

UNIVERSITY OF ILORIN



**THE TWO HUNDRED AND TWENTY SECOND
(222ND) INAUGURAL LECTURE**

**“SHADES OF JOY AND CRY: INTRIGUES
AND INTRICACIES OF CHILDREN’S
SURGERY FOR RESTORING SMILE AND
HOPE FOR THE FUTURE”**

BY

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The Vice Chancellor

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Staff members of University of Ilorin and UITH Community,
My Lords, Spiritual and Temporal,
My Family members, Relations, and Friends,
Scholars and Alumni of the University of Ilorin, Great Unilorites!!!
Gentlemen of the print and electronic media,
Distinguished Invited guests, ladies and gentlemen.

Preamble

I welcome you all in the name of Allah, the Most Beneficent and the merciful, may the peace and blessings of Allah be upon the noble soul of the holy prophet Muhammad (SAW). I give thanks and adoration to the Almighty Allah for allowing me to see this day and for giving me the unique opportunity and the privilege to give account of my academic stewardship by presenting the 222nd Inaugural Lecture of this Better by Far University, University of Ilorin on this 22nd day of December 2022.

Mr Vice chancellor Sir, this is the 6th inaugural lecture from the Department of Surgery and the 2nd from a Paediatric Surgeon who was a pioneer indigenous postgraduate Resident and alumnus of University of Ilorin to serve in the Department as a Professor. This lecture is coming 4 years after the 179th Inaugural lecture delivered by my trainer Prof JO Adeniran titled *“of Monstrosities in children, who is to blame...”*

Mr Vice Chancellor Sir, my inaugural lecture is titled **“Shades of Joy and Cry: Intrigues and Intricacies of Children’s surgery for restoring smile and hope for the future.”** This title was carefully chosen to highlight the under-representation of children for surgical care in resource poor settings, the **intrigues, and the resilience of children against the** surgical diseases, the **intricacies** including challenges, adaptations, and struggles to give optimal surgical care for their wellness and assurance of a healthy future of our population.

How it all began

My passion for medical practice arose from the protracted illness I suffered as a child and the excellent care I received under the care of experts led by Late Prof. Olikoye Ransome Kuti. These impressed my parents who groomed me in preparation for the task of becoming a doctor.

My choice of **Paediatric Surgery** was borne out of many factors which included the excellent care I received when I was ill, the lead dissector role in Anatomy classes, a gift of Paediatric Stethoscope from late Dr David Oyedokun (our family doctor) after my 1st professional MBBS examination in 1991, the encouraging comment by my Internship Supervising Consultants in paediatrics, Prof. ‘WBR Johnson who commented **‘Satisfactory performance. Trainable in Paediatrics’**, and in surgery, my preference to work with my skillful hands was buttressed by Prof S. A. Kuranga’s comment: **‘A very hard working and diligent young man. His performance was remarkable, easily one of the best Interns in his set’** (see

figure 1) and the dearth of trained Paediatric Surgeons in Nigeria.

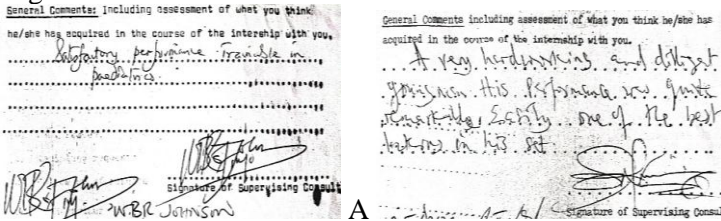


Figure 1: A. Prof ‘WBR Johnson’s comment, B. Prof. S. A. Kuranga’s comment

My journey to the Chair of Surgery at the University of Ilorin, is intricately tied to the evolution of the Division of Paediatric Surgery in the Department of Surgery and its clinical and academic training programmes from 1999 when Dr J. O. Adeniran returned from UK and Dr Awwal M. Abubakar got appointed as Lecturer and Consultant Paediatric Surgeon.

Evolution of the field of Paediatric Surgery

The practice evolved from the initial partial commitment of general surgeons to care for the surgical needs of children to the full dedication of Paediatric Surgeons who focused on peculiarities of children for optimal outcome. Paediatric Surgery started from the works of William E. Ladd (1778-1841) the father of modern-day Paediatric Surgery in Boston Children Hospital.¹ Key to the perpetuation of the field has been the worldwide codification of content for a rational training program for future Paediatric Surgeons, assuring their competence and their future leadership of the field.²

Management of children in dedicated hospitals for best quality service and consistent excellent outcomes started in the early nineteenth century in Europe and North **America** [Paris, France (1802), London, UK (1852), Massachusetts, USA (1882), and in Toronto, Canada (1875)]. The Hospital for Sick Children (Sick Kids) in Toronto and the McMaster Children Hospital, Hamilton, Ontario, Canada in which I was also privileged to do

clinical attachment in 2010 are Canada's most research-intensive hospitals dedicated to improving children's health.

Development of Paediatric Surgery in Nigeria

As in most countries in Africa and the world, general surgeons interested in Paediatric Surgery added the burden to their workload. Late Prof. Michael Akintayo Bankole was the first formally trained Nigerian Paediatric Surgeon in 1968, in the USA. He was the trainer of my Trainers Prof Olusanya Adejuyigbe and Prof O. Sowande at the Obafemi Awolowo University, Ile-Ife. Prof J.O. Adeniran my teacher who started the Paediatric Surgery Unit at UITH, Ilorin is a typical example of Paediatric Surgery converts after his brilliant sojourn in General Surgery and Orthopaedics. Paediatric Surgery training has expanded to more than 25 centres across the country.

Practice of Paediatric Surgery

A child is not a small adult though structurally might look like miniaturized adult but the structural maturity and the physiology of the different categories of children whether as neonate (birth to 28 days), infant (29 days to 1 year), young child (2-12 years), or adolescent (13-18 years) differ significantly from one another and from the adult. The most distinctive and rapidly changing physiologic characteristics occur during the neonatal period due to adaptation from complete placental support to the extrauterine environment, and the demand of growth and development of the child as witnessed in all the other stages.

Extreme prematurity, presence of congenital anomalies, injuries and infectious diseases magnify the already dynamic and relatively fragile physiology of the child at different stages of development, predisposing them to physiologic derangements in temperature regulation, fluid and electrolyte balance, glucose metabolism, hematologic regulation, and immune function. From a surgical standpoint, these dynamic and fragile physiologic parameters are often the primary components that dictate the

perioperative management of the paediatric surgical patient, that is, the intricacies which are intriguing.

Paediatric Surgery has multiple subspecialties: Foetal Surgery (surgery on the unborn child), Neonatal surgery (surgery on babies from birth to 28days), Paediatric General Surgery (gastrointestinal, colorectal, hepatobiliary), Paediatric Urology, Paediatric Trauma, Paediatric Cancer care (Oncology), Minimal Access Surgery and others.

The surgeons operating on these children need the support of other specialists who have adequate understanding of the status of the babies so that targeted modulation of their state of health is done to achieve great outcomes. Chief among these specialties are Paediatric Anaesthetists, Intensivists and Neonatologists.

Children surgery involves a combination of the skills (art and science) of being a surgeon, paediatrician and many other things including Psychosociologist. In our setting, we take care of surgical needs of children from birth to 15 years of age. The Paediatric surgeon's duties also include seeking new knowledge (Research) and care beyond surgical intervention in childhood and continuity of care into adulthood when they are either managed by the Paediatric Surgeon or they are handed over to adult specialist. The Paediatric surgeon can also work with the adult surgeon on missed congenital malformation presenting much later.

The burden of paediatric surgical diseases

Globally, 1.7 billion children do not have access to safe, affordable, and timely surgical care.³ Sub-Saharan Africa (SSA) bears the largest burden because up to 50% of the population are children, among whom we have almost one-third of the world's burden of surgical disease and half of the world's deaths in children less than 5 years (under-5 deaths).^{4,5}

Birth defects (congenital malformation) have significant effects on the physical, mental, financial and social status of children, hence some are abandoned and or even killed

(neonaticide, filicide and infanticide).^{6,7} In Nigeria, the estimated incidence of birth defects varied between 2.5 and 11.5 per 1000 live births in the six geopolitical zones and the Neonatal Mortality Rate (NMR) is among the highest globally at 47.7 per 1000 population of which congenital anomalies formed the bulk (10.6%).^{8,9} The national **neonatal surgical mortality** rate is still high at 26.6%.⁸

In SSA countries, mortality from common paediatric surgical conditions was unacceptably high compared with High Income Countries (HICs) as shown in Table 1. This was particularly so among neonates (41.9%) due to indicators of poor clinical status of the children at presentation and at the time of primary intervention in the paediatric surgery centre.¹⁰⁻¹² This is blamed on barriers to access to surgery which include the significant shortage of workforce (esp. Paediatric Surgeons and Anaesthetists) and health system infrastructure to match the need for children’s surgery, the lack of confidence in the health system leading to huge backlog of unmet paediatric surgical intervention.¹⁰⁻¹⁴

Table 1: Mortality from common paediatric surgical conditions in Low and Middle income (LMICs) compared with High Income countries (HICs)

Conditions	Case fatality in LMICs (%)	Case fatality in HICs (%)
Gastroschisis	75.5	2
Anorectal malformations	11.2	2.9
Intussusception	9.4	0.2
Appendicitis	0.4	0
Inguinal hernia	0.2	0

A taboo in the African setting that *‘a child born with defect or who dies young is from devil and surely God will provide or replace a defective child with a normal child. “omoesuni, olounyio mu tie ropo”* and the premature death of a defective

child is seen as a relief on the family's financial burden so that they can focus on the remaining children. Many babies were named or renamed - Boluwatife, Aiyeoribe, Tanimola, Remilekun etc. due to events of birth, disease conditions and the outcomes of care as narrated in these short stories.

