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ORAL PRESENTATIONS

CARDIOLOGY

ABK/001

Calcium and Magnesium Levels in Children with Congenital Heart Disease on Diuretics at University of Ilorin Teaching Hospital

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Background: Chronic heart failure (HF) is a common occurrence in children with congenital heart disease (CHD) due to poor access to corrective surgery in Nigeria, necessitating diuretic therapy. Diuretics may affect micronutrient levels, worsening malnutrition in these children.

Objectives: The study determined the relationship between the use of diuretics and serum calcium and magnesium levels in children with CHD compared with healthy age- and sex matched controls.

Methods: The study was an analytical cross-sectional study in which 57 subjects and 57 controls aged 1 to 150 months were recruited over 12 months (July 2023 to June 2024) using a questionnaire. Blood samples were analysed using a MapadaTM spectrophotometer for calcium and magnesium assays.

Results: The prevalence of hypocalcaemia and hypomagnesaemia in the subjects was 64.9% and 56.1%, respectively. The mean calcium was significantly lower in subjects than in controls, 1.74±0.55mmol/l vs 2.05±0.66mmol/l, p=0.006, while the mean magnesium was not statistically different between the two groups (1.75±0.43mg/dl vs 1.85±0.36mg/dl, p=0.170). There was no significant correlation between calcium and magnesium with the duration and dosage of diuretics. Calcium levels were significantly lower with increasing severity of HF, p=0.002, but this was not seen with magnesium (p=0.147).

Conclusion: Children with CHD on diuretic therapy have lower calcium than controls. There was an inverse relationship between the severity of HF and low calcium; hence, there is a need for close monitoring of calcium in children with severe HF on diuretics.

ABK/002

A National Survey of Clinicians' Experience with the Management of Childhood Hypertension in Nigeria

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Background: Despite the rising global concern over early-onset hypertension, limited data exist on Nigerian clinicians' experiences managing hypertensive children and adolescents.

Objectives: To explore routine blood pressure (BP) measurement practices and challenges in the clinical management of childhood hypertension.

Methods: A nationwide online survey of 505 conveniently sampled clinicians who provide healthcare to children and adolescents across Nigeria was conducted using a structured questionnaire.

Results: A majority (91.7%) of Nigerian clinicians measured the BP in children or adolescents in the last 12 months, albeit with errors such as the use of wrong measurement apparatus (91.7%), use of age-inappropriate cuff sizes (59.6%), suboptimal patient rest before measurement (65.5%%), and the use of stethoscope diaphragm instead of bell (87.3%). Over half (57.6%) of the respondents lacked awareness of, or access to, standard paediatric BP nomograms. Proper treatment was hindered by absent age-specific guidelines (66.1%), poor compliance (53.6%), caregivers' denial (43.8%) and limited access to suitable medications (53.9%).

Conclusion: Significant gaps exist in paediatric hypertension management in Nigeria, including equipment availability, clinical knowledge, systemic barriers and parent-related factors. Addressing these issues is vital for appropriate diagnosis and care of childhood hypertension.

ABK/003

Quality of Life and Predictors of Poor Quality of Life among Children with Heart Disease in Lagos, Nigeria

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Background: Children with heart disease (HD) experience significant morbidity beyond cardiovascular complications, including impaired growth, recurrent hospitalisations, and reduced quality of life (QoL). While studies in Africa have examined caregivers' burden, limited data exist on QoL among children themselves, particularly those with acquired heart disease (AHD).

Objectives: To assess the QoL of children with HD in Lagos, Nigeria, and identify predictors of poor QoL.

Methods: A comparative cross-sectional study was conducted among 140 children aged 7–16 years: 70 with HD and 70 matched healthy controls attending Lagos State University Teaching Hospital between February and August 2024. Data were collected using an interviewer-administered proforma and the Paediatric Quality of Life Inventory™ (PedsQL™ 4.0), both child- and parent-reported versions. A total score <70% was classified as poor QoL. Statistical analysis was performed with SPSS v24, using chi-square and logistic regression to identify independent predictors.

Results: Poor QoL was significantly more common among children with HD than controls (65.7% vs. 4.3%, $p<0.001$). The most impaired domain was physical functioning. Children with AHD had the highest prevalence of poor QoL (90%), followed by cyanotic CHD. Absence of definitive cardiac surgery and multiple hospitalisations were identified as independent predictors of poor QoL. Anthropometric deficits and lower oxygen saturation were also associated with poorer scores.

Conclusion: Children with HD in Lagos experience a high burden of impaired QoL, particularly those with AHD and cyanotic congenital HD. Routine QoL assessment, timely surgical intervention, and integrated psychosocial support are recommended to improve holistic outcomes.

ABK/004

Clinical Decision Rules in the Diagnosis of Group A Beta Hemolytic Streptococcal Pharyngitis: A Systematic Review and Meta-analysis

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Background: Rheumatic Heart Disease (RHD) remains a significant public health issue in Nigeria. Acute pharyngitis, primarily caused by Group A Streptococcus (GAS), is a precursor to acute rheumatic fever and RHD if not diagnosed and treated early. The challenge in breaking this link lies in the timely and accurate diagnosis and management of GAS pharyngitis, especially in resource-limited settings.

Objectives: To conduct a comprehensive systematic review and meta-analysis of existing clinical decision rules (CDR'S) for early diagnosis of GAS pharyngitis in resource-poor settings with a focus on identifying factors relevant to the Nigerian context.

Methods: A Search was conducted using the PRISMA guideline. Studies done on cohorts of children and adolescents with symptoms of respiratory tract infection (RTI), using diagnostic or screening CDRs for GAS pharyngitis compared to throat swabs cultured in blood agar to confirm GAS pharyngitis were selected. The outcome was the comparison of diagnostic accuracy of the studies with stated sensitivity, specificity and predictive values.

Results: Six (6) studies with CDR's were reviewed. The pooled prevalence of GAS pharyngitis was 23.63%. Clinical features for GAS pharyngitis varied widely among the studies, except for tonsillar swelling and exudates, with consistently high sensitivity and specificity. There was high heterogeneity ($I^2 > 78\%$) and a low odds ratio (DOR) for diagnostic values across studies.

Conclusion: No CDR demonstrated high diagnostic accuracy across all performance metrics. It was recommended that developing CDR's tailored to the epidemiological and clinical profile of GAS pharyngitis in Nigerian children alongside rapid antigen detection tests (RADTs) should be explored.

ABK/005

Beyond the Norm: Rising Burden of Symptomatic Atrial Septal Defects in Infants in Irrua Specialist Teaching Hospital

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Background: Atrial septal defect (ASD) is among the commonest acyanotic congenital heart defects (CHD) in children, but ventricular septal defect (VSD) is widely reported as the leading lesion globally. However, emerging evidence from Irrua Specialist Teaching Hospital (ISTH) suggests a rising trend of symptomatic ASD occurring more frequently in infants. This observation raises important questions, as the burden of ASD in sub-Saharan Africa may be underestimated due to limited diagnostic resources and underreporting. This underscores the need for robust local data to clarify the true epidemiological profile of CHD in this setting.

Objectives: To determine the epidemiological and clinical burden of ASD in infants seen in ISTH.

Methods: Records of children with CHD managed by the Paediatric Cardiology unit of ISTH over two years were reviewed. Biodata, clinical findings and echocardiographic reports of infants diagnosed with ASD were collated and analysed.

Results: A total of 307 children were seen with CHD, of whom 198 (64.5%) were infants. Among these, 115 infants (58.0%) were diagnosed with ASD alone. The median age of the affected infants was 6 weeks (IQR 2-16). The male-to-female ratio was 1.6:1. The commonest presentation in the infants was tachypnoea (72.3%).

Conclusion: ASD accounted for over half of CHD in infants in ISTH, with most being symptomatic. This highlights a rising burden in ISTH and a need for multicenter studies to clarify the true burden of ASD in the region and for improved early diagnosis, surveillance, and access to pediatric cardiology services.

ENDOCRINOLOGY

ABK/006

Study on Vitamin D in Apparently Healthy Under-five Children in Ile-Ife, South-West Nigeria.

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Background: Recent evidence shows there is an association between vitamin D status and disorders in systems of the body other than bone health. There is a paucity of data on Vitamin D in apparently healthy children in Nigeria.
Objectives: To determine serum Vitamin D, Calcium, phosphorus, and alkaline phosphatase levels and factors related to Vitamin D status.
Methods: The study was part of a larger hospital-based, cross-sectional comparative study, conducted at Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, over 18 months (September 2022 to February 2024) to determine the vitamin D status in children with atopic dermatitis. The data of the control group (children with no known chronic disease who had no febrile illness in the preceding two weeks) were reported. Vitamin D was assayed using Enzyme-Linked Immunosorbent Assay. A level above 50nmol/L was used for Vitamin D sufficiency.
Results: The mean value of Vitamin D was 41.37 ± 12.08 nmol/L, and 18.9% of the children had low vitamin D levels. Most of the participants had normal serum Calcium, Phosphorus, and Alkaline phosphatase. 20.8%, 2% and 7.5% of the participants had low Calcium, low Phosphorus, and high alkaline phosphatase, respectively. Mean Serum Vitamin D was significantly higher in children below 2 years (45.39±13.41nmol/L) compared to the older children (36.28±8.72nmol/L), p = 0.006. Vitamin D was not related to gestational age, sex, socioeconomic status, and mother-reported sunlight exposure practice
Conclusion: Low vitamin D in the study population is high. An epidemiological study with a larger sample size is advocated in the region.

ABK/007

Rickets And Its Pattern of Presentation Among Children Attending Pediatric Endocrinology Clinic at Usmanu Danfodiyyo University Teaching Hospital (UDUTH), Sokoto

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Background: Rickets is one of the presentations of children attending the endocrinology clinic.
Objectives: To evaluate the pattern of rickets among children who presented to the endocrinology clinic at UDUTH, Sokoto.
Methods: A retrospective study on rickets among children who presented to the endocrinology clinic over 14 months (June 2024 to August 2025). The bio-demographic data, clinical, and laboratory features of rickets and outcomes of care were retrieved from the case files.
Results: Fourteen (13%) out of 108 patients seen in the clinic within the 14 months had clinical features suggestive of rickets, with information retrievable only for 11 patients (3 files missing). Out of the 11 patients, 5(45%) were males and 6(55%) females, giving a male-to-female ratio of 2:1. Mean age at presentation was 2.23 ± 0.58 years. Five had supportive X-ray findings (which include splaying and fraying of the metaphysis, thinning of the cortex, among others). Seven (63%) presented with positive biochemical findings (mean serum calcium,1.93 ± 0.29; Alkaline phosphatase, 761.65 ± 445.19). Some identified risk factors were reduced exposure to sunlight and exclusive breastfeeding. Treatment given included Stoss therapy and daily maintenance of calcium. Two (18%) were still on follow-up, while 9(82%) had defaulted after two visits despite counselling.
Conclusion: Bowing of the lower limbs was the most common clinical presentation among others. Intensified health education and counselling could improve treatment outcomes.

ABK/008

Response to Exchange Blood Transfusion in Severe Dyslipidaemia Associated with Diabetic Ketoacidosis: A Case Report

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Background: Severe hyperlipidaemia is an uncommon complication of diabetic ketoacidosis (DKA) in children, with only a few reported cases. Insulin deficiency triggers lipolysis, causing milky blood and increasing the risk of acute pancreatitis and lipaemia retinalis. In severe cases, Omega-3, fibrates, or plasmapheresis may be used.
Objectives: To highlight Exchange blood transfusion (EBT) as an alternative to plasmapheresis for managing dyslipidaemia in DKA.

Case Presentation: We report a 6-year-old boy presenting with polyuria, polydipsia, abdominal distension, coma, tachypnoea, and fever. Examination revealed severe dehydration, Glasgow Coma Scale of 7/15, Kussmaul breathing, tachycardia, blood pressure of 123/75 mmHg, and hepatomegaly. Initial investigations confirmed DKA (blood glucose 388mg/dl, urine ketones 3+). Milky, congealed blood hindered sampling and interfered with laboratory analysis. Total cholesterol (TC) and triglycerides (TG) were 350 mg/dL and 2793 mg/dL, respectively. Sodium, potassium, bicarbonate, urea, and creatinine were 141 mmol/L, 3.4 mmol/L, 3 mmol/L, 111 mg/dL, and 3.1 mg/dL, respectively. He received standard DKA therapy, antimalarials, antibiotics, and EBT. Blood became red 8 hours post-EBT, and he was discharged on day 10. Repeat TC and TG were 162mg/dL and 98 mg/dL, without lipid-lowering drugs.

Discussion: Severe hypertriglyceridaemia (>2000 mg/dL) in paediatric DKA is rare and results from insulin deficiency causing lipolysis with ~20% risk of acute pancreatitis. Laboratory interference is common, as seen in this case. While mild hypertriglyceridaemia frequently resolves with DKA treatment, more severe cases may require omega-3, fibrates, or plasmapheresis. Lipaemia resolved with DKA therapy and EBT, preventing complications in this child.

Conclusion: Exchange blood transfusion can prevent severe hyperlipidaemia complications in DKA when plasmapheresis is unavailable.

GASTROENTEROLOGY/NUTRITION

ABK/009

Neck Circumference as a Simple Screening Measure for Identifying Overweight and Obese Nigerian Adolescents

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Background: The increasing global prevalence of overweight and obesity in adolescents has become a public health concern. The Body Mass Index (BMI) is a common method of assessing overweight (OW) and obesity (OB). Another is the Neck Circumference (NC); however, reports of NC in assessing overweight and obesity in Nigerian adolescents are limited in the literature.

Objectives: To investigate the use of NC as a simple screening tool to detect overweight and obesity among Nigerian in-school adolescents.

Methods: In this cross-sectional study, anthropometry and NC of 3508 adolescents were measured, their BMI z-scores calculated and classified as underweight, normal-weight, overweight or obese. Cut-off for NC corresponding to overweight and obesity, defined using BMI-for-age and sex, was calculated. The receiver operating characteristic (ROC) analysis was used to assess the performance of the cut-offs for both genders. Logistic regression analysis was used to determine the associations of socio-demographic characteristics with the prevalence of overweight and obesity.

