns to encourage more eyecare workers to offer low vision services.

8.0 J. Early intervention services for those with brain-based blindness /special children-(Adio AO, 2023, Adio AO, Swajuihian S, 2012). Patients with brain-based blindness are offered early intervention services (i.e. in the first 3 years of life) to improve visual outcomes significantly (Fig 56 a & b), many of whom may not have recovered some of their vision without assistance. Encouraging concurrent speech, occupational therapy and physiotherapy as a group to the

patients will make it easier to access the comprehensive care required for these babies for busy caregivers. Dr Gordon Dutton is one of my mentors in this area. (Fig 57)

Fig 56 a & b: Children with brain based blindness

Fig. 57: Dr Gordon Dutton and I when I visited him in Edinburgh for one-on-one tutelage in early intervention for individuals with brain based blindness in 2014

9.0 What do I plan to do?

9.1 Advocacy for inclusive education to start in Rivers State. Consistent and continuous advocacy in collaboration with local and national NGOs to ask government to activate the four designated schools (Rumueme girls' secondary school and three others) here for inclusive education is on to assist those who cannot afford private inclusive education, only currently available in one place in the State. Presently they must travel to Ebonyi State to go to secondary school. An ideal inclusive school should have boarding facilities, assistive devices, and special teachers ready to teach. Universities like the University of Port Harcourt can be encouraged to admit visually impaired students and cater for their special needs by ensuring the proper assistive materials and devices are in place to make study easy for them. Currently there is no single

facility in place to assist learning for the visually impaired in this university. Indeed, for a while in Nigeria and in the West African subregion, only the Federal College of education (Special), Oyo had full facilities to ensure the blind had the correct format to access and give information.

9.2 Set up a Sensory park to enable those born blind to learn concepts often taken for granted by the sighted and expansion of rehabilitation services to other parts of the country. A university like this which has an active Fine arts Department, can take up this task too. I offer my services to facilitate this.

Fig 58: A child who was born blind poking the eyes

9.3 Broadening of the vision in collaboration with the government and well-meaning Nigerians and philanthropists to carry low vision care and vision rehabilitation to the community as many that have not heard that they can be helped. Presently, eye care spectra stops when medical surgical and optical means stop being effective, this should not be allowed to continue.

10.0 RECOMMENDATIONS

10.1 What can governments do?

i. Ensure prevention of blindness by providing modern equipment for eyecare especially in children and in those who have chronic lifestyle disease conditions like diabetes and hypertension while funding media campaign for mass public enlightenment about the importance of vision and what should be done if it is lost.

ii. All women in child-bearing age should have the Measles Mumps Rubella (MMR) vaccine to prevent childhood cataract, an important cause of low vision and blindness and systemic morbidity. Government should consider adding it to the Expanded Programme on Immunisation or significantly subsidise it as the cost of not vaccinating the women still weighs down our fragile healthcare system with the care for affected children.

iii. The 2006 National Policy on School Health should be revised using widespread advocacy at both State and Federal levels with the inclusion of mandatory visual checks as part of the routine medical examination at predetermined intervals for the benefit of our children.

> Children must have regular eye checks at the following periods:
> At birth, at well baby clinics, before school starts and at age 5yrs, 10yrs, in JSS 3 and in SSS 3

iv. Enforce visual functions are checked before a drivers' licence is issued to anyone.

v. When blindness does occur, ensure all are rehabilitated using appropriate assistive devices for a defined period.

vi. Encourage inclusive education at State and Federal levels from pre-primary to university education. This can be done by equipping already designated schools to mop up blind children who have nowhere to be educated in their own peculiar way, while making provision of appropriate learning media and trained special education teachers in relevant areas for the visually disabled. This will make affordable, inclusive and appropriate educational services are available.

vii. Centers of educational excellence like the University of Port Harcourt should have standard facilities in place to allow equal access to educational materials whether the learner is visually impaired or not. Currently the Donald Ekong Library does not have any facilities whatsoever that can be accessed by those who are visually impaired. Therefore, students with such disabilities currently may not be able to learn from here. This must change.

viii. Create an enabling environment for duty free bribe free importation or encouraging the local production of cheap yet durable assistive low vision devices for the visually impaired/blind.

ix. Enforce existing laws for the visually impaired(including the Nigerian Child's Rights Act 2003 and the Nigerian Discrimination against Persons with Disability(Prohibition)Act 2018) so that parents are encouraged to release affected children for rehabilitation or face the consequences when they fail to.

x. Partner with existing NGOs and the Nigerian Association of the Blind (NAB) to enable better attainment of objectives.

xi. Strengthen ROP screening and modern pediatric Ophthalmic eyecare across the country by equitably providing and maintaining equipment and making sure they are responsibly used after training the relevant workforce.

xii. Encourage taking the gown to town so that primary eyecare is firmly entrenched and fully functional at the grassroot level

What can you do?

Do not stigmatise the visually impaired, encourage the blind and those with low vision and their parents, help them in any way possible, be friends with them, influence government policies, understand what the "white cane" means and most of all celebrate them!!

Because it is ONLY by grace that we are not visually impaired also!

Eccl 11:7 says LIGHT IS SWEET and it PLEASES THE EYES TO SEE the sun.

Therefore, make sure you go for regular eye and body checks for **yourself** to detect health conditions that could lead to blindness that needs to be dealt with **ON TIME**.