1. A 4-year-old with a solitary (one) kidney had it removed by an untrained person (pseudo-surgeon) in the name of an appendiceal mass. Parents turned down renal replacement therapy pending renal transplant and discharged against medical advice because they have 5 other children at home to look after. The parents did not reveal the hospital, nor the 'doctor' and the specimen had been thrown away. (**Aiyeoribe**) The 'pseudo surgeon' continue to thrive on other exploits.
2. A father of 3 children had a 4th one who had epispadias (the penis opening was on the top of the shaft, rather than at the tip), he pleaded with us that the baby should be *ethanised (killed)*. On counselling, the baby had a successful repair, with the bill partly funded by our team. The father afterwards was happy and appreciative. **Many babies are abandoned by their parents in the hospital.**
3. We managed a 2-year-old girl with Wilms tumour (renal cancer) who had good response to neoadjuvant chemotherapy (cancer medications pre-surgery). The parents defaulted from surgical intervention as planned in the 5th week because the mass had reduced and presented the baby a year later with advanced disease (huge tumour, intestinal obstruction, cachexia) and they had no funds (by parents) to procure medications. Baby was lost 2 months after re-admission and sustained palliative care.

My contributions

Mr Vice Chancellor Sir, I focused my contributions on Access, Acceptance, and Quality surgical care in children. You will agree with me that there is no quality without access and acceptance. *‘Miofe se agba mobun e’*, *‘rejection is superior to the gift’*.

Access, Quality and acceptance

Realising impediments to optimal paediatric surgical care in our setting, I pursued a program to increase awareness, acceptance, accessibility, affordability, and expansion of coverage of services to improve surgical outcome (figure 2).¹⁵The measures included strengthening of the staff capacity and capability by leaning on the adage: *Ile lati nko eso r’ode*, *‘charity begins at home’*. We also advocated for appropriate infrastructure and addressed the social barriers such as ignorance, influence by the untrained, poverty and fear of surgery on children.¹⁶We increased out-patient services from once a week to two outpatient clinics per week and elective operation slots from one to four (4) sessions per week. There was also collaboration with other specialists in the hospital and outside the country.

We formed the **Paediatric Surgery Team** comprising the staff at various service points (out-patient, in-patient, operating theatre, emergency rooms). The purpose was to have a unified force to champion the course of effective and emphatic surgical care of children.¹⁵The team members were trained and empowered with knowledge to identify and maintain the clinical condition of children who were brought to the hospital for surgical care. Many of the staff who doubted the possibility of successful outcomes of **‘delicate’** children surgery became the disciples and advocates for seamless provision of surgical service to the children.

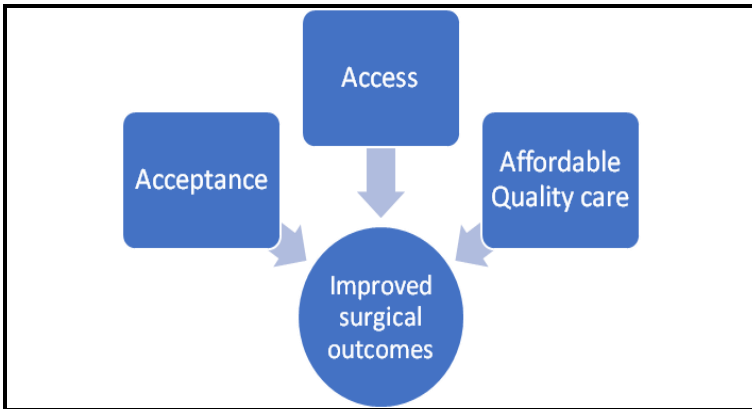


Figure 2: Chart showing impact of service acceptance, access and affordable quality care on surgical outcome.

These increased the annual children surgery volume from about a 160 in 2005 to over 600 cases in 2017 (Figure 3, blue line) with reduced waiting time for both elective and emergency surgery and reduction in complications and deaths from 40% to less than 5% annually (figure 2, orange line). Parental defaults for surgery on their wards were reduced and definitive surgery completion rate increased.¹⁷⁻¹⁹



Figure 3: Chart of increased annual paediatric surgery turnover and low death rates (blue arrow- Dr L. O. Abdur-Rahman joined as Consultant Paediatric Surgeon)

Paediatric Day case surgery

Day Case Surgeries entails admission for surgical procedures on a planned non-residential basis. This serves the interest of children who recuperate best in their home environment.¹⁶

Up until 2001, nearly 100% of children must pass at least a night in the hospital before and after surgery due to fear and challenges of compliances among healthcare providers and caregivers. This order was changed by my introduction of guidelines and patients handbills **for Paediatric Day Case surgical services (PDCSS)**. PDCSS is now routine and constitutes about 70% of our annual elective surgical cases.¹⁷ The complexity of procedures has increased with a wider range of children including neonates benefiting from day surgery. PDCSS helped us to reduce catastrophic expenditure as parents spend less on repeated out-patient visits and admissions.¹⁸ Parents also coped very well at home and were satisfied with PDCSS with expressed willingness to recommend the service to other children's parents.¹⁸ **Parents' joy was made full, and tears wiped.**

Neonatal Surgery and congenital anomalies

Mr Vice Chancellor sir, at this junction may I warn that some of the pictures in this lecture may be disturbing and viewers' discretion is advised.

Neonatal surgery (operation on children less than 29days old) has increased in our annual surgery practice from 7.5% in 1999 to above 20% in 2021 and babies as low as 1.6kg and preterms had been operated. Majority (87%) were referrals from other centres within and outside Kwara state.²⁰ Gastrointestinal anomalies were responsible for the highest cases (36.4% to 67.4%) as shown in Tables 2 & 3. There was 1 in 6 (16.5%) average neonatal surgical deaths, though, lower than the national average of 26.6%, there was a significant early post operative deaths due to postoperative sepsis ($p=0.006$) and respiratory challenge ($p=0.035$).²¹ The need for care in the ICU was also significant

(0.0001).²¹ These patients might have done better if they were electively ventilated (artificial take over breathing), provided parenteral nutrition and potent and sensitive antibiotics in a dedicated and equipped high dependency or neonatal intensive care unit which we lack.

Table 2: Causes of Neonatal surgical admission at UITH, Ilorin over two study periods 1997-2005 and 2006-2021.

Disorders	1997-2005		2006-2021	
	No of patients	%	No patients	of%
Gastrointestinal	86	36.4	213	67.4
Hernias	37	15.7	19	6.1
Neurosurgical	27	10.7	0	0
Anterior abdominal Wall defects	25	10.6	52	16.5
Genitourinary	12	5.1	10	3.2
Facial & soft tissue	49	20.8	22	6.8
Total	236	100	316	100

Table 3: Comparison of causes and case fatality of congenital gastrointestinal anomalies in Ilorin over 2 study periods

Anomalies	1997-2005			2006-2021		
	No of patients	%	Av. Case fatality (%)	No of patients	%	Av. Case fatality %
Anorectal malformation	33	38.4	9.1	79	35.4	5
Jejunioileal atresia	18	20.9	52.4	47	21.1	63.3
Hirschsprung's disease	12	13.9	?	23	10.3	2.2
Oesophageal atresia	9	10.5	88.9	29	13.0	48.3
Infantile hypertrophic pyloric stenosis	6	7.0	33.3	9	4.0	22.2
Mesenteric cyst + patent OMD	3	3.5	33.3	0	0	0
Duodenal atresia	3	3.5	66.6	16	7.2	25
Malrotation	2	2.3		20	9	
Total	86	100		223	100	

**Congenital anomalies of the head and neck
Craniofacial cleft and other airway defects**

In 2015, we successfully managed the first African membranous sub-glossopalatal fusion which was associated with a cleft palate (Figure 4). This anomaly caused restrictive breathing and feeding.²²Ours was the tenth successfully managed and reported case in the world.^{22,23}

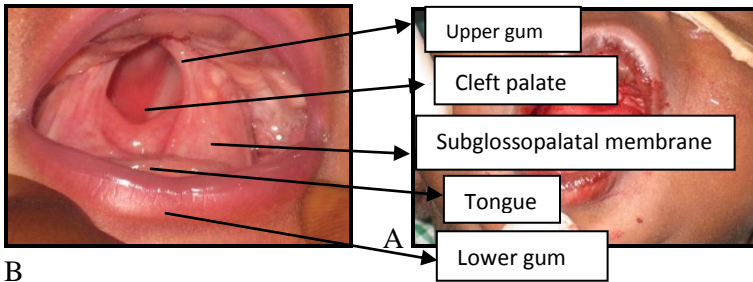


Figure 4: A. Subglossopalata membrane displacing the tongue backwards and also showing cleft palate above. See accumulated saliva in the vestibule on the right. B. After the division of the membrane under local plain lignocaine infiltration. The tongue now moves more anteriorly and palatal cleft is shown.