Results: The cut-off for NC corresponding to overweight in males ranged from 29.8cm to 33.7cm; for females, it was 29.8cm to 30.8cm. The cut-off for obesity ranged from 30.7cm to 36.7cm in males and 30.6cm to 31.8cm for females. There was a positive, statistically significant correlation between BMI and NC ($r = 0.587$; $p < 0.001$) in both male and female adolescents.

Conclusion: The performance of NC in the detection of overweight and obesity has a positive correlation with BMI among in-school adolescents in Ibadan and is therefore a useful screening tool.

ABK/010

Stool Microscopic Findings in Children Presenting with Recurrent Abdominal Pain in Enugu, South-East Nigeria: A Cross-Sectional Study

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Background: Recurrent abdominal pain (RAP) is a frequent complaint in paediatric practice, affecting 10–20% of school-aged children worldwide. Classically defined as three or more episodes of abdominal pain over three months that disrupt normal

activity, RAP remains a diagnostic challenge due to its diverse aetiologies. In low- and middle-income countries (LMICs), parasitic infections—often overlooked—continue to be endemic and may contribute significantly to RAP.

Objectives: To evaluate stool microscopy findings among children with RAP in Enugu, Nigeria, and to assess associations with age, sex, and inflammatory markers.

Methods: A retrospective review of 168 children aged 3–15 years presenting with RAP between 2016 and 2022. Stool specimens were examined for the presence of yeast cells, Entamoeba histolytica (cysts or trophozoites), and helminths (ova or larvae). Associations between organism presence, demographics, and stool red/white blood cells were statistically analysed.

Results: Yeast cells were detected in 96.4% of samples. E. histolytica cysts/trophozoites were identified in 64.9%, while helminth ova were present in 58.3%. Only six children had no parasites isolated. Among helminth ova, Ascaris lumbricoides was most common (55.1%), while Paragonimus westermani, Metagonimus yokogawai, and Diphyllobothrium latum each accounted for 0.6%. No statistically significant associations were observed between age, sex, inflammatory markers, and organism presence ($p > 0.05$).

Conclusion: The high prevalence of intestinal organisms among children with RAP underscores the importance of routine stool microscopy in LMICs. Early detection and treatment of parasitic infections may reduce the burden of RAP and improve paediatric health outcomes.

ABK/011

Relationship between serum albumin and nutritional status in apparently healthy children aged 6 - 24months in Southwest Nigeria

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Background: Serum albumin is a key plasma protein that has been widely used as a biochemical indicator of the nutritional and health status of children. Children aged 6–24 months are at high nutritional risk due to their transition to complementary feeding, yet there is limited data on serum albumin levels in this age group.

Objectives: To assess the relationship between serum albumin levels and nutritional status among children aged 6–24 months.

Methods: A cross-sectional study was conducted among 220 apparently healthy children aged 6–24 months, who were recruited from primary health centres in Ogun State during immunisation clinics. Anthropometric indices were classified using WHO growth standards. Serum albumin was measured using a colourimetric assay (Bromocresol Green method).

Results: The mean serum albumin concentration was 4.03 ± 0.23 g/dL (range: 3.50–4.80 g/dL); none of the participants had hypoalbuminaemia. Overall, 27.7% of children were undernourished, with wasting being the most prevalent form. Mean serum albumin did not significantly differ between the undernourished and well-nourished children ($p = 0.872$), nor was it influenced by the severity of malnutrition. There was also no significant relationship between serum albumin levels and age group, sex, socioeconomic class, or feeding practices (all $p > 0.05$).

Conclusion: Serum albumin levels remained within the normal range in undernourished children, suggesting that serum albumin may not reliably reflect malnutrition in apparently healthy children. Its diagnostic utility for nutritional assessment in healthy children may therefore be limited.

HAEMATOLOGY/ONCOLOGY

ABK/012

Evaluation of Serum Ferritin levels Among Children with Acute Illness at Federal Teaching Hospital, Ido-Ekiti

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Background: Serum ferritin is an important early marker of iron deficiency, a common nutritional problem in growing children. It is also an acute-phase reactant that is elevated during periods of infection and inflammation. There are controversies about the effects of mild illness on serum ferritin levels.

Objectives: To determine the serum ferritin levels in children with acute illness, 6-59 months, compared with apparently healthy children of the same age.

Methods: This cross-sectional comparative study was conducted among 260 children aged 6– 59 months at the Children Outpatients Clinic of the Federal Teaching Hospital, Ido-Ekiti, from August 2021 to May 2022 to determine the differences in the serum ferritin levels of children with common acute ailments (Upper Respiratory Tract Infection (URTI), Malaria, and Diarrhoea) and apparently healthy children. The purposive sampling technique was used to recruit 113 apparently healthy children as controls and 147 children with acute illnesses as subjects. Five millilitres of blood were collected for the determination of serum ferritin level.

Results: The median serum ferritin value (56.08 µg/l) of subjects was higher than that of controls (47.50 µg/l) [p=0.05]. There was a significant association between acute illness and increased serum ferritin values (p=0.013). This difference was not affected by age and anthropometric parameters of study participants. Children with URTI were at a higher odds (AOR: 2.60(1.06- 6.34), p-value: 0.04) of having higher serum ferritin values.

Conclusion: This study demonstrates the effect of acute illnesses on serum ferritin, highlighting the need for cautious interpretation in ill children.

ABK/013

Relationship Between Lipid Profile, Degree of Haemolysis And Risk For Stroke Among Paediatric Sickle Cell Anaemia Patients in Abeokuta, Nigeria

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Background: Dyslipidaemia is a risk factor for stroke in the general population. Chronic haemolysis in sickle cell anaemia (SCA) is known to lead to dyslipidaemia; however, a direct relationship between dyslipidaemia and stroke risk in children with SCA.

Objectives: To determine the relationship between dyslipidaemia, haemolysis, and transcranial Doppler velocities (TCD) among paediatric SCA patients.

Methods: Seventy-five eligible SCA subjects aged 2 to 15 years were recruited, while 75 haemoglobin AA individuals served as controls. Fasting lipid profiles, packed cell volume, lactate dehydrogenase (LDH), and reticulocyte count samples were obtained from participants, and TCD scans were performed on subjects according to the STOP protocol.

Results: Subjects had significantly lower total cholesterol ($P < 0.001$), low-density lipoprotein cholesterol ($P < 0.001$), and high-density lipoprotein cholesterol ($P < 0.001$), and higher triglyceride and TG/HDL-c ratio values compared to controls. There was a negative correlation between LDH level and TC and HDL-c values ($r = -0.306$; $p = 0.039$ and $r = -0.408$; $p = 0.000$, respectively). The LDH level positively correlated with TCD velocities in the middle cerebral and internal carotid arteries bilaterally (right MCA: $r = 0.322$, $p = 0.005$; left MCA: $r = 0.362$, $p=0.001$; right ICA: $r = 0.310$, $p = 0.007$; left ICA: $r = 0.407$, $p = 0.000$). The HDL-c levels negatively correlated with TCD velocity from the right middle cerebral artery ($r = 0.238$; $p = 0.041$). Packed cell volume negatively correlated with velocities from all the right-sided cerebral arteries.

Conclusion: This study demonstrated a significant relationship between dyslipidaemia, haemolysis, and TCD readings in paediatric SCA subjects.

ABK/014

***Carica papaya* leaf extract modulates the Gardos channel and exhibits *in-vitro* anti-sickling effect on HbSS erythrocytes: A preliminary report**

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Background: Several ethnobotanical remedies are being used to combat the HbSS scourge in the sub-Saharan Africa (SSA) region, with little or no empirical evidence on their efficacy and mechanisms of action.
Objectives: To assess the effects of *Carica Papaya* leaf extract on the Gardos channel gene (KCNN4) modulation and its *in-vitro* anti-sickling potentials relative to hydroxyurea, Ciklavit and folic acid, which are commonly used agents by HbSS patients in SSA.
Methods: The modulatory effect of the *Carica papaya* leaf extract on the Gardos channel gene was explored using 40 male Wistar rats. The *in-vitro* anti-sickling potential on HbSS erythrocytes was explored using various concentrations of the extract ranging from 0.25 mg/ml 2mg/ml compared to hydroxyurea, Ciklavit and folic acid on 10 HbSS samples. The phytochemicals and micronutrients in *Carica papaya* leaf extract were investigated.
Results: *Carica Papaya* leaf extract significantly downregulated the Gardos channel gene expression compared to Ciklavit, folic acid and untreated Wistar rat. It exhibited dose-dependent *in-vitro* anti-sickling activity less than hydroxyurea but comparable to Ciklavit. The *in-vitro* anti-sickling potentials of the tested agents were in the following order: hydroxyurea > *Carica papaya* > Ciklavit > folic acid, with a significant difference between *C. papaya vs* hydroxyurea ($p<0.0001$) but comparable to Ciklavit. *C. papaya vs* Ciklavit ($p=0.84$). However, folic acid did not exhibit any *in-vitro* anti-sickling effect.
Conclusion: *Carica Papaya* leaf extract downregulated the Gardos channel and demonstrated dose-dependent *in-vitro* anti-sickling property. *Carica papaya* leaf extract may have potential as an adjuvant therapy in HbSS care.

ABK/015

Prevalence of Sickle Cell Disease and Sickle Cell Trait Among Children and Adolescents in Nigeria: A Systematic Review and Meta-Analysis

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Background: Sickle cell disease (SCD) is among the most common genetic disorders globally, with Nigeria bearing the highest burden. However, the true prevalence of SCD and its genetic driver—the sickle cell trait (SCT)—remains uncertain, limiting effective planning and resource allocation.
Objectives: This study systematically reviewed and synthesised available data on the prevalence and determinants of SCD and SCT among Nigerian children and adolescents.
Methods: Following PRISMA guidelines (PROSPERO ID: CRD42024556354), we searched AJOL, PubMed, EMBASE, Google Scholar, Cochrane Library, Scopus, and Web of Science for studies published from January 1950 to October 2024. Eligible studies were assessed using the Newcastle-Ottawa Scale adapted for cross-sectional studies. A cumulative meta-analysis was performed to estimate pooled prevalence and associated factors.
Results: Thirty studies involving 211,938 participants met the inclusion criteria. The pooled prevalence of SCD was 4.0% (95% CI: 3.0–6.0; I^2=99.6%), while SCT prevalence was 21.0% (95% CI: 20.0–23.0; I^2=90.5%). The northwestern zone recorded the highest SCD (7.0%; 95% CI: 3.0–11.0) and SCT (23.0%; 95% CI: 19.0–28.0) prevalence, whereas the southeastern and southwestern zones had the lowest SCD (2.0%) and SCT (19.0%) rates, respectively. No significant associations were found between SCD prevalence and sex or socioeconomic status.
Conclusion: SCD and SCT remain highly prevalent among Nigerian children and adolescents, with marked regional disparities. These findings highlight the urgent need for targeted screening, prevention, and management strategies across high-burden regions.

ABK/016

Haematological Correlates of Cerebral Vessel Velocities in Children with Sickle Cell Anaemia in Keffi, Nigeria

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Background: Stroke is a major complication of sickle cell anaemia (SCA). Transcranial Doppler (TCD) ultrasonography predicts stroke risk but is poorly accessible in resource-limited settings.
Objectives: To determine haematological parameters associated with cerebral blood flow velocity in children with SCA at Federal Medical Centre, Keffi.
Methods: This cross-sectional study involved 116 children with SCA aged 2–16 years in steady state. Time-averaged mean maximum velocity (TAMMV) of the middle cerebral arteries was measured using non-imaging TCD. Associations between TAMMV and haematological parameters were assessed using Pearson correlation and linear regression. Variables with significant associations were further analysed using multiple linear regression. Receiver operating characteristic (ROC) analysis was used to determine haemoglobin thresholds associated with elevated TAMMV.
Results: Mean age was 8.58 ± 3.80 years, with a male-to-female ratio of 0.9:1. Mean TAMMV was 105.12 ± 21.15 cm/s and mean haemoglobin concentration was 7.36 ± 1.08 g/dL. TAMMV showed a significant negative correlation with haemoglobin concentration. On multiple linear regression, haemoglobin concentration remained the only independent predictor of cerebral blood flow velocity in the right middle cerebral artery (β = −4.529, p = 0.008; 95% CI −7.826 to −1.233). ROC analysis demonstrated higher TAMMV at haemoglobin levels below 7 g/dL.
Conclusion: Low haemoglobin concentration is associated with elevated TAMMV in children with SCA and may guide prioritisation for TCD screening

ABK/017

Treatment Abandonment in Paediatric Oncology: Its Prevalence, Predictors and Impact on Survival Rates

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Background: Treatment abandonment is a major cause of treatment failure in childhood cancer care. It remains one of the factors for the wide gap in survival rates between the high and low middle-income countries. There is a paucity of information on the outcome following treatment abandonment among affected children.
Objectives: To identify the prevalence of treatment abandonment, the predictors and the outcome of treatment in individuals who abandoned treatment.
Methods: A three-year retrospective study spanning July 2022 to July 2025 of newly diagnosed cancer cases in children aged 0 to 18 years at the paediatric oncology unit of the Lagos State University Teaching Hospital, Ikeja.
Results: A total of 294 diagnoses were made during the study period. Half (n = 147, 50%) of subjects abandoned treatment. In all, 54 (18.4%) are alive, 11 (3.7%) completed treatment and are lost to follow-up care. Out of the 147 who abandoned treatment, 30 (20%) represented to our facility. The treatment plan following representation was curative for 8 (26.6%) and end-of-life care for 21 (70%). In all, 22/30 (73%) of these subjects died, and 4/8 (50%) of those with a curative plan still abandoned treatment. Disease type $\chi^2 = 10.881$, p = 0.284), age ($\chi^2 = .219$; p = 0.363) and gender ($\chi^2 = .502$; p = 0.277) were not predictors of treatment abandonment. Treatment abandonment was commonest during chemotherapy 110/147 (75%).
Conclusion: The prevalence of treatment abandonment in childhood cancer care is high. It is a major contributor to treatment failure and death.

INFECTIOUS DISEASES

ABK/018

Attitude and Preparedness toward Antimicrobial Resistance and Stewardship among Clinical Students at a Tertiary Institution

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Background: Antimicrobial resistance (AMR) remains a growing concern, driven largely by irrational antibiotic use. It is, therefore, important to look into the attitude and preparedness of future

healthcare professionals toward antimicrobial stewardship (AMS).