11.0 CONCLUSION

Avoidable Blindness occurs when ocular conditions are left to run its course (OUT OF SIGHT) not remembering that it will ultimately lead to the detriment of society when it is not attended to (OUT OF MIND). Lets do all we can to intentionally avoid any vision related challenge (IN PLAIN SIGHT) so we can keep beholding this beautiful world with good sight.

Mr Vice - Chancellor, Sir, permit me to end this lecture by handing over this lecture notes to you with the hope that the relevant stakeholders will do all they can keeping all in mind and collaborating with us to produce happier mothers, happy parents and a happy community with excellent eyesight in as many as possible, anywhere they are located, they will not be out of mind but will be in plain sight.

Thank you ALL for your attention.

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CITATION ON

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Adedayo Omobolanle Adio (nee Omoni) was born in Ibadan, Oyo State Nigeria on the 5th of. June 1967 Late Dcn Ademola Omoni Esq and Mrs Adekiitan A Omoni of Ilobu, Irepodun LGA, Osun state. She had her early education up to the Ordinary Level GCE in Ibadan at the Staff School, University of Ibadan and Methodist Grammar school, Bodija Ibadan, Oyo state as a pioneering student. She served as games and library prefect in her secondary school before attending the College of Health Sciences, University of Ilorin, Kwara State for her Basic Medical degree (MBBS) which she completed in 1990. Her residency in Ophthalmology was as a supernumerary sponsored by the University of Port Harcourt teaching hospital. She was awarded the Fellowship of the National Postgraduate Medical College of Nigeria in Ophthalmology and the

Fellowship of the West African College of Surgeon in 1999 and 2000 respectively after completing clinical rotations and training in Ophthalmology at the University College Hospital (UCH), Ibadan, Oyo State, University of Nigeria Teaching Hospital, Enugu, Enugu State, and University of Port Harcourt Teaching Hospital Rivers state and passing all prescribed examinations. She subsequently did sub-specialty fellowship training in Paediatric Ophthalmology, and Neuro-Ophthalmology with additional certification in Low vision at the LV Prasad Eye Institute, Banjara Hills, Hyderabad, LV Prasad Eye Institute, Vijayawada both in Andrea Pradesh, India (2013-2014) and the Princess Alexandria Hospital, Edinburgh, Scotland in 2015.

She further developed her professional capacity at other institutions over the years including Mercy Eye Centre, Abak and SIM, Kano.

Our inaugural lecturer started her career as a young clinician and academic in 2003 in the University of Portharcourt and was appointed as an honorary consultant with the University of Portharcourt teaching hospital thereafter. She rose through the ranks to become a Professor of Ophthalmology in 2014 and a Consultant Ophthalmologist sub-specialised in Paediatric Ophthalmology, Strabismus and Neuro-Ophthalmology. A past residency training Director and Head of Department of Ophthalmology, UPTH, she is currently a member of the Ethics and Scientific board of the World Society of Pediatric Ophthalmology Societies (WSPOS) since 2015.

She established the different subspecialties in the Dept of Ophthalmology when she was HOD in 2007 and loves to teach and believes firmly in training eyecare workers to offer the best service they can and has performed cutting edge surgical

procedures in squint surgery never before performed elsewhere in Nigeria and West Africa for which she has been recognized. She has also been a coordinator of many training courses which has gone on to develop capacity in various corners in Nigeria and abroad aiding the development of primary eye care delivery.

Professor Adedayo Adio has supervised over 25 postgraduate dissertations and theses for both postgraduate medical doctors and basic medical science students and is involved in training medical students, caregivers, community health nursing and primary eyecare training.

She has been invited to speak at several national, and international conferences especially on low vision, inclusive education and rehabilitation of the blind and is involved in high level advocacy for the irreversibly and severely visually impaired and is a strong advocate to improve their access to assistive devices and equitable establishment of inclusive educational services. Her research and publications are relevant with pointers to detection for early intervention for child eye health. She has also collaborated on research on comorbidities in childhood cataract and outcomes of pediatric glaucoma surgeries in addition to retinopathy of prematurity among others Her scientific works over 80 in number are published in reputable national, and international peer reviewed journals and in two books and cited by 787 research publications currently and still counting. [https://scholar.google.com/citations?hl=en&user=Fmjcz2wAAAAJ]

She has been involved in review of training curricula, conference proceedings, development of training and disease guidelines at state, regional and national levels and in the

examination of postgraduate medical personnel since 2002 for both the West African College of Surgeons and the National Postgraduate Medical College of Nigeria. She is a reviewer for National and International Journals.

Prof. Adio has served as the past National Chairperson for the Nigerian Pediatric Ophthalmology and strabismus society(NIPOSS) and has served on the board of the Optometry and Dispensing Opticians for many years.

A Christian and member of Winners chapel, she is happily married to Pastor Engr Adegboyega Adio and the family is blessed with 3 grown sons. She loves to make friends , cooking and reading mystery novels.

Mr Vice Chancellor Sir, I present to you a distinguished academic, a mentor, a model of excellence in hard work, a passionate professional, a respected Paediatric ophthalmologist, a Philanthropist, a go getter, a mother, a devoted wife, Prof Adedayo Omobolanle Adio, our inaugural lecturer of today.

Prof Owunari A Georgewill
Vice Chancellor, Uniport