Mr Vice Chancellor sir, many parents who delivered babies with facial cleft (cleft lip and palate) have psycho-social detachment and abandoned their new born babies because of unpresentable (grotesque) appearance and some may kill these babies through neglect. This necessitated myself and my colleagues to repair some Cleft Lips in the early neonatal period with excellent outcome and early bonding with their parents (Figure 5).²⁴

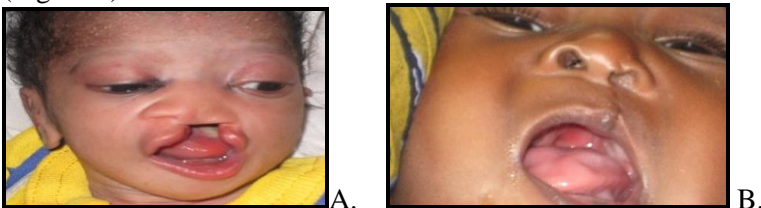


Figure 5: A. Newborn with cleft of the lip and palate B. Repaired upper lip in a 3 week old baby making the baby more acceptable,

Cervical Lymphangioma

These are congenital malformations of the lymphatic system presenting with fluid filled swellings in the neck (Cystic

Hygroma) and on other parts of the body (figure 6 A, B, C). We introduced intralesional injection of bleomycin which had over 98% efficacy with complete resolution as shown in figure 6D and we had no record of any complication or recurrence. This eliminated risk of surgical injury to vital structures and allayed the fear of surgery in parents making this treatment modality a better choice.²⁵

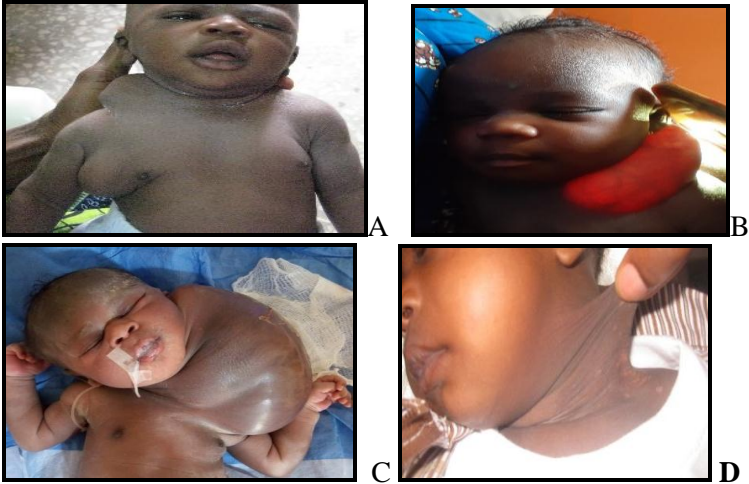


Figure 6: A. Cervical and axillary lymphangioma, B. characteristic brilliant transillumination C. Huge left cervical lymphangioma acutely tilting the neck to the right. D. After bleomycin injection sclerotherapy.

Congenital Intestinal Obstruction

Oesophageal Atresia (congenital absence of channel from throat to stomach)

Mr Vice Chancellor Sir, the poor outcome of management of oesophageal atresia (OA) as shown in the table 3 earlier is not only because of lack of machines to take over the breathing of the babies before and after surgery but also the compromised airway from aspiration of breast milk or contaminated saliva which majority of them presented with. Prevention and or control of this aspiration is a vital step to the

survival of the neonates and is achieved by suction with a Replogle® tube which is usually not readily available and costly for caregivers in most centers in the LMICs. We devised the **ARISE (Abdur-Rahman Ilorin Suction oEsophageal) tube** which is a double lumen **tube in tube** made from readily available, cheap and easily constructed feeding tubes that assists to keep the airway dry under low pressure suction. It makes the baby comfortable, and caregivers and care providers restful (figure 7).²⁶This has improved our outcomes (see table 3 above) of primary oesophageal repair and has been adopted by other centres after presentation at the APSON conference in 2019.

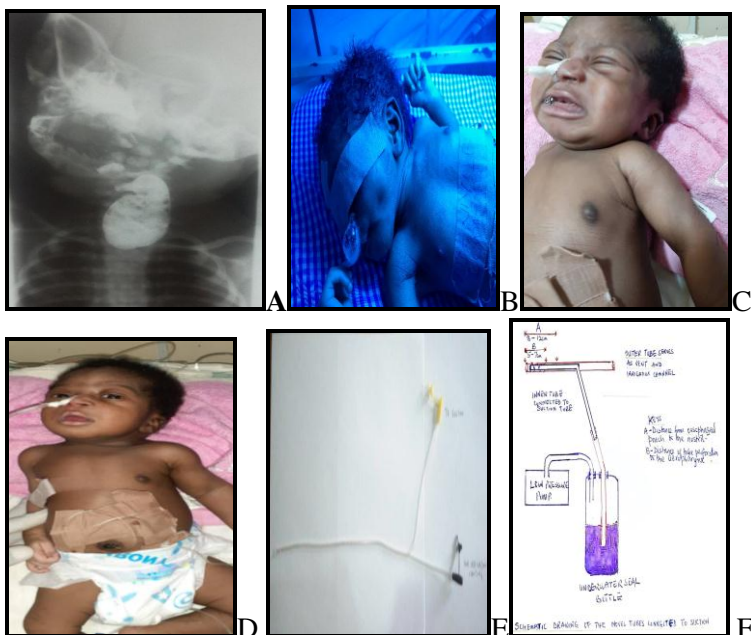


Figure 7: Oesophagram of the patient with OA showing blind proximal oesophageal pouch, B. thick saliva popping out of nostrils and mouth with chest retraction from lung blockage, C. Distressed neonates with OA drooling saliva despite presence of single lumen naso oesophageal tube which must be sucked actively day and night by mother and staff. D: Calm patient after novel ARISE tube was applied. No chest retraction or respiratory difficulty, E: The tube in tube sample, F: Schematic drawing of the connection of the tube to the suction machine G: Video clip of a calm and comfortable baby on ARISE tube.

Anorectal malformation (ARM)

Anorectal malformation (ARM) is the congenital absence of anus in babies which could be associated with multiple congenital anomalies (figure 8).²⁰ The true incidence of the associated anomalies is not known in our practice, due to hampering of full investigation by funds and non-availability of

appropriate technology. In our series, cardiac, vertebral, oesophageal and renal anomalies are among the commonest associations (Figure 9).²⁷

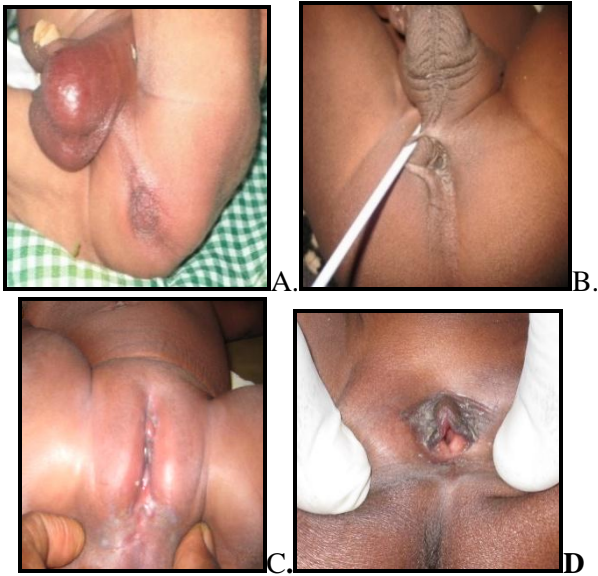


Figure 8: A. Male with absent anus B. Male with stenotic anus covered with skin bridge (bucket handle type) C. female rectovestibular fistula (rectum opening within labial minora), D. Female persistent cloaca- rectum, vagina and urethral opening through single channel