Objectives: To assess the attitude and preparedness of clinical students toward AMR and AMS.

Methods: A descriptive cross-sectional study was conducted among 422 clinical students of Olabisi Onabanjo University. Data were collected using a self-administered questionnaire, and descriptive statistics were performed.

Results: Clinical students demonstrated highly positive attitudes toward AMR and stewardship (95%; 95% CI: 92.9%-97.1%). Most recognised AMR as a serious public health issue (96.5%; 95% CI: 94.75%-98.25%). Confidence in explaining AMR to patients was moderate (72%; 95% CI: 67.7%-76.3%), while nearly all acknowledged the healthcare professionals' role in combating resistance (97.2%; 95% CI: 95.63%-98.77%). Inappropriate practices such as self-medication were largely rejected (70.6%; 95% CI: 66.25%-74.95%).

Preparedness indicators were comparatively higher: 85.8% (95% CI: 82.47%-89.13%) felt prepared to apply AMS principles in future clinical practice, and 78.2% (95% CI: 74.26%-82.14%) had educated others on antibiotic misuse. However, only 21.3% (95% CI: 17.39%-25.21%) knew where to report suspected AMR cases. Participation in AMR-related seminars was low (26.3%; 95% CI: 22.10%-30.50%). Willingness to engage in future AMS training was high (85.3%; 95% CI: 81.92%-88.68%).

Conclusion: Clinical students exhibited positive attitudes and considerable preparedness toward antimicrobial stewardship, indicating their potential to play a significant role in mitigating antimicrobial resistance in future practice. Fostering this can therefore reduce the burden of antimicrobial resistance in Nigeria and even globally.

ABK/019

Determinants of knowledge of HPV and Malaria vaccine among medical students in a College of Medicine in Ogun State, Nigeria

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Background: HPV and malaria significantly burden sub-Saharan Africa. With Nigeria expanding HPV and malaria vaccination, medical students' knowledge is crucial, as they are future healthcare providers. This study assessed their vaccine knowledge and key determinants of their knowledge.

Objectives: To assess the levels and determinants of HPV and malaria vaccine knowledge among medical students in Ogun State.

Methods: A cross-sectional study of 200 clinical students was conducted; data were collected using questionnaires, and statistical analyses were done to assess sociodemographics, HPV vaccine knowledge, and malaria vaccine knowledge. P-values <0.05 were considered significant.

Results: The mean age of participants was 24.38 ± 2.68 years; 52% were male. Overall, 76.0% demonstrated good knowledge of the HPV vaccine, compared to 53.5% for the malaria vaccine. Knowledge gaps were most notable regarding HPV vaccine dosing (20.5% correct) and Nigeria's introduction date (7.5% correct), as well as malaria vaccine dosing (47.5% correct) and national adoption (12.0% correct).

Female students and those in the 600 level were significantly more likely to have good knowledge of both HPV (AOR = 2.176; p = 0.027; AOR = 2.442; p = 0.010) and malaria vaccines (AOR = 1.830; p = 0.042; AOR = 2.827; p < 0.001).

Conclusion: Medical students showed high HPV and malaria vaccine knowledge, but there were gaps in the knowledge of national vaccination policies and dosing. Academic level and gender predicted knowledge, highlighting the need for stronger curriculum-based education, which may strengthen future immunisation advocacy.

ABK/020

Enhanced Adherence Counselling Effectiveness Amongst Paediatric Patients with High Viral Load on HAART at Usmanu Danfodiyyo University Teaching Hospital, Sokoto

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Background: Enhanced Adherence Counselling (EAC) is an interventional program that provides targeted adherence counselling for HIV-infected individuals on antiretroviral therapy (ART) who have unsuppressed viral loads before diagnosing treatment failure. The main goal of HAART is viral suppression, which has reduced morbidity, mortality and improved survival rates among children living with HIV infection

Objectives: To assess the effectiveness of EAC in achieving viral suppression in paediatric patients who had an unsuppressed viral load.

Method: A retrospective study of HIV-infected children on ARVs at Paediatric ART Clinic, UDUTH, Sokoto who were virally unsuppressed over 8 years. Information retrieved from the case notes and adherence register included HAART regimen, viral load before and after EAC, among others.

Result: A total of 21 children were studied. The M: F ratio was 1:2. Mean age was 12.53. 17(81%) were on TLD and 4(19%) were on ABC/3TC/DTG. The mean viral loads before and after EAC were $2.55x10^4$ (±331455.94) cpm and $1.4x10^3$±2853.68 cpm, respectively. 14 (66.7%) out of the 21 children studied were adolescents. Thirteen (62%) had viral suppression after the EAC sessions, 5(23.8%) didn't have viral load suppression after EAC, 3(14.3) were still on follow-up.

Conclusion: The EAC is effective in achieving viral load suppression among HIV-infected children on ART. Monitoring of viral load and effective EAC at unsuppressed viral load will improve the outcome of ART and survival rate of HIV-positive children in our community.

ABK/021

Predictors of Morbidity and Mortality Among Children with Diphtheria in Sokoto: A Prospective Cohort Study

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Background: Diphtheria is a major cause of preventable childhood mortality globally, with recurrent outbreaks over the last three years in Sokoto State.

Objectives: To determine the predictors of morbidity and mortality among children hospitalised with diphtheria in Usmanu Danfodiyo University Teaching Hospital, Sokoto, Nigeria.

Methods: A prospective cohort study was conducted among 250 children below 16 years with clinical diphtheria between January 2023 and September 2025. Socio-demographic and clinical characteristics were recorded at admission, and participants were followed until discharge or in-hospital death.

Results: Morbidity occurred in 165 (66%), mortality in 46 (18.4%). Median time to presentation was longer in complicated cases (5 vs 3 days; Mann–Whitney p=0.003). Independent predictors of morbidity were unvaccinated status (aOR 2.8, 95% CI 1.6–4.6), delayed presentation >5 days (aOR 2.2, 95% CI 1.3–3.8), age <5 years (aOR 1.7, 95% CI 1.0–2.9) and bull neck (aOR=2.44, 95% CI: 1.22–4.88) while of mortality were unvaccinated status (aHR 2.9, 95% CI 1.7–5.1), delayed presentation (aHR 2.2, 95% CI 1.3–3.8), and myocarditis (aHR 3.6, 95% CI 2.0–6.6). Cox regression confirmed shorter survival among unvaccinated and late presenters (log-rank p<0.001). The mortality model showed strong discrimination (AUC=0.87), good calibration (Hosmer-Lemeshow p>0.05), and explained variance (Nagelkerke R^2=0.46).

Conclusion: Lack of vaccination, delayed presentation, and myocarditis predict poor outcomes in paediatric diphtheria. There is a need for improved vaccination programs and timely referral systems to reduce diphtheria-related deaths.

ABK/022

Can the Immunisation Card Serve as an Audit of Preventive Child Care Services for Children Admitted to Hospital?

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Background: The immunisation card (IC) is an important health record as it documents vaccinations and other services that a child receives. The utility of the cards depends on the reliability and accuracy of the

recorded data, health workers using the record as a reference source of the child's medical history and consistently requesting the card during clinical encounters. Few studies have assessed the completeness of the content of ICs in Nigeria.

Objectives: To determine the level of completeness of the data in ICs of Nigerian children.

Method: Following ethical clearance, this cross-sectional study recruited consecutive children aged 2 - 59 months who owned an IC and were admitted to the children's emergency room of the University of Benin Teaching Hospital. Data (age, gender, receipt of various services such as immunisation, weighing, and birth registration) were obtained from the IC.

Results: There were 351 children aged between 2 and 59 months, of which 181(51.6%) were males. The majority, 297(86.7%), were reportedly weighed, but documentation of 2 or more weights was only available for 270(76.9%). About 30% of the children had no graph plots of their weights. Only about a quarter (24.8%) had heights on their cards. Birth registration numbers were only seen on 42% of the cards, even though 328(93.5%) caregivers had reported registration. Vaccinations were recorded on all (100%) cards.

Conclusion: For the ICs to be useful, health care workers in immunisation clinics must comply with inputting all relevant data on ICs.

ABK/023

Low Awareness but High Willingness: Pregnant Women's Perception and Predictors of Malaria Vaccine Acceptance for Self and Child in Southwest-Nigeria

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Background: Malaria remains a major cause of maternal and child morbidity in sub-Saharan Africa. The malaria vaccine offers a new preventive strategy, but its uptake depends on public awareness and acceptance. This study assessed awareness, perceptions, and predictors of malaria vaccine acceptance among pregnant women for themselves and their children, in a tertiary hospital in Southwest Nigeria.

Methods: A descriptive cross-sectional study was conducted among 274 pregnant women using a structured questionnaire.

Results: Most respondents were aged 20–34 years (75.5%), had tertiary education (55.1%), were self-employed (69.0%), and married (85.3%). Less than half (48.5%) were aware of the malaria vaccine. Nonetheless, 86.1% believed in vaccination as a preventive measure, and 87.2% believed the malaria vaccine can protect against malaria. Willingness to receive the vaccine was high, 81.0% for self and 79.9% for their children. Factors significantly associated with acceptance included belief in the vaccine's protective ability ($p<0.001$), free vaccination ($p<0.001$), convenient vaccination location ($p=0.002$), healthcare provider recommendation ($p=0.002$), and information about vaccine safety and effectiveness ($p=0.005$). Logistic regression revealed that belief in vaccine protection (AOR=0.30, 95% CI: 0.17–0.53, $p<0.001$) and healthcare provider recommendation (AOR=0.48, 95% CI: 0.25–0.93, $p=0.029$) were independent predictors of vaccine acceptance.

Conclusion: Although awareness was low, pregnant women showed positive perceptions and high willingness to accept malaria vaccine for self and child. Enhancing awareness and promoting provider-based recommendations will be crucial for successful malaria vaccine roll-out in Southwest Nigeria.

ABK/024

Contact Tracing as a Dual Strategy to Identify Children with Latent TB Infection and Active TB Disease in Nigeria

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Background: Tuberculosis preventive therapy (TPT) is a cornerstone of childhood Tuberculosis (TB) control, reducing the risk of progression from latent infection to active disease. In high TB burden settings such as Nigeria, embedding TPT delivery within contact-tracing activities offers a dual opportunity: to protect exposed children through prevention while simultaneously identifying those with active TB disease.

Objectives: To evaluate the implementation of TPT among child contacts of TB patients in Nigeria as a dual strategy for identifying active TB cases and children eligible for preventive therapy.

Methods: Children with known TB exposure, particularly household contacts of bacteriologically confirmed TB cases, were screened using standardised symptom-based algorithms and clinical evaluation. Asymptomatic children without signs of active disease were assessed for TPT eligibility, whereas symptomatic children underwent further diagnostic assessment, including Xpert MTB/RIF testing, to confirm active TB. Programme data from 2022–2024 were analysed to determine the yield of TPT initiation and TB case detection.

Results: Integration of TPT within contact-tracing activities enhanced early case detection and preventive coverage. In 2022, among 99,732 child contacts identified, 35,365 (35.4%) were initiated on TPT, and 4,236 (4.2%) were diagnosed with active TB. In 2023, 176,201 contacts were screened, 83,955 (47.6%) were placed on TPT, and 10,211 (5.8%) were identified with active TB. In 2024, of 168,448 contacts screened, 95,632 (56.8%) commenced TPT, while 13,311 (7.9%) were diagnosed with TB. The year-on-year increase demonstrates growing program efficiency and strengthened integration of preventive and diagnostic efforts.

Conclusion: Implementing TPT through contact tracing provides a pragmatic, dual-benefit strategy for child TB control.

ABK/025

Prevalence and intensity of urinary schistosomiasis among primary school pupils in Ndokwa-East LGA of Delta State, Nigeria

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Background: Schistosomiasis is a water-borne tropical parasitic disease that is a major public health problem. It is a neglected tropical disease that is still endemic in Nigeria and other West African countries. The complications associated with the infection in children are enormous.

Objective: To determine the prevalence and intensity of urinary schistosomiasis among primary school children in Ndokwa-East Local Government Area of Delta State.

Methods: This study was a cross-sectional descriptive study of primary school children aged 5-15 years in Ndokwa-East Local Government Area (NELGA) of Delta State. Urine microscopy (centrifugation method) was done for the pupils, and the schistosoma eggs were counted and graded according to WHO standards. Relationship between the intensity of schistosomiasis infection and the infection prevalence was tested using chi-square analysis and Fisher's exact test where indicated.

Results: A total of 374 pupils were studied. Twenty-eight (7.5%) of them had urinary schistosomiasis; The mean egg count was 35.29 eggs per 10ml of urine (range of 5-120 eggs per 10 ml of urine), and 18 out of the 28 infected pupils (64.3%) had mild infection. Gender, age, distance of the school/home from water body, level of interaction of the pupils with water bodies, occupation of the caregivers/parents, and education level of the caregivers/parents did not significantly influence the intensity of the infection.

Conclusion: In conclusion, the intensity of urinary schistosomiasis infection among primary school pupils in NELGA was not affected by socio-

demographic characteristics of the subjects and their water contact activities.

ABK/026

Malaria vaccine introduction in Nigeria; knowledge, concerns and acceptance among mothers of under five children in Asaba, Nigeria

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Background: Malaria remains endemic in Nigeria with a high burden of morbidity and mortality among children. Due to the high burden of morbidity associated with malaria, it has led to the introduction of malaria vaccination. Despite this giant stride, it has faced several challenges.

Objectives: To assess the mothers' knowledge, concerns and acceptance of the malaria vaccine among mothers of under-five children in Asaba.

Methods: This is a cross-sectional study that was carried out among 400 mothers attending the immunisation unit or antenatal clinic using a simple random method. A structured, pretested, self-administered questionnaire was used to collect the data.

Results: A total of 400 women participated in this study. The study revealed that 58.7% of the mothers have heard of the malaria vaccine, with only 44.0% having a fair knowledge of the vaccine. The majority of the mothers (44.7%) got their information from a health worker. Most of the concerns raised by the mothers were the fear of side effects (44.0%), while only 36.8% of the mothers were willing to vaccinate their children with the malaria vaccine.