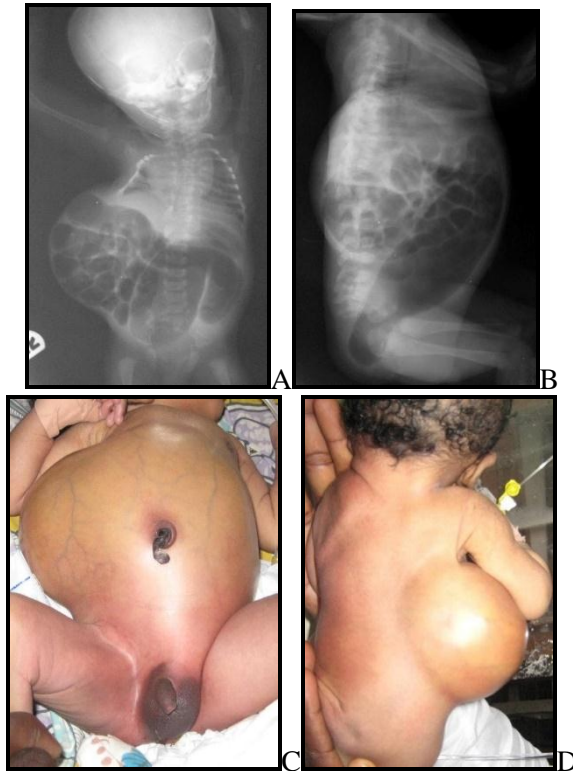


Figure 9A-D: A male neonate with anorectal malformation and associated multiple congenital anomalies in the vertebral (thoracic, lumbar and sacral defects, absence right 7-12th ribs), abdominal wall (right ventrolateral thoracolumbar hernia), Undescended right testis, absent right kidney.

Mr Vice Chancellor Sir, non-availability of real time Fluoroscopy (dynamic contrast x-ray) for pre-intervention determination of the site and configuration of the anorectal malformation informed the step taken by my colleague and I to devise an imaging technique called **non-fluoroscopic pressure colostography** to outline and determine the level of connection between the blind rectum and the urinary tracts(Figure 10).²⁸Failure to determine this connection makes definitive

surgical correction difficult and causes recurrence of fistula and other complications. This novel technique has turned out to be appropriate technology in resource poor settings and has been useful in solving problems.²⁹

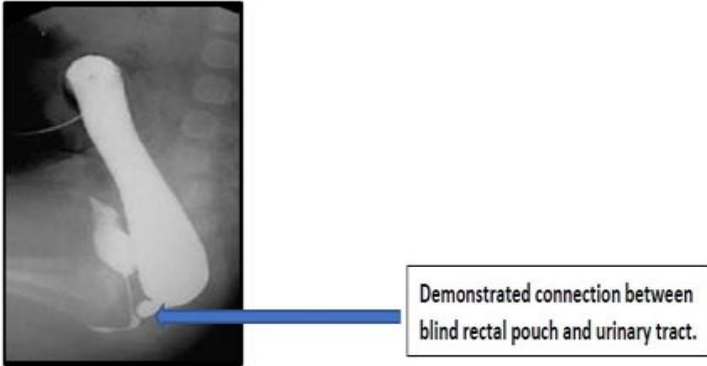


Figure 10: Non-fluoroscopic pressure colostograph demonstrating fistula connection between the rectum and the bulbar urethra

Hirschsprung Disease (HD)

HD is due to congenital absence of nerve cells in the wall of the intestine to control the movement of food and faecal contents. This presents in the new born as delay or difficulty in passing meconium (early greenish stool post-delivery) and in older children as chronic constipation, malnutrition and sepsis. The gold standard for diagnosis is the full thickness rectal wall biopsy which is technically challenging for the inexperienced practitioner. We demonstrated that a two-sample rectal biopsy technique had higher diagnostic yield.³⁰ We also introduced one stage trans-anal pull-through to avoid the morbidity of colostomy, risk of repeated anaesthesia and financial burden of multiple surgeries on the parents. This has become routine in about 70% of confirmed HD cases and has given good cosmetic outlook without compromise of continence. We are currently evaluating the short-term outcome.

Gastro-intestinal Duplication (GD)

Duplication of the gastro-intestinal tract (Figure 11) presents with intestinal obstruction or non-specific abdominal pain (NSAP) with high complications rates especially bowel gangrene.³¹ Seven babies were successfully operated and all of them survived.³¹**Non-specific abdominal pain in children should be adequately investigated to avoid catastrophe.**

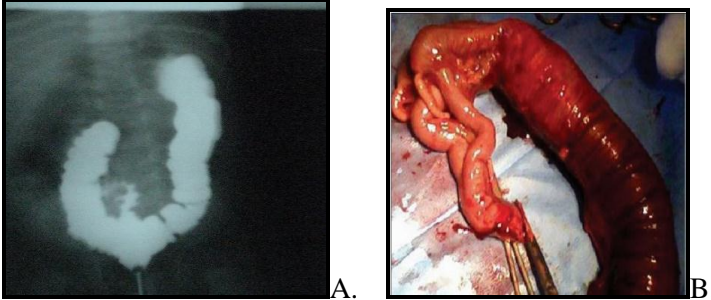


Figure 11: A. Confusing appearance of double colonic loop in barium enema. B. Duplication of terminal ileum, caecum, appendix and the colon

Conjoined twins (Congenital joining of babies)

Conjoined twins (CT) are rare anomalies resulting from abnormal division of fertilised ovum during the process of twinning. The Conjoined Twins have intricate parts that are shared in unique manner from the head to the toes (figure 12). These require thorough investigations to determine anatomic and physiologic implications of separation of the shared parts. The incidence of Conjoined Twins in Nigeria is not known, but in the last 9 decades (1936-2021) about 19 pairs of Conjoined Twins have been reported to have been born alive or dead.

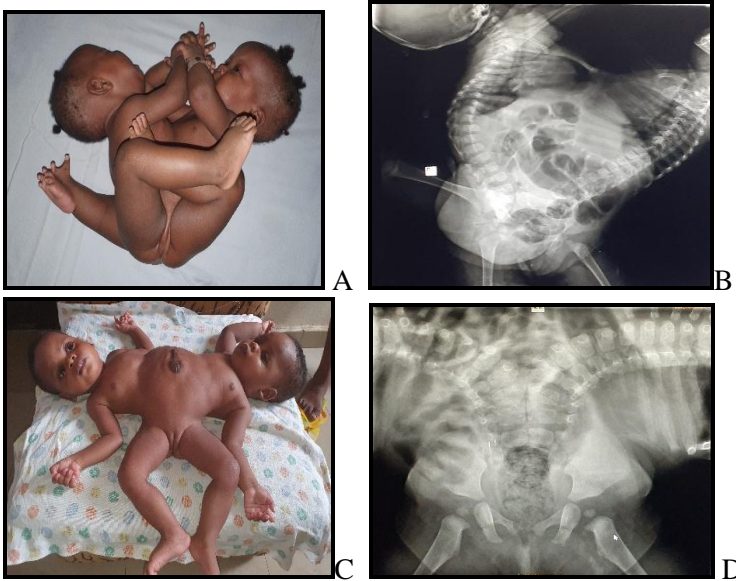


Figure 12: A & B- Thoracoomphaloischiopagustris conjoined twins (joined from the chest, abdomen and pelvis with 3 legs), C & D- Parapagus dicephalus (two heads and chest but joined at the lower spine with single pelvis and two legs).

There have been 3 pairs of Conjoined Twins managed at UIITH, Ilorin in 2005, 2015 and 2020. In our setting, we adapted adult investigative and therapeutic equipment for optimal outcomes since many children equipment are not available. Our success with the highly celebrated first successful separation of Conjoined Twins in Ilorin in January 2021 (figure 13) resulted from the cohesive 66-man multi-disciplinary collaborative team under my leadership and the application of simulation skills in the clinical scenarios was presented and highly commended at the 2021 Bethune Round Table conference in Canada.³²

Our joy was shattered eighteen (18) weeks ago when we lost one of the conjoined twins to adhesive intestinal obstruction precipitated severe septicaemia just two weeks to her second

birthday. The twin sister remains healthy to date and she and parents with two younger set of twins are members of this audience.



Figure 13: A. Conjoined twins at 12 hours of live. B. Preoperative picture at 110 days C. The separated babies at in the Intensive Care unit and D Babies at one year of age.E. UIITH management and some conjoined twins team members

Intestinal resection and Ostomies

The Intestine is a powerful engine room for extraction of the by-products of digested food, fluid balance regulation and immunologic protection. Its functions are affected by the site/segment, extent/length and pathophysiologic state of bowel segment that is functional. Bowel length loss is seen in neglected diseases such as intussusception and Typhoid intestinal perforation.³³ Many of these children were given **salvage stomas for diversion of intestine contents externally as shown in Figure 14.** These were difficult to manage by the caregivers

leading to more complications and deaths preventing completion of definitive surgery.