Conclusion: For effective introduction of malaria vaccine as part of the routine immunisation program in Nigeria, dedicated effort must be made by all stakeholders in ensuring timely dissemination of information on the importance and need for malaria vaccine, as this will aid its acceptability by the populace.

ABK/027

Incentivising Measles Vaccinations with SQ-LNS Supplementation in Children aged 6-23 Months: The NutriVax Pragmatic Cluster-Randomized Trial in Yobe State, Northeast-Nigeria

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Background: Immunization and Nutrition Integration is an emerging priority in global health, and is particularly relevant to parts of northern Nigeria where high rates of malnutrition and low vaccination coverage pose a double threat to child survival.

Objectives: To evaluate whether integrating Small-Quantity Lipid-Based Nutrient Supplement (SQ-LNS) distributions with the routine National Program of Immunisation (NPI) — the NutriVax strategy – improves population-level measles vaccination coverage compared to NPI alone in children aged 12–23 months.

Methods: We conducted a two-arm superiority pragmatic parallel cluster-randomised controlled trial with baseline and endline household cross-sectional surveys. Twenty wards of Nguru and Karasuwa Local Government Areas, Yobe State, were randomly allocated (1:1) to the NPI (control) or NutriVax arm. The primary outcome was measles 1 vaccination coverage. Secondary objectives included pentavalent vaccination.

Results: Between July 2024 and July 2025, 19,805 children received SQ-LNS in the NutriVax arm.

Baseline and endline surveys were performed in May 2024 and May 2025, respectively. At endline, children in the NutriVax arm were twice as likely to receive measles 1 vaccination than in the control by card-only (ORa 2.08 (95% CI: 1.3-3.35, p = 0.004)). Difference in difference analysis showed a +20.1-percentage point (pp) increase in measles 1 coverage by card-only (95% CI: 13.6-26.6pp, p<0.0001), +15.1pp (95% CI: 8.1-21.6pp, p<0.0001) by card/declaration, and -12.5pp in zero-dose children (95% CI: -18.5 to -6.3pp, p<0.0001) in the NutriVax arm compared to the control.

Conclusion: SQ-LNS served as a powerful incentive for measles and pentavalent vaccinations in Yobe State, Nigeria.

ABK/028

Acceptability and Feasibility of Integrating SQ-LNS Incentives into Routine Immunisation Programmes among Children 6-23 months, in Yobe State, Nigeria

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Background: Undernutrition and infectious diseases reinforce each other, increasing child morbidity and mortality in northern Nigeria. Low immunisation coverage and high malnutrition rates worsen this challenge. Integrating Small-Quantity Lipid-Based Nutrient Supplements (SQ-LNS) with routine immunisation delivery, as explored in the NutriVax-Measles intervention, may improve uptake, but its feasibility and acceptability remain unclear.

Objectives: To explore the acceptability and feasibility of integrating SQ-LNS with routine immunisation to improve vaccination coverage among children aged 6–23 months in Yobe State.

Methods: An exploratory qualitative study was conducted through in-depth interviews (n=53) and focus group discussions (n=8) with key stakeholders (caregivers, health care workers, community health workers, and community representatives). Thematic analysis was guided by multiple conceptual frameworks.

Results: The majority of the participants expressed satisfaction with this integrated approach. Most caregivers admitted not vaccinating their children because they did not see its importance. However, with the SQ-LNS distributions and awareness sessions, they were motivated to bring their children for monthly rations, where they also update their children's vaccinations. All stakeholder groups emphasised the importance of community leaders' support and targeted male sensitisation to address the prevailing sociocultural norms. Additionally, improved service organisation to reduce waiting time, provision of comfortable waiting areas, and increased access for remote residents were considered crucial to enhance caregivers' acceptability of the intervention.

Conclusion: The NutriVax–Measles intervention is acceptable and feasible within Yobe's fragile health system, provided that community sensitisation is sustained, fathers and community leaders remain engaged, and well-organised decentralised service delivery.

ABK/029

Pattern and Outcome of Diphtheria-Related Complications Among Paediatric Patients at the Federal Teaching Hospital, Birnin Kebbi

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Background: Diphtheria remains a re-emerging vaccine-preventable disease in Nigeria, contributing significantly to morbidity and mortality among

children. Understanding the pattern and outcomes of diphtheria-related complications is essential for enhancing case management and preventive measures.

Objectives: To assess the pattern and outcomes of diphtheria-related complications among paediatric patients at the Federal Teaching Hospital, Birnin Kebbi.

Methods: This descriptive cross-sectional study analysed data from 49 children diagnosed with diphtheria over one year. Information was collected using a structured questionnaire and statistically analysed.

Results: Among the 49 patients, 55.1% were females and 53.1% lived in rural areas. Most (45.5%) were aged between 5 and 10 years. Incomplete immunisation was observed in 53.1%, while 38.8% were fully immunised. Airway obstruction (46.9%) was the most common complication, followed by renal failure (18.4%) and pneumonia (16.3%). The overall mortality rate was 36.7%, with 51.0% recovering and 12.2% leaving against medical advice. A significant association existed between age and outcome ($p < 0.05$), with children under five years experiencing the highest mortality. No significant association was found between sex and outcome ($p > 0.05$).

Conclusion: Diphtheria among children in Birnin Kebbi carries high complication and mortality rates, especially in younger and incompletely immunised patients. Strengthening routine immunisation and prompt case management are crucial to reducing diphtheria-related deaths.

ABK/030

Prevalence and Clinical Pattern of Superficial Fungal Infections among Primary School Children in Ido-Osi LGA, Ekiti State, Nigeria

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Background: Global prevalence of superficial fungal infections (SFI) among school children is estimated to be 20-25%, with rates as high as 72% documented in some studies among Nigerian school children. Prevalence of SFI has, however, not been documented among primary school children in Ekiti State even though studies have shown that there are implications for school attendance, self-esteem and long-term dermatological health when school children have SFI.

Objectives: To determine the prevalence and clinical pattern of SFIs among primary-school children in Ido-Osi Local Government Area, Ekiti State, Nigeria.

Methods: A school-based cross-sectional study was conducted among children aged 6-15 years recruited between January and July 2023, through multistage random sampling. Participants were examined, and cases were defined clinically, by Wood's lamp examination, microscopy and culture. SFIs were classified as tinea capitis, tinea corporis, or other superficial mycoses.

Results: Of 510 children examined, 243 (47.6%) had SFIs. The most common presentation was tinea capitis (85.6%), followed by pityriasis versicolor (5.8%) and others (such as tinea corporis (4.1%). Lesions were more frequent among boys (57.1%) than girls (42.9%) and among children aged 6-10 years. Trichophyton (61.8%) and Microsporum (24.4%) species were the commonest causative organisms identified, while Malassezia species was the least common organism identified (1.1%).

Conclusion: SFIs are highly prevalent among primary school children in Ido-Osi, with tinea capitis predominating. Routine school health screening, improving personal hygiene awareness and targeted health education are needed to reduce burden and prevent complications.

NEONATOLOGY

ABK/031

Point of Admission Hypothermia and Correlates among Neonates admitted into the Special Care Baby Unit, UDUTH, Sokoto, Nigeria

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Background: Neonatal hypothermia is a preventable cause of mortality. In Usmanu Danfodiyo University Teaching Hospital (UDUTH), Sokoto, North-Western Nigeria, the burden of neonatal hypothermia is not documented despite being a referral centre for neonatal care.

Objectives: The study determined the prevalence of point of admission hypothermia, causes, and outcome among neonates admitted to the Special Care Baby Unit (SCBU) of UDUTH, Sokoto.

Methods: This was a retrospective study among neonates aged 0–28 days admitted in the first half of 2025. We extracted clinical and socio-demographic data from the case folders using a structured proforma. Temperatures were classified according to WHO thresholds.

Results: Of the 258 neonates admitted within the study period, 230(89.1%) had their temperature at admission recorded, comprising 149(64.8%) males and 81(35.2%) females. Mean admission temperature was 37.0±1.2ºC;(range:33.0-42.0ºC). Point of admission hypothermia was recorded for 68(29.6%) neonates, of which 44 (19.1%) had mild, 24 (10.4%) had moderate, and none had severe hypothermia. Common diagnoses associated with hypothermia were birth asphyxia 34(50%), prematurity 19(27.9%) and neonatal sepsis 6(8.8%). Hypothermia was significantly associated with low birthweight (LBW)(p=0.03), diagnosis at admission(p=0.00), and mortality(p=0.002). There were five (2.2%) mortalities, and all had hypothermia.

Conclusion: Point of admission hypothermia occurred in about a third of neonates admitted. Asphyxia and prematurity were the common causes. It was also associated with increased risk of mortality.

ABK/032

Predicting the risk of Significant Hyperbilirubinaemia in Indigenous black preterm babies at the University College Hospital Using Cutaneous Jaundice Meter

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Background: Neonatal jaundice is one of the commonest medical problems in newborns, with a higher risk of developing significant hyperbilirubinaemia in preterm babies. Cutaneous bilirubin measurement is non-invasive and can help in early detection of significant hyperbilirubinaemia.

Objectives: To determine TcB levels at 24 and 48 hours that predict the risk of developing TSB ≥ 5mg/kg/dl in the first week of life in preterm babies; the correlation between Transcutaneous bilirubin (TcB) and Total serum bilirubin (TSB) in the first week of life in jaundiced indigenous black preterm babies, and the effect of phototherapy on this correlation.

Methods: It was a prospective cross-sectional study carried out on preterm babies with gestational age of 26 weeks to <37 completed weeks in the lying-in wards and neonatal wards of the University College Hospital (UCH), Ibadan, Oyo State between August 2018 and January 2019, using a convenience sampling method. They had clinical examination and bilirubin measurements.

Results: Of the 80 babies reviewed, 72(90%) developed significant jaundice while 8(10%) did not. The TcB values at 24 and 48 hours that best predicted the likelihood of developing significant hyperbilirubinaemia were 6.53mg/kg/dl with a sensitivity of 67% and specificity of 100%; and 6.69mg/kg/dl with a sensitivity of 76% and a specificity of 85%. There was a positive correlation between the TcB and TSB in the first week of life; phototherapy did not affect this correlation.

Conclusion: In preterm newborns, transcutaneous bilirubin measurements can be used to predict significant hyperbilirubinaemia in the first 48 hours of life and intervention commenced early.

ABK/033

Risk Factors and Outcome of Perinatal Asphyxia in Term Babies Delivered at Wesley Guild Hospital, Ilesa, Nigeria

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Background: Perinatal asphyxia (PA) is the failure of a newborn to initiate and sustain spontaneous breathing at birth. It is a significant cause of neonatal morbidity and mortality in developing countries.

Objectives: To determine the risk factors and outcome of perinatal asphyxia in term babies delivered at the Wesley Guild Hospital (WGH), Ilesa, Nigeria.

Methods: Term babies with and without PA were recruited into a comparative cross-sectional study. Relevant information, including socio-demographic, perinatal and clinical factors, were obtained from the mothers and caregivers and recorded into a predesigned proforma. Perinatal asphyxia was defined using a 5-minute Apgar score <7. These factors were analysed and compared among the babies. Study participants were managed, and the outcome of hospitalisation was documented.

Results: Eighty-four babies each were recruited with and without PA. Significantly higher proportion of mothers of babies with PA compared to those without PA were from low socioeconomic class ($p = 0.002$), had only primary education ($p = 0.001$), were primiparous ($p = 0.003$), unbooked ($p < 0.001$), delivered per vaginal ($p = 0.003$), received antenatal care outside WGH ($p < 0.001$) and had meconium-stained liquor ($p = 0.005$). None of these factors, however, independently predicts asphyxia using a binary logistic model. Most (94.0%) of the babies with PA were discharged home, while mortality occurred in five (6.0%) of the babies.

Conclusion: The major risk factors for PA in Nigeria are modifiable and preventable. Primary preventive strategies, including affordable basic obstetric and newborn care, will go a long way in reducing the burden of PA.

ABK/034

Impact of Neonatal Resuscitation Training on Knowledge and Confidence Among Traditional Birth Attendants in Makoko, Lagos, Nigeria

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Background: Birth asphyxia is a leading cause of neonatal mortality in Nigeria, particularly where Traditional Birth Attendants (TBAs) are primary childbirth caregivers.

Objectives: To evaluate the impact of a one-day neonatal resuscitation training on TBAs' knowledge and confidence in managing birth asphyxia in Makoko, Lagos.

Methods: We conducted a pre-post intervention study with 23 TBAs. A structured training workshop was delivered using the Helping Babies Breathe and Essential Newborn Care modules. A validated questionnaire assessed knowledge of the definition of asphyxia, recognition of danger signs, and resuscitation steps before and immediately after the training.

Results: Participants had a mean age of 37.6 years and 13.9 years of practice. Baseline knowledge was low: only 21.7% correctly defined birth asphyxia, 26.1% recognised resuscitation as an emergency, and 30.4% could mention correct resuscitation steps. Post-training, significant improvements were observed: the correct definition increased to 47.8% ($p = 0.039$), emergency recognition rose to 100% ($p < 0.001$), and 95.7% could list the correct steps ($p < 0.001$). Self-reported confidence in managing a non-breathing newborn surged from 26.1% to 100% ($p<0.001$).

Conclusion: A brief, structured training significantly improved TBAs' practical knowledge and confidence in managing birth asphyxia. This underscores the potential of equipping TBAs with resuscitation skills as a pragmatic strategy to reduce neonatal mortality in resource-limited settings. Further research is needed to assess the long-term retention of the skills and their clinical impact.

ABK/035

Neonatal electroencephalographic patterns in Nigerian term newborns with hypoxic ischaemic encephalopathy and relationship with neurodevelopmental outcomes at age 3 months

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Background: Neonatal electroencephalography (EEG) represents a reliable and cost-effective means of assessing cerebral function and predicting

neurological outcomes in babies with hypoxic ischaemic encephalopathy.

Objectives: To evaluate EEG patterns in the first week of life in term newborns with HIE and their relationship with neurodevelopmental outcomes at age three months.

Methods: A prospective, analytical study of 108 term neonates with HIE admitted to the University College Hospital, Ibadan, Nigeria. Each infant underwent serial conventional EEG within the first 48 hours and on the seventh day of life. Clinical severity of HIE was graded using Thompson scores. Neurodevelopmental outcome was assessed at three months with the Ages and Stages Questionnaire (ASQ).

Results: HIE severity by Thompson scores at presentation was mild in 71 (65.7%), moderate in 25 (23.2%) and severe in 12 (11.1%). EEG abnormalities were identified in 77 (71.3%) neonates at age < 48 hours. Severely abnormal EEG features- excess discontinuity, burst suppression, and absent sleep–wake cycling were significantly associated with severe HIE ($p = 0.013$). By day 7, 63 (64.9%) infants showed significant improvement in EEG patterns, while 21 (21.6%) showed worsening patterns. At age three months, 42 (44.2%) of 95 survivors had features of developmental impairment in one or multiple domains of development. Persistently abnormal or worsening EEGs by day 7 predicted poor neurodevelopmental outcomes ($p < 0.001$).

Conclusion: Burst suppression and persistently abnormal EEG on day 7 strongly predict neurodevelopmental delay at three months. Burst suppression on day 7 had the highest predictive accuracy for adverse outcomes.

ABK/036

Predictors and Outcomes of Hypothermia Within One Hour of Admission Among Neonates at Neonatal Unit, Lagos State University Teaching Hospital

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Background: Neonatal hypothermia, defined as core body temperature <36.5 degree-Celsius, is a known threat to neonatal survival, especially in low-resource settings due to poor quality healthcare, poor referral system and limited thermal care practices. Knowledge of its predictors may guide effective and timely interventions.

Objectives: To assess the prevalence, predictors and outcome of hypothermia within the first hour of admission among neonates admitted to the Neonatal Unit, LASUTH, Ikeja, Lagos.

Methods: We reviewed prospectively collected de-identified data of neonates admitted between May and October 2025, inputted into an electronic database (African Neonatal Network/Vermont Oxford Network). Hypothermia was defined as temperature <36.5 degrees-Celsius.

Results: Of 330 neonates, temperature was recorded for 289 infants, and 199 had documented temperature within the first hour of admission. Overall prevalence of hypothermia-within-1-hour was 35.7% (95% CI: 29.0-42.8), similar between inborn (37.5%) and outborn (33.9%). Bivariate analysis linked hypothermia to younger admission age, lower gestational age, low birth weight (LBW), low 1- and 5-minute Apgar scores, and preterm birth($p<0.05$). Multivariable logistic regression identified LBW as the sole independent predictor (adjusted OR =3.84 [95% CI:1.9-7.6]). Death was more common among the hypothermic than normothermic (38% versus 12.5%, OR=4.3 [95%CI:2.1-8.7], $P<0.001$). Length of hospital stay was not significantly affected ($p=0.45$).

Conclusion: Neonatal hypothermia within the first hour was common among neonates admitted into our unit, underscoring the need for a rigorous and timely thermal-care protocol (including Kangaroo Mother Care (KMC)) implemented sustainably, preferably via a quality-improvement approach, especially for LBW.

ABK/037

Effects of Combined Erythropoietin and Magnesium sulphate on Neurological Recovery in Neonates with Severe HIE

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Background: Hypoxic-ischaemic encephalopathy (HIE) following severe perinatal asphyxia often

results in long-term neurological deficits. The combined use of erythropoietin (EPO) and magnesium sulphate ($MgSO_4$) as neuroprotective agents has shown promise.
Objectives: To evaluate the effectiveness of combined EPO and $MgSO_4$ in promoting neurological recovery in term neonates with severe HIE.
Methods: In a randomised controlled study of 100 term neonates with stage II or III HIE, participants were assigned to receive either combination therapy (EPO+$MgSO_4$) or $MgSO_4$ alone. Neurological outcomes, including time to seizure control, return of primitive reflexes, normalisation of tone, and Thompson score, were assessed over 28 days.
Results: The combination group had significantly faster seizure control (1.34±1.61 vs. 2.71±2.23 days, $p = 0.002$), earlier return of suck reflex (4.73 vs. 7.92 days, $p = 0.014$), and quicker normalisation of muscle tone (16.12 vs. 21.31 days, $p = 0.037$). Thompson scores also normalised earlier (5.88 vs. 8.52 days, $p = 0.008$).
Conclusion: EPO combined with $MgSO_4$ significantly accelerates neurological recovery in severe perinatal HIE. These findings support the neuroprotective synergy of this regimen in resource-limited settings.

ABK/038

Factors Associated with Poor Growth Velocity Patterns Among Preterm Neonates at Lagos State University Teaching Hospital

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Background: Preterm birth remains a major contributor to neonatal morbidity and mortality, with growth velocity being a key determinant of outcomes. Identifying modifiable factors affecting preterm growth is essential to improve their survival and quality of life.
Objectives: To describe the growth velocity pattern of preterm infants and identify the independent predictors of poor growth velocity.
Methods: A prospective cohort study was conducted from June 2023 to March 2024 involving 152 preterm neonates recruited within 24 hours of birth. Weight, length, and head circumference were measured weekly until 40 weeks postmenstrual age. Growth velocity for weight was calculated using the exponential model. Maternal and neonatal factors associated with poor growth velocity were analysed using multivariate logistic regression.
Results: The growth velocities were 10.78 g/kg/day for weight, 0.63 cm/week for length, and 0.67 cm/week for head circumference. Independent predictors of poor growth velocity for individual parameters included ≤4 antenatal care (ANC) visits ($p < 0.05$), lower gestational age ($p < 0.01$), lower birth weight ($p < 0.009$), and delayed initiation of enteral feeding ($p < 0.001$). When all growth parameters were combined, early initiation of enteral feeding (within 24–48 hours of birth) was significantly associated with better growth outcomes.
Conclusion: Poor growth velocity among preterm infants is associated with inadequate ANC attendance, lower gestational age, low birth weight, and delayed enteral feeding. Improved maternal healthcare access and early initiation of enteral feeds, when clinically tolerated, may enhance growth outcomes in preterm neonates.

ABK/039

Evaluation of the Reliability of Transcutaneous Bilirubinometry in Neonates under Phototherapy for Jaundice at Two Tertiary Hospitals in Abuja, Nigeria

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Background: Transcutaneous bilirubinometry has emerged as a non-invasive and cost-effective tool for screening and treatment monitoring of neonatal jaundice. There is a dearth of information on its reliability during phototherapy.
Objectives: To compare transcutaneous bilirubin (TCB) values with corresponding total serum bilirubin (TSB) values in icteric neonates before, during and after phototherapy.
Methods: This was a prospective cohort study of 254 icteric neonates admitted for phototherapy at two tertiary hospitals in Abuja. Paired values of TCB and TSB were obtained before, during and after phototherapy. TCB and TSB values were compared

using paired t-test, Chi-square, Pearson correlation and Bland-Altman's plots. At defined cut-off values, the sensitivity, specificity, area under the curve (AUC) and predictive values were determined using the Receiver Operating Characteristic (ROC).

Results: The study showed a strong positive correlation between TCB and TSB values, with correlation coefficients of 0.9, 0.7 and 0.6 before, during and after phototherapy, respectively. Bland-Altman's plot showed 0.4mg/dl (95%LOA: -2.8-1.8), -0.5mg/dl (95%LOA: -4.8-3.8), -0.4(95%LOA: -4.2-3.2) respectively, before, during and after phototherapy. At a cut-off TCB value of 12mg/dl pre-phototherapy, area under the curve (AUC) of 0.9, sensitivity of 100% and specificity of 86.8%; during phototherapy, AUC of 0.9, sensitivity of 84.6% and specificity of 86.1%; after phototherapy, AUC of 1.0, sensitivity of 100% and specificity of 100%.

Conclusion: TCB can be used to monitor hyperbilirubinemia in neonates under phototherapy; however, its interpretation should be done with caution.

ABK/040

Improving Kangaroo Mother Care Uptake in a Neonatal Unit through a Quality Improvement Approach in Lagos, Nigeria

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Background: Kangaroo Mother Care (KMC) is a proven, cost-effective intervention that significantly improves the survival and health outcomes of preterm and low-birth-weight neonates. Despite its strong evidence base and inclusion in global newborn care guidelines, its implementation remains suboptimal in many health facilities, often due to limited awareness, inadequate training, infrastructural constraints, and inconsistent policy support.

Objectives: To increase KMC uptake through a structured quality improvement (QI) intervention.

Methods: A QI project was conducted in the inborn neonatal unit between June and September 2025. The baseline audit showed that only 71% of eligible infants received KMC. A multidisciplinary QI team identified key barriers: inadequate caregiver awareness, inconsistent staff training, poor documentation and limited monitoring tools. Interventions implemented included staff reorientation, supervised documentation, parental education, KMC checklists, and peer support groups for mothers. Data were collected weekly using the NEST 360 run charts to track progress. The team applied Plan–Do–Study–Act (PDSA) cycles to test and refine interventions.

Results: Following implementation, KMC uptake increased from 71% to 100% over four months. Sustained improvement was observed even during a brief sepsis outbreak that temporarily reduced admissions. Staff compliance with documentation improved from 40% to 90%. Mothers reported greater confidence and bonding with their infants.

Conclusion: A structured QI approach using simple, context-appropriate interventions significantly improved KMC uptake and staff engagement. Continuous mentorship, regular data review, and family involvement were critical for sustaining progress. This can be adapted by similar neonatal units to strengthen KMC implementation.

ABK/041

Prevalence and Risk Factors for Neurodevelopmental Delay in Very Low Birth Weight Preterm Infants at Corrected Age in Lagos, Nigeria

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Background: With improving survival rates of very low birth weight (VLBW) preterm infants, the focus of care is shifting towards mitigating long-term neurodevelopmental sequelae. However, robust data on the prevalence and profile of neurodevelopmental delay (NDD) in this population within Nigeria remains limited.

Objectives: To determine the prevalence and associated risk factors for NDD in preterm VLBW children at corrected age of six months to two years in Lagos, Nigeria.

Methods: We conducted a multicentre, comparative cross-sectional study between June and November 2024. A total of 156 children were enrolled using a consecutive sampling technique: 78 VLBW preterm children and 78 age- and sex-matched term, normal birth weight controls. Participants were recruited from the neonatology clinics of two major teaching hospitals. Neurodevelopment was assessed using the Malawi Developmental Assessment Tool (MDAT).

Results: The prevalence of NDD was significantly higher in the VLBW preterm cohort (61.5%) compared to the term controls (16.7%), yielding an odds ratio of 8.01 (95% CI: 3.78–16.94; p<0.001). The most affected domains were language (35.8%) and social-emotional (34.6%). Male sex was identified as a significant risk factor, with male infants having five times the odds of NDD (OR=5.0, 95% CI: 0.06–0.75; p=0.016). Conversely, exclusive breastfeeding demonstrated a protective association against delayed outcomes.

Conclusion: This study reveals a high prevalence of neurodevelopmental delay among VLBW preterm infants in Lagos, Nigeria. These findings highlight an urgent public health need to integrate structured, routine neurodevelopmental surveillance into follow-up care protocols to enable prompt intervention and optimise developmental trajectories.

ABK/042

Clinical and Sonographic Predictors of Short-Term Outcomes of Neonates with Asphyxial Events at a Teaching Hospital in Abuja, Nigeria

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Background: Perinatal asphyxia is a major cause of morbidity and mortality in newborn infants. It is important to develop simple, inexpensive and accessible markers to identify affected neonates.

Objectives: To assess the value of clinical and sonographic predictors of short-term outcomes in asphyxia singly or combined.

Methods: A hospital-based prospective cohort study was conducted at the Special Care Baby Unit of the University of Abuja Teaching Hospital, Abuja, from June to December 2023. Neonates who failed to initiate/sustain spontaneous respiration or had an Apgar score of </= 6 at 5 minutes were consecutively recruited. Abnormal clinical examination findings on admission were documented. Each baby had a transfontanelle ultrasound [TFUS] and Doppler scans done within 48 hours of birth. Abnormalities on TFUS were documented and resistive indices [RI] calculated from Doppler scans. Babies were followed up for 7days. The short-term outcomes of interest were death and survival with or without deficits.

Results: Abnormal tone, poor suck, impaired consciousness, poor oxygen saturation and seizures were associated with poor outcome. Lower Apgar score was not associated. Poor suck predicted adverse outcome.

Abnormal TFUS and RI were associated with poor outcomes. The finding of cerebral oedema simultaneously with intracranial haemorrhage was predictive of poor outcome.

Conclusion: Poor suck is a clinical predictor of poor outcome in asphyxia. The presence of both cerebral oedema and intracranial haemorrhage is a sonographic predictor.

ABK/043

From Fear to Advocacy: Caregivers' Experiences with Kangaroo Mother Care and Immediate KMC in a Nigerian Neonatal Unit

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Background: Kangaroo Mother Care (KMC) and immediate KMC (iKMC) improve survival and bonding among preterm and low-birth-weight infants, yet implementation in Nigerian neonatal units is variable.

Objectives: To explore caregivers' experiences, perceptions and concerns following introduction of KMC and iKMC in a tertiary neonatal unit.

Methods: A qualitative descriptive study was conducted at Lagos University Teaching Hospital. Data collection comprised in-depth interviews (n = 13) and focus group discussions (n = 2). Interviews were audio-recorded, transcribed verbatim and analysed thematically using Braun and Clarke's framework.

Results: Participants (mean age 30 ± 6.2 years) were predominantly mothers (91.7%). Four themes emerged. *Understanding and perception:* most caregivers first learnt about KMC during admission and described it as skin-to-skin care promoting warmth and bonding. *Benefits:* reported advantages included improved infant stability, bonding, ease of breastfeeding and maternal reassurance. *Challenges:* participants reported physical discomfort (9/13), time constraints (6/13), privacy concerns (2/13) and fear of suffocation or apnoea (5/13); two mothers reported infant apnoea during KMC, with prompt recognition and intervention attributed to close contact. *Support and suggestions:* continuous staff encouragement, comfortable infrastructure and family inclusion, particularly paternal involvement, facilitated adherence.

Conclusion: Caregivers' attitudes progressed from fear to advocacy. With education, staff support and improved facilities, KMC/iKMC can be a safe, family-centred neonatal care strategy in resource-limited settings.