To overcome this challenge, we formed the **UITH Paediatric Enterostoma Care Team**(doctors and nurses) in 2012 armed with the knowledge and skills to educate and train the caregivers before and after surgery so that they accept and master the care of the stomas (oesophagostomy, gastrostomy, jejunostomy, ileostomy, colostomy) to achieve completion surgery and excellent outcomes. This resulted in improved outcome of stomas and boosted the nurses' acceptance of their new role as educator and care provider for the patients.³⁴ The parents were also satisfied with the excellent care provided by the team.³⁴ This project won me an award at the International Interprofessional Wound Care Course at Stellenbosch University in Cape Town, South Africa in 2013.



Figure 14: A. Poorly sited and managed gastrostomy tube. B. Transverse loop colostomy with dehiscence and Surgical Site Infection, C. Poorly sited divided sigmoid colostomy over the iliac bone, also has skin excoriation D. Healthy divided sigmoid colostomy

Paediatric urology

Circumcision

Circumcision is a painful procedure that is practiced from time immemorial. In UITH, neonatal (age ≤ 28 days) circumcision was commonest (46%) with less than 30% of them receiving anaesthesia before year 2008 because of the belief that

neonates do not feel or recall the painful experience.³⁵ This practice was condemned, and no child had circumcision without a form of safe anaesthesia (local, regional or general anaesthesia) and post procedure analgesia ever again. **The children and their parents were filled with smiles and agony of procedure was eliminated.** In another community-based circumcision survey among under 5 (years) children in Ilorin, the circumcision status of mothers was 65.6%, and under-5 female-child circumcision rate was 46.7%.³⁶ Circumcisions were performed at almost equal frequencies by traditional practitioners (39.8%) and doctors (39.2%), mostly outside the health centres. The mean age at circumcision was 22 ± 0.69 months without any form of anaesthesia. 'Group' circumcision was practiced among 41.2% (2 in 5) of the children increasing the risk of cross infection. One in every 3 children examined had post-circumcision complications including penile torsion, amputation, urethra-cutaneous fistula, clitoral cyst, and buried penis as shown in figure 15.

The complications were concealed and many never presented for help thereby suffering perpetual psychosocial trauma and marital conflicts. The high rate of circumcision complications indicated the need for proper enlightenment and retraining of circumcision providers on the safe methods available.

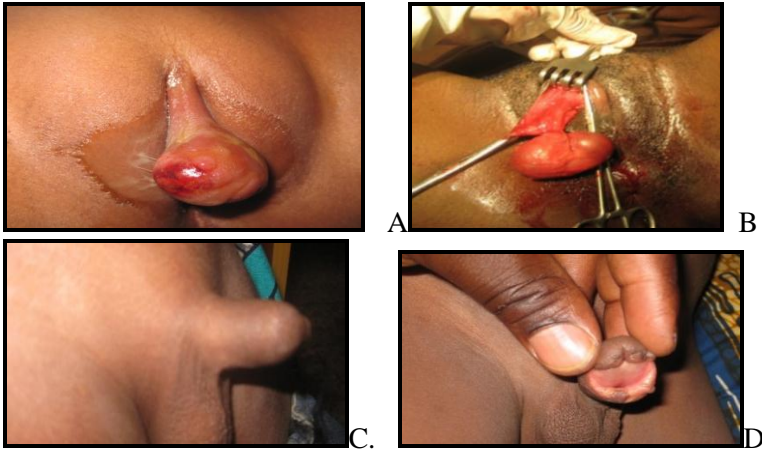


Figure 15: A. Infected clitoral cyst in a 3-year-old B. a 22-year-old with clitoral cyst at excisionshortly before her wedding ceremony

C. Glans (head of penis) amputation D. Wide urethrocutaneous fistula

Hernias in Children

Despite inguinal hernias and hydroceles being the largest outpatient and elective day surgery cases, majority (82.9%) of a group of our patients presented for the first time with complicated inguinal hernias.^{16,38} The parents in 3 or 4 cases (73.4%) had noticed the groin swelling for periods ranging from 1 day to 5 years but delayed because their primary healthcare provider (doctors, nurses, community health attendants, chemist) and guardians advised that the children were too small to be operated upon. This led to an unfortunate and unacceptable scenario in which many of these children lost their testes, ovaries, and parts of the bowel (figure 16A). They also underwent risky and avoidable emergency surgery, had prolonged hospital care and sometimes suffer other morbidities and mortalities.³⁷ **Alas, Children surgery is feasible at any age**

(figure 16B), all you need to do is to present them to the expert.



Figure 16: A extensive small bowel and left testis gangrene from obstructed left inguinal hernia. B A neonate with bilateral inguinal hernia that was successful repaired a day case (see the size of baby compared with my arm).

Hypospadias and Epispadias

Hypospadias is a congenital malformation in which the urethra or opening of the penis is on the under surface of the shaft (Figure 17). Many children were presented late at median age of 18 months (range 2months – 14years) and a third had post-operative complications worsen by pre-operative circumcised.³⁸ Despite the technical challenges that accompany this uninformed circumcision, we succeeded in the repairs of the anomalies such as urethral duplication, circumcised hypospadias, and epispadias.^{39,40}

Dysmorphic appearance of the external genitalia calls for sensitization of the public and health care practitioners to avoid circumcision and present the babies early to prevent irredeemable complications. The preputial skin is useful for the repairs.



Figure 17: A. Glanular hypospadias with intact prepuce, B Coronal hypospadias. C. Repair distal hypospadias. D Uncircumcised perineal (proximal) hypospadias with chordee (figure appeared as if there was no problem until it was exposed in E(see intact dorsal hooded prepuce)F. Repair proximal hypospadias

Undescended testes (UDT)

Failure of passage of the testis from the location of its formation in the abdomen into the scrotum results in failure of multilevel transformation of sperm producing cells (primary oocytes to spermatocytes) due to higher temperature in the abdomen and groin that can cause infertility and cancer (malignancy).

Mobilisation and fixing the testis in the scrotum (Orchidopexy) is recommended to be done early in infancy (before 1 year). Our study revealed that the average age at presentation of UDT and surgery was 4 years.⁴¹ This is VERY LATE! About half (47.8%) of testes were grossly atrophic (small) at the time of surgery and this has great implication for future fertility of the affected children. **Please check the location of your babies' testicles early.**

Disorder of sexual differentiation (DSD) or Intersex or Ambiguous genitalia

The birth of a new baby brings great joy to the family and the expectation of the family is for the birth attendant to announce the sex as the baby is delivered. Inability to ascertain the sex dampens the joy. To compound this problem, the children were presented late after being reared and named with presumed phenotypic sex and there was lack of tools for early investigations to determine the hormonal assays, the genetic and or gonadal sex.⁴² These delayed the average age at final diagnosis which was 7.5 months at our centre where ovotesticular DSD was the commonest.⁴² Unusual presentation of DSD was also seen in a supposedly male child who presented with inguinal hernia but was found to have a persistent Mullerian duct at age 7 years (figure 18).⁴³ The UITH DSD Multidisciplinary Team (MDT) has helped in providing expert care and support for patients and their families.

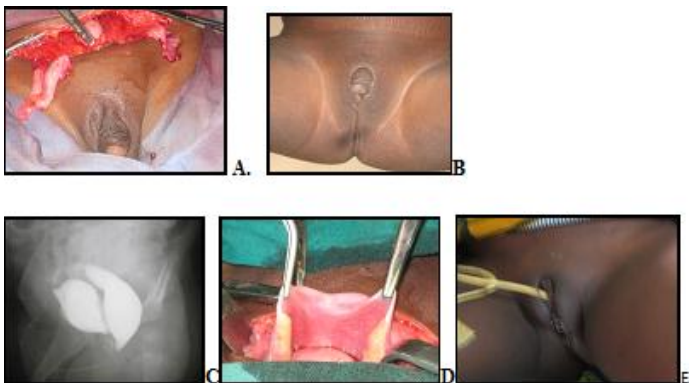


Figure 18: A. The occurrence of male and female sex characteristics in Persistent Mullerian ducts. B. Completely fused labial majora with macrophallus and single opening in severe congenital adrenal hyperplasia D. Urogenital sinogram showing the urinary bladder and dilated vaginal, EMini laparotomy confirming female internal genitalia (uterus, fallopian tubes and ovaries) for patient in B.F. Female sex conversion (feminising genitoplasty).