ABK/044

The impact of low-dose high-frequency mentorship approach in enhancing newborn care in Nigeria: Newborn Essential Solutions and Technologies (NEST360) experience.

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Background: NEST360 Nigeria has employed a low-dose-high-frequency mentorship approach to improve clinical skills and adherence to treatment guidelines using the comprehensive newborn care guideline.

Objectives: To explore the role of the low-dose high-frequency mentorship model in promoting sustainable in-service training and continuous quality improvement in neonatal units.

Methods: Two facilities, X (402) and Y (405), a tertiary facility and secondary facility respectively, were included as case studies. HCWs working in both X and Y were taken through the National Comprehensive Newborn Care Course (CNCC), which disseminates the country's newborn care protocols while integrating the use, maintenance and troubleshooting of essential devices. The mentors were tasked to break down the CNCC content into small topics that could be taught frequently and conveniently in their units. June – Nov 2023 data from NEST360 implementation tracker (NEST-IT) was used to assess the effectiveness of interventions

Results: Small dose topics included the use of CPAP and prevention of hypothermia at birth and at admission. Facility X increased CPAP utilisation by 50% and prevention of hypothermia at admission by 65% while Facility Y increased by 8% and 19% respectively. Case mix, staff rotation, attrition, industrial strikes and quality of unit leadership remain a challenge and may have played a role in the difference in performance.

Conclusions: This research assesses the mentorship strategy of NEST360 Nigeria using the specific example of improving the quality of care of newborns through low-dose training, although some challenges are noted in its implementation.

ABK/045

Pharmacologic neuroprotective agents for the treatment of perinatal asphyxia in LILMICs: a systematic review and meta-analysis of RCTs

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Background: Perinatal asphyxia (PA) is a major contributor to neonatal mortality and long-term neurodevelopmental impairment, particularly in low-resource countries, where the effectiveness of therapeutic hypothermia remains limited. Pharmacologic neuroprotective agents have shown potential as alternative treatments, but their efficacy in low-income and lower-middle-income countries (LILMICs) is not well established.

Objectives: To assess the effectiveness of pharmacologic interventions in neonates with PA in LILMICs.

Methods: A systematic search of PubMed, Web of Science, CINAHL, and Google Scholar was conducted for randomised controlled trials (RCTs) published between 2000 and 2024. Eligible studies compared pharmacologic neuroprotective agents with placebo or standard care, excluding therapeutic hypothermia, among neonates diagnosed with PA in LILMICs. Data on survival and neurodevelopmental outcomes were extracted and synthesised; meta-analyses were conducted where appropriate.

Results: Twelve RCTs (1,008 neonates) were included: eleven in Asia, one in Africa. $MgSO_4$ was the most frequently studied (66.7%), followed by melatonin, topiramate, erythropoietin, and citicoline. Meta-analysis showed pharmacologic agents improved survival (RR: 1.11, 95% CI: 1.01-1.22) and short-term outcomes including successful oral feeding (RR: 1.66; 95% CI: 1.24-2.22) and normal neuroimaging features (RR: 1.55; 95% CI: 1.34-1.79) at discharge. $MgSO_4$ was the most consistent for improving short-term outcomes, while melatonin had the greatest survival benefit. Favourable neurodevelopmental outcomes were reported up to 19 months.

Conclusion: Pharmacologic neuroprotective agents show promise in improving survival and neurological outcomes in neonates with PA in LILMICs. More robust RCTs will help to establish them as feasible alternatives to therapeutic hypothermia in LILMICs.

NEPHROLOGY

ABK/046

Risk Factors Associated with the Occurrence and Outcome of Acute Kidney Injury in Children at the National Hospital, Abuja

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Background: Acute kidney injury (AKI) is a sudden decline in kidney function and is associated with significant childhood morbidity and mortality. In Nigeria, reported prevalence ranges from 30.7% - 82.9%. Many risk factors are preventable, making early recognition and intervention vital.

Objectives: To determine the prevalence, severity, short-term outcomes, and risk factors of AKI among children aged one month to 15 years admitted to the Emergency Paediatric Unit of the National Hospital, Abuja.

Methods: A prospective observational study was conducted among 270 paediatric admissions between April and September 2022. Using Kidney Disease Improving Global Outcomes (KDIGO) criteria for diagnosis and staging, AKI was defined as an increase in serum creatinine ≥ 26.5umol/l within 48 hours, or a rise to ≥ 1.5 times baseline, and/or Urine output <0.5ml/kg/hour for six hours. Serum creatinine was measured at admission, then serially depending on the renal function status until discharge or two weeks in those with AKI. Urine output was monitored. Associations between clinical variables and AKI occurrence and outcome were analysed.

Results: Fifty-seven children (21.1%) had AKI at admission, of whom 68.4% were in stage 3. Significant risk factors included low socioeconomic status (P=0.001), nephrotoxic drug and herbal use (P<0.001), and delayed presentation (P<0.001). Twelve AKI patients (21.1%) died, 75% of whom

were in stage 3. Significantly poorer outcomes were seen in children with Oliguria (P=0.004), sepsis (P=0.022), and need for dialysis (P=0.001).

Conclusion: AKI is common among hospitalised children in Abuja, driven largely by preventable factors. Improved community awareness, early detection and intervention are essential to reduce AKI-related morbidity and mortality.

ABK/047

Paediatric Rheumatic Diseases: Pattern, Health Related Quality of Life and Associated Factors among Patients in a Tertiary Hospital in Lagos

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Background: There is a paucity of data on the pattern of paediatric rheumatic diseases (PRDs) and health-related quality of life (HRQOL) of affected children in Nigeria.

Objectives: To describe the patterns of PRDs, HRQOL of affected children and their associated factors at the Lagos State University Teaching Hospital.

Methods: A comparative cross-sectional study conducted between June 2023 and May 2024, involving 110 children (55 with PRDs and 55 controls). Paediatric Quality of Life (PedsQL) generic 4.0, paediatric rheumatology module 3.0, Childhood Health Assessment Questionnaire (CHAQ) and visual analogue scale for pain were used for assessment. The disease activity at diagnosis for juvenile idiopathic arthritis (JIA) and juvenile systemic lupus erythematosus (JSLE) was assessed. Harter social support scale was used to assess the perception of social support.

Results: The pattern of PRDs in the subjects included 27 JSLE, 14 JIA and 14 other rheumatic diseases: three chronic musculoskeletal pain, three fibrodysplasia ossificans progressive (FOP), two juvenile dermatomyositis, one polymyositis, two polyarteritis nodosa, one systemic sclerosis, one aquaporin-4 antibody optic neuritis and one Periodic fever, aphthous stomatitis, pharyngitis and adenitis (PFAPA).

The median (IQR) PedsQL score was significantly lower in cases than in controls [76.9 (57.5-90.0) vs 87.5(82.5-95.0), respectively; p<0.001]. HRQOL was significantly associated with functional disability (p= 0.003) and pain scores (p = 0.042) but not with social class, disease activity and perception of social support. Functional disability was an independent predictor of HRQOL (p=0.019).

Conclusion: Health-related quality of life in patients with PRDs should be assessed regularly in the clinic.

ABK/048

The Psychosocial Burden of Enuresis Among Secondary School Adolescents in Port Harcourt

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Background: Enuresis is the involuntary passage of urine on oneself after the age when bladder control should have been achieved; this may be associated with psychosocial issues, including depression.

Objectives: To determine the burden of enuresis among secondary school adolescents in Port Harcourt, Rivers State.

Methods: A multistage sampling technique was used to recruit secondary school adolescents. Study instruments included a modified childhood urinary incontinence questionnaire, the paediatric urinary incontinence quality of life instrument, and the Patient Health Questionnaire-9. SPSS version 25 was used for analysis, and the level of significance was set at $p \leq 0.05$.

Results: A total of 344 students participated, 200 (58.1%) males and 144 (41.9%) females. Their ages ranged from 10 to 16 years (mean 13.9 ± 1.2 years). Sixty males (30.0%) had enuresis compared to 29 (20.1%) females. ($\chi^2 = 4.23$, $p = 0.04$) Enuresis was significantly associated with a higher birth order, polygamous family setting, constipation, and a family history of enuresis. Children with enuresis had higher depressive symptoms and lower quality of life in all domains. (OR 28.7, 95% CI: 14.24-57.93, p< 0.001)

Conclusion: Enuresis is not uncommon among adolescents in Port Harcourt, with associated significant familial and psychosocial factors. The need to identify these adolescents early and institute

medical intervention that will include mental health services is very crucial.

NEUROLOGY

ABK/049

Comparative Assessment of Intelligence Quotient in Children with and without Epilepsy

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Background: Epilepsy is a prevalent neurological childhood disorder, known to affect cognitive development and intellectual abilities. Increasingly, findings suggest children with epilepsy (CWE) do not always have lower intelligence quotient (IQ) scores relative to healthy peers.

Objectives: To compare the IQ of children with epilepsy with that of their age-, sex-, and socio-economic status-matched healthy controls, and to determine the socio-demographic variables affecting the IQ of CWE.

Methods: 114 CWE and 114 matched controls aged 6-18 years from Paediatric Outpatient clinics of the University of Uyo Teaching Hospital (UUTH), Akwa Ibom State, Nigeria were recruited. Socio-demographic variables were obtained using a self-designed questionnaire, and IQ was assessed using the Ravens Standard Progressive Matrices.

Results: Sub-optimal intelligence was noted in 47.37% of CWE, and their IQ scores were significantly lower than controls ($p<0.001$). Although controls had higher proportions of optimal IQ (grades I-III) compared to CWE, this difference was not statistically significant ($p=0.181$). Factors significantly associated with sub-optimal IQ among CWE included age category ($p=0.044$), area of residence ($p=0.033$) and socio-economic status ($p=0.033$). Binary logistic regression identified age ≥16 years (OR 5.333, $p=0.020$), rural residence (OR 2.349, $p=0.037$), and low socio-economic class (OR 4.371, $p=0.018$) as significant predictors of sub-optimal IQ.

Conclusion: Sub-optimal intelligence is prevalent among CWE. In our locality, age ≥16 years, residing in rural areas, and low socio-economic class are predictors of sub-optimal intelligence in CWE.

ABK/050

Clinical and Functional Profile of Children with Suspected Duchenne Muscular Dystrophy

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Background: Duchenne muscular dystrophy, an X-linked recessive neuromuscular disorder characterised by progressive muscle weakness and loss of ambulation, remains under-reported in Nigeria. This study describes the socio-demographic, clinical, and functional characteristics of children with suspected Duchenne muscular dystrophy at the University of Ilorin Teaching Hospital.

Objectives: To assess the demographic, clinical, and functional profiles of children with suspected Duchenne muscular dystrophy.

Methods: A cross-sectional descriptive study was conducted among 13 children with suspected Duchenne muscular dystrophy attending the Neuro-Paediatric Clinic. Demographic variables, family history, clinical features, investigation results, and management details were collected using a structured proforma. The data were analysed using descriptive statistics and one-way analysis of variance for group comparisons.

Results: All participants were male, aged 5–15 years (mean 10 ± 2.7 years). Nearly half (46.2%) were first-born. A family history of neuromuscular disease was present in 46.2%; none had undergone carrier testing. Frequent falls (76.9%), Gowers' sign (84.6%), proximal muscle weakness (69.2%), and calf pseudohypertrophy (69.2%) were common features. Mean age at symptom onset was 6 ± 2.6 years. Loss of ambulation occurred after a mean duration of 4 years. Overall, 38.5% used wheelchairs, and 7.7% required orthoses. Serum creatine kinase levels were markedly elevated (>2000 IU/L) in 69.2%.

Conclusion: Children with suspected Duchenne muscular dystrophy in this cohort presented late, with significant functional limitation and elevated creatine kinase levels. Limited access to genetic testing and multidisciplinary care remains a barrier to optimal management. Early diagnosis, genetic counselling, and improved functional support services are needed.

ABK/051

Intelligence Quotient and Its Socio-Demographic Determinants among Nigerian Adolescents

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Background: Cognitive performance among adolescents is influenced by both biological and environmental factors. Understanding the distribution and determinants of intelligence quotient (IQ) is critical for educational and health policy planning, yet data from Nigerian adolescents remain sparse.

Objectives: To determine the distribution of IQ among secondary-school adolescents in Bida metropolis and examine its association with key socio-demographic variables.

Methods: A descriptive cross-sectional study was conducted among 432 adolescents aged 10–19 years selected from eight secondary schools in Bida, Niger State. The Raven's Progressive Matrices (RPM) test was used to assess IQ. Socio-demographic data, including age, sex, school type, parental education, and socio-economic class, were collected.

Results: The mean age of participants was 15.4 ± 2.1 years; males constituted 49.5 %. 154 (35.6%), 168 (38.9%) and 110 (25.5%) adolescents were in socio-economic class groups of upper, middle and low, respectively. The mean RPM score was 27.3 ± 13.0, with 80.3 % exhibiting suboptimal IQ. The IQ was significantly associated with sex ($p = 0.010$), school type, and parental education ($p < 0.001$).

Conclusion: A large proportion of adolescents in Bida demonstrate below-average IQ performance. Socio-economic and educational disparities appear to influence cognitive outcomes. School-based cognitive enrichment and parental education initiatives may help improve adolescent intellectual development.

ABK/052

Stroke Prevention in Nigerian Children with Sickle Cell Disease: Fifteen Years of Routine Transcranial Doppler Screening in Ibadan, Nigeria

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Background: Ten per cent of children with sickle cell disease (SCD) will develop a stroke before their twentieth birthday. Transcranial Doppler (TCD) has been described as an unprecedented breakthrough in SCD-related brain injury.

Objectives: To determine stroke risk, stroke incidence, and survival over 15 years in the stroke prevention in SCD programme in Ibadan.

Methods: A prospective longitudinal study. Children with SCD aged 2-16 years were enrolled into the stroke prevention programme. All had routine non-imaging TCD performed and were carefully followed up with 3-monthly/annual TCDs. Hydroxyurea (HU) was given for stroke prevention.

Results: 1355 children with SCD were enrolled into the programme. Median age at first TCD examination was 88.0 months, and the period of follow-up ranged from 1 to 15 years, median 5.1 years. At first TCD, stroke risk was classified as standard risk, conditional risk, abnormal risk, and inadequate in 69.3%, 19.5%, 9.2% and 2.0%, respectively. Thirty-eight (2.8%) children had a conversion to abnormal risk on follow-up. Subject retention rate was 87.4%, with 492 (36.3%) successfully discharged from the programme. Three strokes occurred, giving a stroke incidence of 0.09/100 person-years of observation. Twenty-four (1.8%) children died. Hydroxyurea use was associated with a significant decline in TCD velocities, stroke incidence, and risk of mortality.

Conclusion: Routine TCD screening in children with SCD and administration of hydroxyurea for primary stroke prevention represent feasible, cost-effective interventions in a resource-poor economy for improved outcomes. Children with SCD treated with HU may have a lower risk of death.

ABK/053

Plasma carbamazepine levels and seizure response in children with epilepsy seen at the University College Hospital, Ibadan

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Background: Carbamazepine (CBZ) is one of the most frequently prescribed anti-seizure medications. It has a narrow therapeutic index and high inter-individual variability.

Objective: To determine the proportion of children with epilepsy on carbamazepine monotherapy who attain therapeutic plasma concentrations of 4-12mcg/ml and the relationship between plasma carbamazepine levels and seizure control.

Methods: A cross-sectional study on children with epilepsy, aged 1-15 years, seen at the University College Hospital, Ibadan, who had been compliant on CBZ monotherapy for ≥ 6 months. Five millilitres of blood were drawn just before the next dose (trough levels), and plasma carbamazepine levels were assayed using the Chemiluminescent immunoassay technique.

Results: A total of 101 children, 55 males and 46 females, were enrolled. Their ages ranged from 1-15 years, with a median age of 9.25 years. Focal onset epilepsy accounted for 58.4% of cases. Eighty-four (83.2%) of the children achieved therapeutic plasma levels of 4-12mcg/ml. There was a statistically significant association between total daily dose of CBZ and plasma CBZ levels (p=0.030) but no statistically significant difference in the weight-adjusted dose of CBZ in children with therapeutic, sub-therapeutic and elevated plasma CBZ levels (p=0.272). Neurological co-morbidities worsened seizure outcomes. Age (p=0.0330) and body weight (p=0.019) are significant predictors of the attainment of therapeutic levels of plasma CBZ.

Conclusion: The findings indicate variability in CBZ dosing and the attainment of therapeutic plasma levels. Treatment with CBZ needs to be individualised, guided by therapeutic drug monitoring.

ABK/054

Prevalence of Folate Deficiency in Children on Long-Term Anti-Seizure Medications in Irrua Specialist Teaching Hospital, Nigeria

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Background: The long-term use of anti-seizure medications (ASMs) could be associated with serum folate deficiency (SFD), but there is a paucity of data on the prevalence in children, especially those in rural areas.

Objectives: This study aimed to determine the prevalence of SFD and its relationship with the type of ASM used.

Methods: We compared the serum folate levels of 105 children with epilepsy aged 1-16years old and 105 age-and-sex-matched controls. We also compared the socio-demographic characteristics, dietary history, and peripheral blood film findings of children with versus without folate deficiency but excluded children with severe malnutrition, regular folate supplementation, chronic illness and anti-folate medications from the study. The level of statistical significance was set at p =/<0.05.

Results: The prevalence of SFD in children with epilepsy on long-term ASM was significantly higher than in those without epilepsy (19% vs 8.6%; OR (95% CI) = 2.51 (1.09, 5.81); p = 0.028). Among the children with epilepsy, the prevalence was significantly higher in those on enzyme-inducing medications (25.9% versus 10.6% in those on non-enzyme-inducing medications; OR (95% CI) = 2.90 (0.98, 8.78), p = 0.048).

Conclusion: SFD is significantly associated with the use of enzyme-inducing antiseizure medications in children with epilepsy.

ABK/055

Beyond Survival: Promoting Early Childhood Development, Early Identification and Intervention for Developmental Delays and Disabilities in Osun State

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Background: Nigeria has high rates of poor delivery outcomes, increasing the risk of developmental delays and disabilities. Many affected children go undetected and lack access to early interventions.

Objectives: To evaluate the implementation of early detection and care through developmental screening, referral, and caregiver support strategies for children with delays or disabilities.

Methods: Using a mixed-methods approach, from February 2024 to August 2025, we assessed the early childhood development (ECD) knowledge and readiness among health workers, and caregivers' satisfaction pre- and post-implementation of the ECD project in Osun State. We trained 292 health workers across nineteen primary health centres. Training focused on ECD and integrated screening, using the Ibadan Simplified Developmental Screening tool and Malawi Development Assessment Tool. Health workers and Caregivers were interviewed to understand the effect of the multidisciplinary ECD care and the caregiver support programme using the "Baby Ubuntu" framework.

Results: Improved ECD knowledge was found among 82% of health workers. The screening tool was considered simple, effective, and appropriate for resource-constrained settings. We screened 8,100 children, with 98.7% showing no concerns, while 0.7% had developmental delays, and 0.6% required further assessment. Caregiver satisfaction significantly improved regarding health worker ECD knowledge (97.4%, $p = 0.011$) and services available (97.4%, $p = 0.007$). Participation in support groups led to reported improvements in child development, caregiver confidence, and psychosocial well-being.

Conclusion: Integrating low-cost developmental screening into primary services is feasible and enhances early identification of delays and disabilities. Establishing MDT services and peer-based caregiver programs can positively influence child outcomes and caregiver experiences.

ABK/056

Demographic and clinical characteristics of children with Infantile Spasms in Lagos

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Background: Infantile spasms occur mostly in infancy or early childhood. Associated features are developmental regression, burst-suppression and hypsarrhythmia. The spasms are sometimes mistaken for colic, and delay in diagnosis is common. This worsens prognosis. Early recognition and appropriate treatment of this condition is poor.

Objectives: This study sought to characterise the clinical features and outcome of infantile spasms in children in Lagos.

Methods: The clinic records of children diagnosed and treated for infantile spasms over three years were retrieved. The clinical features, investigation results and treatment outcomes were extracted and analysed.

Results: Thirty-seven children aged 5-50months were diagnosed with infantile spasms; 59.5% were males. Head drops with limb jerks (43%) were most common. Seizure frequency was 1-15/day in clusters and averaged 4/day. Delivery was *per vaginam* in 81%. Regression occurred in 11%. The risk factors for infantile spasm were perinatal asphyxia (40.5%), meningitis (13.5%) and prematurity (8%). MRI was abnormal in 10.8%. EEG showed burst-suppression (89.2%) and hypsarrhythmia (5.4%). The commonest side effects of prednisone use were irritability and weight gain (37.8%). Earliest cessation of spasms was 3 days. Seizures stopped in 45.9% but returned within 3 months of therapy in 21.6%. An improvement in milestones was noticed in 59.5%.

Conclusion: Infantile Spasms occur in Nigerian children. A high index of suspicion for diagnosis is advocated. Response occurs to prednisolone and Epilim, but outcome varies. Recurrence occurs. EEG is a good diagnostic tool.

ABK/057

Mobile health applications for educating parents and guardians in early recognition of autism spectrum disorder among children in southwest Nigeria

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Background: Autism Spectrum Disorder (ASD) is increasingly recognised in Nigeria; however, early diagnosis is often delayed due to limited parental knowledge, misconceptions, and poor access to specialised services. Given widespread smartphone ownership, mobile health (mHealth) tools may support early recognition, yet evidence on parental readiness in Southwest Nigeria remains limited.

Objective: To assess the potential role of mHealth applications in improving parental education and early recognition of ASD among parents and guardians in Southwest Nigeria.

Methods: A descriptive cross-sectional survey was conducted among 86 parents/guardians across five states in Southwest Nigeria. Early recognition of ASD was assessed using a researcher-developed Early Recognition Score (ERS) comprising 12 closed-ended items describing core ASD-related behaviours. Correct responses were scored 1 and incorrect or "don't know" responses scored 0, yielding total scores from 0 to 12. Scores ≥8 indicated good early recognition. Data were analysed using descriptive statistics and cross-tabulations and interpreted using the Technology Acceptance Model and Health Belief Model.

Results: ASD awareness was high (88.4%), and 86.0% reported familiarity with early symptoms; however, only 40.7% demonstrated good early recognition based on ERS scores. Smartphone ownership (95%) and internet access (>90%) were high, but awareness of mHealth tools (38.4%) and ASD-specific applications (<17%) were low. Reported barriers included lack of trust (73.3%), cultural beliefs (69.8%), and stigma (83.7%). Nonetheless, 93.0% expressed willingness to consult health professionals via digital platforms.

Conclusion: Despite gaps in accurate symptom recognition, parents showed readiness to adopt ASD-focused mHealth tools to improve early identification and timely help-seeking.

PULMONOLOGY

ABK/058

Outcome and management of 2 to 59-month-old Nigerian children with chest indrawing pneumonia at primary-level healthcare facilities: prospective cohort study

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Background: In 2012, WHO recommended outpatient oral amoxicillin for children aged 2–59 months with chest indrawing pneumonia without general danger signs, based on randomised trials.

Objectives: To assess mortality and case management for such children routinely managed at primary healthcare centres (PHCs) in Lagos, Nigeria.

Methods: This prospective observational cohort study (September 2021–September 2023) was conducted in Ikorodu LGA, nested within the INSPIRING Lagos study evaluating a "stabilisation room" intervention across 16 PHCs. PHC healthcare workers (HCWs) trained in IMCI provided routine care, while INSPIRING staff independently assessed eligibility using IMCI criteria. The primary outcome was the 14-day case fatality rate (CFR) among children with chest indrawing pneumonia without general danger signs; secondary outcomes included antibiotic use, treatment adherence, and referral practices.

Results: PHC HCWs identified 24 chest indrawing cases, while INSPIRING staff diagnosed 247 (including 19 of the 24). Among those followed up (n=16), CFR was 6.3% (1/16; 95% CI: 0.2–30.2) for PHC HCW-identified cases and 0.5% (1/197) for INSPIRING-identified cases. Due to a single death and high loss to follow-up, CFR estimates are statistically fragile. Only 4% (1/24) received IMCI-aligned care. Of children prescribed antibiotics, 50% (4/8) completed treatment, and only 1 of 6 referred children was admitted.

Conclusions: PHC HCWs rarely diagnosed chest indrawing pneumonia, and substantial loss to follow-up reduced precision. Strengthening HCW skills and IMCI implementation is critical to improving pneumonia detection and reducing preventable child deaths in Nigeria.

ABK/059

Nutritional Status and Determinants of Acute Respiratory Infection in Under-Five Children

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Background: Malnutrition is a major contributor to under-five morbidity and increases the risk of acute respiratory infection (ARI). Understanding nutritional determinants of ARI is essential for improving child health outcomes.

Objectives: To assess the nutritional status of children with ARI and identify nutritional factors associated with ARI development.

Methods: A hospital-based cross-sectional study was conducted among 225 children aged 6–59 months presenting with ARI to the Paediatric units of Usmanu Danfodiyo University Teaching Hospital, Sokoto. Acute respiratory infection was diagnosed using the World Health Organisation Integrated Management of Childhood Illness guidelines. Anthropometric measurements, including weight-for-age, height-for-age, weight-for-height and mid-upper arm circumference, were obtained and classified using World Health Organisation growth standards. Associations between nutritional indicators and ARI were evaluated using chi-square tests and logistic regression.

Results: Median age was 20.3 months (mean 20.3 ± 10.5); 112 (49.8%) were male. Malnutrition was common: 50.2% of children were underweight, 45.3% wasted and 19.1% stunted. Severe acute malnutrition based on weight-for-height was found in 23.5%. Significant associations were observed between ARI and weight-for-age, height-for-age, weight-for-height and mid-upper arm circumference ($p < 0.001$). Moderate underweight markedly increased the likelihood of ARI, while moderate and severe stunting increased the odds of ARI by 8.9 and 7.0 times, respectively.

Conclusion: Underweight, wasting and stunting were common among U5 children with ARI in Sokoto; both chronic (stunting) and acute (underweight) malnutrition were strongly associated with more severe respiratory disease. Integrating routine nutritional screening and targeted nutrition interventions into ARI case management is recommended.

ABK/060

Predictive Validity of Paediatric Respiratory Severity Score for Poor Outcomes among Under-fives with Severe Pneumonia in a Rural Tertiary Centre

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Background: Pneumonia is the leading infectious cause of childhood mortality among under-fives worldwide; Nigeria contributes the highest to this burden. Scoring tools for childhood pneumonia play a role in the identification of severity and predicting risk of poor outcomes, thereby allowing for early intensification of care and reducing these poor outcomes.

Objectives: To validate the predictiveness of the Paediatric Respiratory Severity Score (PRESS) for

poor outcomes of severe pneumonia in a tropical setting.

Methods: It was a prospective study over 12 months at the Children's Emergency Room of Irrua Specialist Teaching Hospital. Children aged 2-59 months admitted with severe pneumonia (SP) using the Paediatric Association of Nigeria (PAN) criteria were recruited; thereafter, the PRESS, a bedside severity scoring tool with 5 parameters (tachypnoea, wheezing, hypoxaemia, feeding, use of accessory muscles), was applied. Poor outcomes (prolonged hospitalisation, need for mechanical ventilation, escalation of antibiotic therapy and death) were identified. Predictive validity was assessed by discrimination using Area under the receiver operating characteristic curve (AUC) and calibration using the Hosmer-Lemeshow Chi-Square test (p >0.05= good calibration).

Results: The PRESS had poor to good discrimination for poor outcomes, with AUCs of prolonged hospitalisation 0.61, escalation of antibiotic therapy 0.76, need for mechanical ventilation 0.78 and death 0.82. All had good calibration: prolonged hospitalisation 0.245, death 0.470, need for mechanical ventilation 0.653, escalation of antibiotic therapy 0.863.

Conclusion: The PRESS can predict poor outcomes of severe pneumonia. Multi-centred studies are recommended to further validate our findings.

ABK/061

Determinants of Severe Bronchiolitis Among Under-Two Children Admitted to a Tertiary Hospital in Sokoto: A Case-Control Study

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Background: Severe bronchiolitis is a major cause of hospitalisation among under-two children, yet its determinants remain under-researched in Northwestern Nigeria. Understanding these factors is essential for informing early prevention strategies.