Paediatric tumours

Teratomas

Teratomas are growth of body structures outside of normal site of origin (Figures 19 & 20). Most of the extragonadal teratomas (77.8%) presented with complications which arose from myths, ignorance, and poverty.⁴⁴ This led to malnutrition, sepsis and malignant transformation despite the tumour location at accessible (open) sites (neck, sacrum).⁴⁴ Of the 21 children managed, successful excision biopsy was done in 19 (85%) patients with post excision mortality of 11.8% due to endotracheal tube blockage and progression of disease.^{44,45}

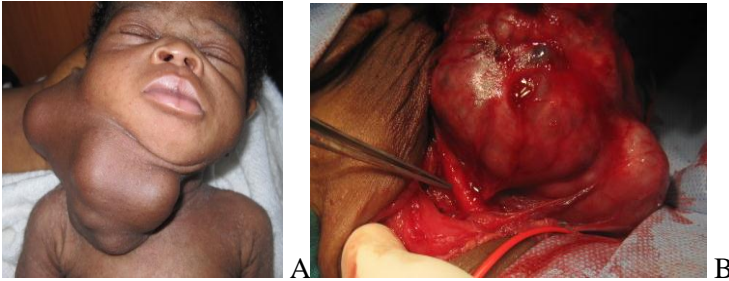


Figure 19: A. Huge cervical teratoma causing respiratory compromise. B. Intraoperative attachment of mass to the carotid artery

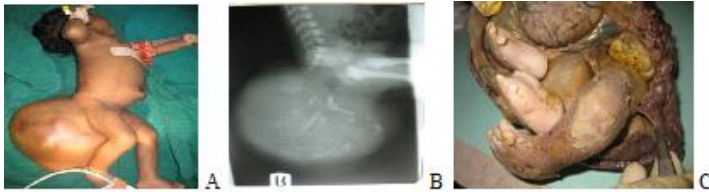


Figure 20: A. Huge sacrococcygeal teratoma (SCT), B. Plain radiography showing cartilaginous and bony tissue in the SCT, C. Post excision photograph showing multiple legs and foot, brain tissue and bowel in the mass

Peritoneal Dialysis

Mr Vice Chancellor sir, I facilitated the introduction of peritoneal dialysis (PD) in children by a discussion with Prof O. T. Adedoyin who as a Paediatric Nephrologist was handicapped by difficulty in getting paediatric canular/catheter for hemodialysis and peritoneal dialysates. I assured him that my division could insert peritoneal catheters to assist these babies with kidney failure. This discussion led to commencement of insertion of peritoneal catheters in children in 2013 and has yielded good fruits as many children's lives were saved even after protracted (more than 7 weeks) kidney failure from various causes.^{46,47}

Paediatric Minimal Access Surgery

Mr Vice Chancellor, Sir. My advocacy for the provision of minimal access (pin hole) surgery (Figure 21 A-C) in children brought about the establishment of Therapeutic Laparoscopy Surgery for both adult and children at the University of Ilorin Teaching Hospital from 2010.^{48,49} We have maximised these benefits in our practice in providing diagnostic and therapeutic management of non-palpable undescended testes, disorders of sexual differentiations (Intersex or ambiguous genitalia), simple and complicated appendicitis, adhesiolysis, omentectomy, pyloromyotomy (Figure 21D & E), laparoscopic assisted cholangiography in

Biliary Atresia, Congenital Diaphragmatic and Inguinal Hernia repair.⁴⁹⁻⁵¹

Our study showed that the coping and psyche of the children and caregivers were boosted by laparoscopy due to faster recovery, improved cosmetic and aesthetic outcome, shorter duration of hospitalizations, decreased wound infection and reduced pain with lesser use of narcotic medications.⁴⁹⁻⁵¹ The Joy of parents was full and they were filled with smiles as a father exclaimed saying: ‘doctor! it is amazing that you have operated on this baby with no obvious wound on the tummy’. Incidentally, the benefits of this technique have been more enjoyed by the elites and NHIS enrollees because of the higher cost which might be catastrophic for families who pay out of pocket.⁴⁹ Administration and government should make this service accessible and affordable for poor families and by extension, it would guarantee adequate exposure and training of many colleagues.⁵² I have trained colleagues, surgical residents and allied health staff and students in the set-up of equipment, and operative techniques in laparoscopy to entrench and expand the scope of practice of laparoscopy across the country and I am happy today that many other surgical units in the hospital have embraced this technique.

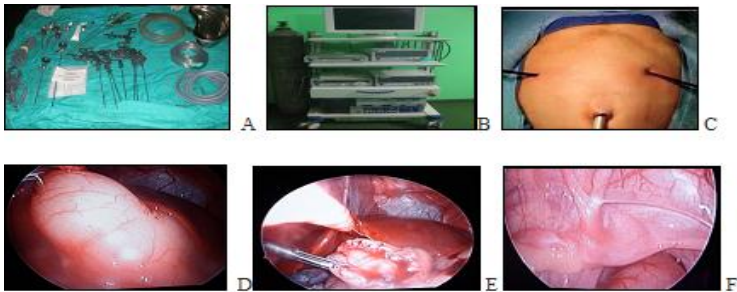


Figure 21 A- C: Laparoscopy instruments, laparoscopy equipment arrange on the tower and abdominal ports in-situ. D & E: Laparoscopy view of pylorus in Infantile Hypertrophic pyloric stenosis before and after the laparoscopic pyloromyotomy F. Laparoscopic view of left hemi-uterus in True hermaphrodite

Paediatric Trauma

There is continued increased incidence of preventable child mortality from unintentional and intentional injuries caused by road traffic crashes, falls, drowning, natural disasters, civil conflicts, and wars resulting in significant negative effects on general health status of children, social disruption on their lives and many children now constitute large proportion of internally displaced persons (IDPs).⁵³ Unfortunately, in SSA, trauma systems hardly exist to adequately address the catastrophic effect of paediatric trauma.⁵⁴

In UITH, more than 70% of admissions and deaths in adult surgical accident and emergency (A&E) room were due to injuries and children constituted about 20% (1 in 3) of the victims.⁵⁵ Though, they arrived the emergency room early, most were brought by volunteers who are ill prepared.⁵⁶

Motorcycle injuries in children resulted in multiple injuries to the extremities (70.5%), and head (63.4%), and also caused high deaths.⁵⁷ Most of the children were pedestrians (52.6%), passengers (40.3%) and teenage riders (7.1%) [Figure 22]. To make matter worse, at home and in the community, a significant proportion of family members used inappropriate means to treat children's injuries with taking them to the hospital while believing that injuries are not preventable.⁵⁸ **Injury to the urinary** (kidneys, ureters, bladder, urethral) **and genital tracts** (penis, testes, vagina, uterus etc) arose from blunt and penetrating trauma in which many were iatrogenic or intentional injuries e.g., circumcision mishaps, rape by pedophiles.^{20,36,53,59}



Figure 22: A. Children as pedestrians attempting to cross congested highway. B. Multiple school children on motorcycle without wearing helmet. C. Blunt abdominal injury post fall with necrotising fasciitis to the abdomen and scrotum, D. Head injured children D facial laceration, E: Brain eversion, F. Frontal laceration and injury to the right eye, G. Gangrenous left lower limb after visit to traditional bone setters H. Above elbow amputation of left upper limb post injury

Beware, chest injuries with diaphragmatic rupture could present in a disguised manner thereby making many children to be wrongly diagnosed and treated as having pneumonia and pleural collection (Figures 23 and 24). This caused delay and compromised the lung function resulting in poor surgical outcomes.⁶⁰ Vigilance and use of appropriate radio-diagnostics facilities like Computerised Tomography scan could

help in quick assessment and care in intensive care facilities could support the patients and assure survival.



Figure 23: A. & B. Bowel loops in the chest from diaphragmatic rupture. There is compression of the lungs and mediastinal shift C, contrast barium meal showing bowel loop in the chest



Figure 24: A. impalement chest injury caused by car tyre compression on the chest in a 5-year-old. B. Stomach and spleen were trap in the diaphragmatic rent. C. Rent in the diaphragm after reducing the bowel from the chest.
Paediatric surgical infections

Mr Vice Chancellor Sir, the 4th leg of Paediatric surgical care after congenital anomalies, tumours and trauma are infections (sepsis). **Infections** are very rampant in our environment and complicate illnesses and surgical interventions in children as seen in most cases of surgical **abdominal emergencies**.²⁰ Many of the children with Intussusception (the telescoping of a segment of the intestine into another, Figure 25 A & B) were still being presented late because of wrong diagnosis and treated for diarrhoea diseases and some of the parents' refusal of surgery.⁶¹

In 2013, in collaboration with the Radiologists, we started a **non-operative ultrasound guided hydrostatic reduction of intussusception** for those that presented early. This resulted in better outcomes and economic earnings for the parents.⁶²

Children with Typhoid intestinal perforation (TIP, a grievous complication of enteric fever) were referred to us in very sick states with a high proportion needing redo surgery from post-operative complications such as enterocutaneous fistula and abdominal abscesses. Mortality from TIP ranged from 10.9% to 39% in children in Nigeria, ours being the least.⁶³

We also documented the rare concurrent occurrence of gall bladder empyema and perforations in TIP (figure 26).⁶⁴ This called for vigilance and thorough exploration at laparotomy for peritonitis in children.

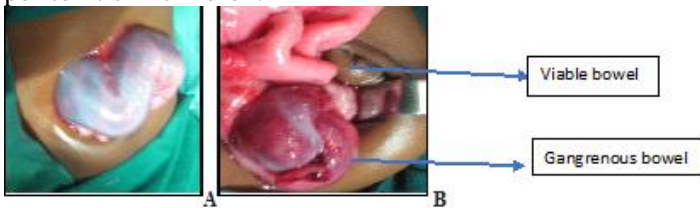


Figure 25: A. Ileocolic intussusception, B Irreducible gangrenous bowel segment in intussusception

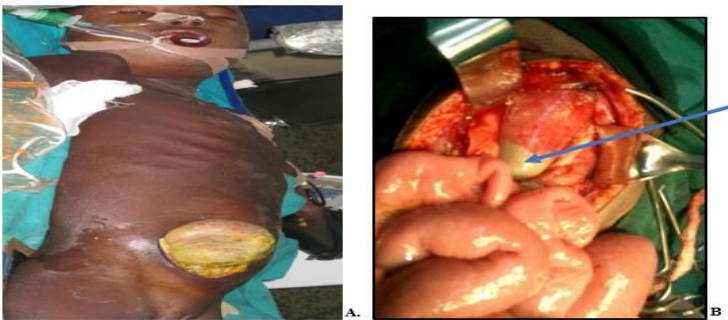


Figure 26:Gangrenous gallbladder (blue arrow) in a patient with typhoid intestinal perforation

Interdisciplinary research

Pain control, anaesthesia and intensive care

The practice of Paediatric Surgery is solely dependent on quality anaesthetic care which we enjoy from our anaesthetists. Consent seeking for the use of anaesthesia in paediatric surgeries is a Herculean task that is accompanied by high anxiety in the parents which could be compounded by finance, hospital logistics and their wards not meeting the eligibility criteria.⁶⁵ These caused parents' frustrations and disappointment, and many delayed or never presented their babies for the needed surgical intervention again. In view of these we introduced videos, drawings, and pictures during pre-operative counselling to illustrate the constituent procedures to allay parental fear and play therapy and video games to distract the children and gain their cooperation at induction (figure 27). Oyedepo et al ⁶⁶ also introduced pre-induction oral ketamine to ensure calmness and secure cooperation of both the patients and the parents. The oral ketamine preparation was found to be acceptable, efficacious, and safe for children.⁶⁶ We have also established that caudal block and inguinal field block with plain bupivacaine provided comparable duration of analgesia (intra and post operative) in pediatric groin surgeries, and it reduced the risk of general anaesthesia.⁶⁷



Figure 27: A baby sitting and playing with toys on the operating table in the theatre while the Anaesthetists were giving the induction medications

The situation of high deaths among surgical neonates and young infants due to non-availability of well-equipped and staffed children intensive care units as reported by Bolaji et al.⁶⁸ in 2009 persist till date. Only 1 in 5 children who needed ventilation could be ventilated because of non-availability of appropriate ventilator and paediatric friendly equipment in the adult ICU.

Multicentre National and International collaborations & Medical-Surgical Education

Mr Vice Chancellor, Sir. My leadership in the formations of a local interprofessional team and international partnerships have helped to expand our capacity and increased stakeholders' collaboration in surgery and perioperative care of children. Many of our staff (doctors and nurses) also benefitted from exchange programmes.

Genetics as the bedrock of the causes, management and prevention of congenital anomalies prompted our collaboration in the Craniofacial Anomalies Researches (Nigeria CRAN and AfriCRAN) that provided evidence of mutation of the MSX1 gene and identified 2 rare novel loci that are potentially pathogenic variants (p.Asn323Asp and p.Lys426IlefsTer6) in non-syndromic cleft lip with or without cleft palate.⁶⁹⁻⁷¹ These studies are expensive and involved a lot of material transfer abroad. We hope that the surge of molecular biology experts and diagnostic laboratories following COVID-19 epidemic would assist locally in determining karyotypes in DSD and peculiar genes responsible for most of the congenital anomalies that we see and manage in our environment so that preventive interventions can be instituted.

Our partnership with the Global Surgery Projects sponsored by National Institute of Health and Research (NIHR) of the United Kingdom have provided evidence that surgical site infections are not reduced by the expensive antibiotic impregnated sutures, and chlorhexidine, or povidone iodine solutions but rather a mandatory change of gloves and

instruments (CHEETAH) at the time of closure of abdominal wounds.^{72,73}

Community service

University of Ilorin Teaching Hospital, Ilorin

I was the Pioneer Executive Director of Centre for Injury Research and Safety Promotion (CIRASP) and Coordinator of Limbless People Nigeria Foundation (LPNF) from 2007 to 2011. As the ED of CIRASP, I sustained the primary goals of trauma research, dissemination of findings and advocacy for appropriate preventive, therapeutic and rehabilitative interventions and we partnered with the Federal Road Safety Corp and the Road transport workers to train them on basic skills to resuscitate victims at the scene and during transport to the health facilities.⁷⁴ My Colleagues and I through TETFund grant, also trained and Certified Unilorin Students as First responders to Trauma victims in January 2020.

We secured and fixed (through Late Mr Aboyeji Afolayan of Omu Aran, founder of LPNF) more than 80 lower limb prostheses to indigent amputees at no cost to them (figure 28).



Figure 28: Lower limb prostheses donated to amputees

As the Chairman, Theatre Users' Committee (2018-2021), I initiated the conversion of the old Obstetric theatre and part of the labour ward to Day case Surgery Centre by the UITH management. I was appointed the **Chairman, Medical Audit Committee of UITH** from November 2020 and we produced the

first Standard Operating Procedure and Medical Audit Parameters Manual for the hospital.

University of Ilorin, Ilorin

I was appointed the **Coordinator of Medical Education Resources Unit (MERU) from 2012 to 2014** and I facilitated the installation of multimedia projectors and public address systems in the 4 lecture rooms of old College of Health Sciences and established the digital audio-visual room for MERU at the take-off of the clinical skills and simulation laboratory. I was also appointed the **Pioneer Coordinator of the Clinical Skills and Simulation Laboratory (CSSL) from 2014 to 2018**. The details of my activities in clinical skills simulation is for another event but I must say for records that Integrated **simulation-based education into the College curriculum (figure 29)** and introduced courses such as Basic Life Support, Basic Skills for Interns and Nurses, Airway Management, Basic Surgical Skills, Trauma Care for Students, and provided support for Objective Structured Clinical Examination (OSCE) in all departments.^{75,76} I assisted in the Advisory, Set up and Training at more than 15 other Medical Schools & institutions in Nigeria including the NCDC and NPMCN. I led the production of the first **SIMULATION BOOK IN NIGERIA- Textbook of Clinical Simulation: a comprehensive manual for Instructors and Learners (figure 30)** to standardise instruction and assessment of simulation education in Nigeria. The book authored by more than 80 faculties has been accepted for publication by TETFund.



Figure 29: A. first set of medical students (Nov. 2015) to use the CSSL, B. Interns learning CPR, C. 3rd Training of Trainers (lecturers) in CSSL on simulation high fidelity simulator (May 2017) D. 1st set of residents for biannual BSS course of West African College of Surgeons (Jan. 2016)



Figure 30: Edited Books

I was appointed the **Head of Department of SURGERY** from 2018 to 2021 when I nurtured to fruition the annual **SURGICAL RESEARCH (SRD) DAY** which has held 4 editions since 2019. This has showcased the surgeons' research activities and encourage scholarship among surgical trainees including the medical students. We have also held two (2) **Advanced Surgical Skills Courses** which has now metamorphosed to an **International Advanced Surgical Skills**

Course in collaboration with the Faculty of Veterinary Medicine and Veterinary Teaching Hospital, UNILORIN. Under my watch the Chronicle of the Department of Surgery was also produced. I was appointed the **Director, Unilorin Medical Screening Centre**, this laudable health promotion centre conceived in 2011 has received massive support in equipping and funding by the University administration, it is now operational, and I encourage patronage from the university community for our general good.

Other Institutions

I have used my God given talent in providing clinical and administrative services at government and private institutions within Ilorin, across the country and abroad. I have served in the education, training, and advocacy committees of various Surgical Associations and agencies (APSON, PAPSA, WOFAPS GICS, KidsOR[®], SmileTrain[®], Global Surgery Unit of University of Birmingham, UK)**providing support for surgical trainees and allied healthcare workers with primary focus on quality paediatric surgery service expansion.**⁷⁷

Postgraduate training and research supervision

Mr Vice Chancellor Sir, in my short sojourn in Paediatric Surgery, I have the privilege to mentor and train more than twenty(10 of whom are primary trainees of UITH) Paediatric Surgery Fellows of both Postgraduate Medical Colleges (NPMCN & WACS), and 2 of them are Professors and 2 are Readers while others are Consultants at different institutions in Nigeria and abroad. I have also participated in the training of more than 100 junior residents who have completed their fellowship in other specialties.I have supervised more than fifteen (15) fellowship dissertations and five (5) MSc. dissertations.

Associations and Unions

I have served the **Association of Paediatric Surgeons of Nigeria (APSON)** since its inception in 2001 and I am currently the Vice President of APSON with membership of over 160. I have also served in the EXCO or sub-committees of the Association of Resident Doctors, UITH Chapter, MDCAN UITH, NMA Kwara state, Islamic Medical Association (IMAN) and IMAN Trust Non-Interest Cooperative, UITH, Society for the study of pain, Pain and Palliative Committee, Hospice and Palliative Association of Nigeria and many others.

Current and future Research

Mr Vice Chancellor Sir, the field of paediatric surgery is evolving, and technology driven, and we look forward to the conduct of more experimental research that will influence our practice and improve our outcomes. We are working with foetal and maternal health physicians to establish a multilevel preventive and health promotion models to reduce burden of childhood surgical diseases through prenatal diagnosis and optimal postnatal surgical care. We have established an international collaboration for state of the arts surgical care of children with Liver, pancreas and biliary (Hepatopancreatobiliary) diseases from which some patients are already benefitting and a **first successful paediatric liver transplant** for one of our patients has been facilitated.

Conclusion

Mr Vice Chancellor Sir, it is evident that the practice of children surgery in our locale is challenging, our efforts are impactful, and we look forward to doing more with the support of all and sundry. **The Joy and Cry of the parents, the children, and the staff in obtaining optimum service are intriguing.** The children are our future, and we need to proffer solutions in the promotion of their surgical health to ensure a healthy nation. **Access to quality Surgical service is part of the Child's Rights**

Recommendations

Mr Vice Chancellor Sir, I wish to recommend that all identified barriers are addressed thus:

A. University of Ilorin and UITH

1. The University and UITH need to collaborate in the urgent provision of state-of-the-arts intensive care facilities for children in our institutions to ensure good outcomes of care and facilitate comparable international research outputs.
2. There is a need to provide dedicated Laparoscopy suite with complementary paediatric gastrointestinal endoscopes to assure seamless service delivery and equipment protection and maintenance.
3. There should be focus on collaboration between basic medical and clinical sciences to establish paediatric surgical clinical trials, antenatal diagnosis, neonatal screening and early postnatal surgical intervention using comprehensive outcome measures.

B. Government at all tiers of the health system

4. The government should step up paediatric surgical care awareness at the primary health care level (Private and Public) so that the conditions are identified early, and appropriate counsel are provided to caregivers or quality first level surgical care particularly in abdominal emergencies, and injuries are implemented to eliminate catastrophes. Trainees at undergraduate and postgraduate levels should do mandatory Paediatric surgery rotation.
5. All existing Children hospital should be upgraded to have complementary well-equipped and staffed Paediatric Surgical services at state and federal levels.

C. Health care providers

6. The healthcare providers should know that medical practice is dynamic, and children are not small adults. Update your knowledge regularly and refer children

early to appropriate specialists for early evaluation and intervention to improve the outcome of care.

D. The public

7. Our children are our future. To ensure a healthy and strong nation, we need to pay adequate attention to their health needs especially surgery. Parents and patients support groups should be formed to encourage mutual exchange of experience. The families and children should be supported by philanthropists.

Acknowledgement

Mr Vice Chancellor Sir, my appreciation goes first and foremost to Almighty Allah, my Creator, the all-knowing, the wise, the Lord of the worlds. I glorify His name and thank Him and praise Him for granting me the grace to traverse my academic and clinical career to this level. I thank the University authority for the honour bestowed on me in appointing me a Professor and the University of Ilorin Teaching Hospital for providing the enabling environment for me to thrive.

I appreciate my father Alhaji Abdur-Rahman Ajani Salawudeen Olowu of blessed memory, for doing everything possible to seeing that I progressed not only to the University but also to study Medicine and start my postgraduate training early. My father was my confidant, friend, and prayer mate. I will forever miss him. I pray that Allah will continue to bless his soul and grant him the highest place in Aljanat. I also thank my mother Alhaja Suwebat Akanke (present in our midst) for your motherly role, I remember the ‘tinko’ meat, and assorted dry fish that you always package for me during the thriving times at medical school. Your prayers always are well appreciated. You have nurtured us well, may you live longer to reap more fruits from your biological, fostered and adopted children. My stepmothers Alhaja Adamo and Alhaja Osenatuhave also been wonderful, and I thank you most sincerely. I am most grateful to my parent’s in-laws Alhaji Abubakar and Alhaja Risikat Afolabi

for your love, prayers and support and for trusting me with your jewel, my charming, courageous and God-fearing better half.

My siblings, my in-laws and extended family members have been my pillar of support and I pray that God will bless you all.

- a. My 22 siblings and their families- Alhaji Tajudeen, Mr Ganiyu, Alhaja Afusat, Alhaja Amudat, Rashidat, Alhaja Modinat Oseni Aminullai, Dr Sulaiman Olayinka (Canada), Engr Abdullateef, Mr Yusuf (Belgium), Alhaji Hassan, Pharmacist Ibrahim (UK), Mrs Bilikis, Alhaja Fatimo Rabi, Engr Daud, Alhaji Raheem, Mrs Adijat (UK), Mr Musbau (UK), Mrs Nimat, Mr Kamaldeen, Mrs Aminat, Mrs Alimat, and Mr Aliu Rahman.
- b. My brothers and sisters in-law- Dr and Mrs Olusola Afolabi, Alhaji Siraj & Mrs Habeebat Bukola Ahmed, Mr and Mrs Yinka Adedeji, Mr Akeem and Mrs Khadijat Kikelomo Adeyeye, Mr Muyideen Lekan Afolabi, Alhaji Yinusa Afolabi, Alhaji Yahaya Afolabi, Alhaji Gani Afolabi, Alhaji Raufu Salawu, Alhaji Alade Oyetunde, Mr Wasiu Afolabi, Alhaji Bashir Obatiajoye, Alhaji Raheem Adebayo and all their family members.
- c. My Uncles and Aunties and their families- Alhaji Bayo Yusuf, Alhaji Saka Adetunji, Alhaji Raimi Olaitan, late Alhaji Raimi Suberu, Late Alhaji Lambe Adisa Salawudeen, Late Mr Aminu Amoo, Late Adamo nee Salawu, Alhaji Hussein Aminullahi, Alhaji Kareem Olayiwola Salawudeen, Engr Alhaji Gani Adesina, Alhaji Sherif Taiye Rahman, Late Alhaji Dauda Rahman, Alhaji Gani Abiola, and many others that time has not permitted me to mention.

My special thanks go to Dr Rasak Jimoh, the Oluomo of Igosun land, Dr Idowu W Olanrewaju, Dr Fatai Alade, and my special sisters Mrs Sabitiu Ojoand Mrs Adijat Ariwajoye for their support and kindness to me always. Alhaji and Alhaja Bayo Ojuolape, and Alhaji and Alhaja

Ismaila Saka Olodo have been very supportive and are well appreciated.

To my wife, Alhaja Aolat Bolanle Abeke, Oninure, you are a pious, virtuous and courageous friend and sister. I am grateful for your love and support. Your commitment to the upbringing of all the children in our care have been wonderful. Your warmness to and respect for my extended family is specially appreciated. This lecture is dedicated to you and to the memory of my father with whom you share many characteristics. Surely after all difficulty there is ease (Q94:6). Insha Allah you too shall be celebrated soon.

To our Children Abdulgafar Olayinka Abdulraheem, Musharafat Olabisi and Muhsinat Bukola, I thank you for making me a proud father and being obedient and pious. May Allah protect you and guide your steps.

Late Dr David Oyedokun (here represented by his son Mr Ayo Oyedokun) had great influence in my life and I shall forever be grateful. May God continue to bless your souls. I cannot forget Alhaji Momonu Oladimeji of Oko Ode and Alhaji Ahmad Olayiwola Kamal of blessed memory and their families who adopted me as their sons and took interest in my progress from my post-secondary admission and all other stages of my career. Alhaji Kamal also provided me the special privilege of participation in caring for your father (our father), the 1st Grand Mufti of Ilorin and founder of Ansarul Islam Society- Sheik Kamalideen Al-Adabiyy (Rahimohullahutaala). Alhaja Aishat Kamal (aka IyaNiyi) has also been very supportive and I cannot thank you enough.

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