Objectives: To identify the socio-demographic, clinical, and environmental factors associated with severe bronchiolitis in under-two children admitted in Usmanu Danfodiyo University Teaching Hospital, Sokoto, Nigeria.

Methods: A hospital-based, age-and sex-matched case–control study between January and September 2025. The study included 67 cases (children <24 months with severe bronchiolitis) and 201 matched controls admitted with non-respiratory conditions in a 1:3 ratio using the nearest neighbour technique. Data regarding socio-demographic characteristics, clinical presentations, host and environmental factors were collected. Statistical analysis was done using SPSS version 27 at 95% confidence intervals (CI) with statistical significance set at <0.05.

Results: Cases were predominantly and statistically associated with prematurity, lack of exclusive breastfeeding, passive household tobacco smoking, poor household ventilation and use of biomass fuel for cooking when compared to controls($p<0.001$). Multivariable conditional logistic regression confirmed independent determinants of severe bronchiolitis as prematurity (aOR=4.25, 95% CI: 2.05–8.82, $p<0.001$), lack of exclusive breastfeeding (aOR=2.58, 95% CI: 1.23–5.39, $p=0.013$), passive household tobacco smoke exposure (aOR=3.67, 95% CI: 1.78–7.56, $p<0.001$), poor household ventilation (aOR=2.34 (95% CI: 1.12–4.87, $p=0.024$), and use of biomass fuel for cooking (aOR=2.9, 95% CI: 1.4–6.1, $p = 0.000$).

Conclusion: Prematurity, inadequate breastfeeding, tobacco smoke exposure, and biomass fuel exposure are key determinants of severe bronchiolitis. Public health interventions targeting these modifiable risk factors may reduce disease severity.

ABK/062

Medication Adherence and Education Needs among Hospitalised Children with Asthma

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Background: Asthma is a leading cause of paediatric hospitalisation globally. While previous studies have explored inhaler knowledge, few have examined medication adherence and education gaps during hospital admission, a critical period for intervention. Understanding these factors may guide strategies to enhance disease management and reduce readmissions.

Objectives: To evaluate medication adherence patterns and identify education needs among hospitalised children with asthma and their caregivers.
Methods: A cross-sectional study was conducted among 64 children aged 6–12 years admitted for asthma exacerbations at Usmanu Danfodiyo University Teaching Hospital, Sokoto, over 12 months. Adherence was assessed using caregiver-reported questionnaires and prescription reviews. Children and caregivers were surveyed on knowledge gaps, inhaler technique, and educational needs. Data were analysed descriptively.
Results: Among the 64 children, 52 (81%) demonstrated suboptimal adherence before admission. Suboptimal adherence was observed in 90% of younger children (6–8 years), 85% with previous hospitalisations, 88% living in rural areas, and 86% from lower-income households. Key barriers included forgetfulness, incorrect inhaler technique, and inadequate information and training. Caregivers expressed the need for structured, personalised management plans and written instructions to support effective asthma control.
Conclusion: Hospitalised children with asthma frequently exhibit suboptimal medication adherence due to knowledge gaps, technique errors, and insufficient training, particularly among younger children, those with prior hospitalisations, rural dwellers, and low-income households. Hospital admission provides a crucial opportunity to deliver personalised education and written management plans, improve adherence, and optimise asthma outcomes. Incorporating structured educational interventions into routine paediatric care is essential.

GENERAL PAEDIATRICS/OTHERS

ABK/063

Perceived Barriers to the Utilisation of Free Maternal Health Services in Delta State, Nigeria

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Background: Presence of skilled birth attendant (SBA) at delivery is key to optimal neonatal outcome. Despite the availability of free maternal health services (MHS) in Delta State, more than 40% of women deliver outside health facilities without SBA. This study explored community-level perceptions of the barriers to MHS utilisation in Oshimili South Local Government Area (OSLGA).
Objectives: To determine barriers to the utilisation of MHS for delivery in OSLGA
Methods: A community-based cross-sectional mixed-methods study was conducted from August to December 2024. There were 12 focus group discussions, 14 key informant interviews, and structured interviews with 385 women of childbearing age. Analytical tools were NVivo 14, SPSS version 27, and Binary logistic regression for identification of predictors of MHS utilisation.
Results: Although 88% (338) of women accessed antenatal care, only 78% (300) delivered in a health facility. Major barriers included: negative attitudes of health workers (39%), ignorance of available services (33%), low socioeconomic status (30%), and poor knowledge of pregnancy danger signs (21%). Education level was a significant predictor of ANC attendance (p=0.003). Community members' proposed solutions included staff reorientation, awareness creation, and improved accountability mechanisms.
Conclusion: Persistent sociocultural, economic, and systemic barriers limit the uptake of free MHS. Quality improvement initiatives, community engagement, and targeted communication strategies are needed to improve MHS outcomes in Delta State.

ABK/064

Child Nutrition Assessment, Growth Monitoring, and Promotion: Reviving a neglected Child Survival Strategy Through Capacity Development in Rivers State

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Background: Growth Monitoring and Promotion (GMP), an important WHO/ UNICEF Child Survival Strategy adopted in the 1980/1990s, involves regular anthropometric measurements of under-fives with interpretation and their use for monitoring and promoting under-five growth and development. Its

underutilization contributes to the late detection of malnutrition and its related morbidity and mortality.

Objectives: To share experiences with capacity development training of primary healthcare workers on GMP in Rivers State.

Methods: Forty-three healthcare workers comprising 20 Medical Officers of Health, 23 Nutrition Officers, and 8 additional participants from the 23 Local Government Areas (LGAs) and health training institutions in Rivers State participated in the 3-day non-residential training on GMP funded by the Rivers State Primary Health Care Management Board. Training materials included those of the WHO Training Course on Child Growth Assessment and Module 8: Nutritional Assessment, Growth Monitoring and Promotion of the Maternal, Infant and Young Child Training Materials. The training involved presentation of the course contents, discussions, group and individual readings, role plays, demonstrations, and clinical practice at selected health facilities with pre- and post-tests.

Results: The pre-test scores ranged from 1.4-48.6% (mean 21%) and the post-test scores 20-100% (mean 60.7%), indicative of improvement in knowledge. The participants also improved in their skills and recognised the under-utilisation of GMP as part of the Child Health Card and recommended its cascading to all the LGAs.

Conclusion: Participants demonstrated poor knowledge and practice of GMP, which improved with the training. They committed themselves to ensuring GMP implementation in their LGAs.

ABK/065

Paediatricians and the Implementation of the Guidance on the Restriction of the Digital Marketing of Breastmilk Substitutes: A Wake-up Call

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Background: The marketing of "products within the scope" of the International Code of Marketing of Breast-milk substitutes and inappropriate promotion of foods for Infants and young children significantly undermine progress in optimal infant and young child feeding by limiting the attainment of the relevant Global Nutrition and Sustainable Development Goals targets, thereby contravening Article 24 of the UN Convention on the Rights of the Child. Consequently, at the 2025 World Health Assembly, a resolution to restrict digital marketing and promotion of these products was passed.

Objectives: To inform paediatricians of the Recommendations of the WHO Guidance on regulatory measures aimed at restricting digital marketing of breast-milk substitutes (Guidance)

Methods: Relevant Recommendations of the Guidance were extracted for presentation

Results: Digital marketing was defined as "marketing conducted or disseminated in digital environments and/or facilitated by digital technologies" and "Digital environments are the operational or information technology systems, networks, internet-enabled applications, devices and/or data contained within such systems and networks and any other related digital system, including, but not limited to, social media, websites, email services, text or voice or image or video messaging services, streaming services, search engines, eCommerce platforms, peer commerce and smartphone applications". Among its 11 Recommendations is Recommendation 2, which states that Regulatory measures should prohibit the promotion of products within the scope of the Code, or their brands, through health care systems and health professional associations using digital technologies.

Conclusion: Paediatricians are therefore crucial to ensuring optimal infant and young child nutrition through the implementation of the Guidance.

ABK/066

Orphan Status and Nutritional Outcomes Among Institutionalised Children in Umuahia, Abia State Southeast Nigeria: A Cross-sectional Study

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Background: Orphaned children in institutional care are particularly vulnerable to malnutrition due to reduced parental support, limited resources, and inconsistent caregiving. Understanding how orphan status influences nutritional outcomes is critical for improving children's health and essential for

designing targeted interventions in institutional settings.

Objectives: This study assessed the association between orphan status and nutritional status among institutionalised children.

Methods: Conducted among 152 children aged 1 to 15 years residing in selected institutions in Umuahia, Abia State. Anthropometric indices—weight-for-age, weight-for-height, height-for-age, and BMI-for-age—were measured and analysed using WHO growth reference standards. Data were analysed to determine the relationship between orphan status and nutritional outcomes using appropriate statistical tests.

Results: A significant association was observed between orphan status and nutritional indicators ($p < 0.05$). Double orphans exhibited the highest prevalence of undernutrition (78.4%), including stunting and underweight, compared to single orphans and non-orphans. The findings suggest that the loss of both parents increases vulnerability to poor growth outcomes, likely due to emotional distress and limited nutritional care.

Conclusion: Orphan status is a key determinant of nutritional well-being among institutionalised children. Interventions should prioritise double orphans through targeted nutritional support, caregiver training, and routine growth monitoring to enhance the welfare of these vulnerable populations.

ABK/067

Interest in Paediatrics Residency Training Among Early Career Doctors in Nigeria.

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Background: Paediatrics plays a crucial role in child health but remains a less preferred speciality among young doctors in Nigeria. Understanding the reasons for low interest is essential to improve recruitment into paediatric residency programs.

Objectives: To assess the level of interest in pursuing paediatrics residency among early career doctors in Nigeria and identify the main factors influencing speciality choice.

Methods: A descriptive cross-sectional online survey was conducted among 251 early career doctors across Nigeria using a structured Google Form. Data were analysed using descriptive statistics. Variables explored included demographics, exposure to paediatrics during medical school, mentorship, perception of the field, and perceived barriers to specialisation.

Results: Of 251 respondents, 100% were within 5 years of graduation from medical school, 2.7% were female, and 54.1% were aged 26–30 years. Only 21.6% expressed interest in paediatrics residency, 9.2% were unsure, and 68.8% were not interested. Major barriers included unfriendly work environments, poor financial compensation, inadequate manpower and poor work-life balance. Positive influences included better mentorship, improved remuneration, and enhanced facilities. About 39% agreed that international collaborations and scholarships could increase their interest.

Conclusion: Interest in paediatrics residency among early career Nigerian doctors is low despite positive exposure during training. Creating a supportive learning environment, improving welfare, and enhancing mentorship could attract more doctors to the specialty.

ABK/068

Sexual Abuse: Characteristics, Pattern and Outcome in Children Seen at the University of Port Harcourt Teaching Hospital

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Background: Child Sexual Abuse (CSA) is defined by the World Health Organisation as the involvement of a child in sexual activity that he or she does not fully comprehend and is unable to give informed consent to. It is a profound violation of the child's human rights and trust. Sadly, children rarely disclose sexual abuse immediately after the event: Instead, disclosure is often delayed and may be initiated following a physical complaint or a noticeable behaviour change. Survivors of CSA often grapple with medical, mental health and social difficulties.

Objectives: The purpose of this study was to determine the characteristics, pattern and outcome of

child sexual abuse seen in the University of Port Harcourt Teaching Hospital over the last three years.

Methods: A retrospective and prospective study of clinical records of sexually abused children seen in the Paediatric Clinic and the Children's Emergency Ward between January 2023 and October 2025 at the University of Port Harcourt Teaching Hospital, Port Harcourt, Rivers State, was conducted. The characteristics, patterns, and outcome of sexual abuse were analysed.

Results: A total of 32 sexually abused children were seen; more females were sexually abused, with a female-to-male ratio of 2.5:1. The age ranged between 2 years and 17 years. Male perpetrators were significantly more than female perpetrators, accounting for more than 70%. Most of the abusers were known to the victims: (neighbour- 31%, family friend/friend-25%, father-9%, househelp- 6%). Male-to-female abuse accounted for 63% of the cases seen, male-to-male 25%, while female-to-female and female-to-male were 6% respectively. The most common form of abuse was penetrative sexual abuse. Sixteen per cent of the children tested positive for Human Immunodeficiency Virus, 6% had depression, and 45% developed vaginal candidiasis after the abuse (noted more in the younger age group). There was delayed disclosure of the assault to parents and caregivers in more than 70% of the cases.

Conclusion: These results highlight that CSA most commonly occurs within the child's immediate social circle, with close family and friends being the predominant perpetrators. Efforts to combat CSA must prioritise family-based education and support systems that empower children to disclose abuse safely.

ABK/069

Predictors of Ear Position in Ejagham Children: The Role of Ear Angulation and Craniofacial Indices.

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Background: There is a paucity of information on predictors of ear positioning, despite its importance for diagnosing genetic malformations in children.

Objectives: To determine the ear position (EP) and its predictors in children of Ejagham ethnicity aged 0-5years.

Methods: A community-based cross-sectional study involving 1993 children aged 0-5 years. Craniofacial measurements assessed included Occipitofrontal circumference, Mandibular dimensions, Head length (HL), Head width (HW), and ear parameters, with EP assessed using the Inter-medial canthal line and Ear angulations (EA) with a goniometer. Bivariate analysis identified factors associated with ear positioning, while multivariate binary logistic regression identified independent predictors of ear position.

Results: Mandibular height (MH), HW, and HL are significantly smaller in females with low-set ears (LSE), while males also show reductions, albeit less significant. For males, the mean MH with LSE is 32.5 mm (normal: 35.1 mm), HW is 12.3 cm (normal: 12.9 cm), and HL is 15.9 cm (normal: 16.8 cm). For females, the mean MH with LSE is 29.2 mm (normal: 35.3 mm), HW is 11.5 cm (normal: 12.9 cm), and HL is 15.3cm (normal: 16.7 cm). Males with LSE have higher EA (Mean EA: 22.1° R, 22.0° L vs. normal: 19.8° R/L), while females with LSE show significantly higher EA (Mean EA: 28.2° R/L vs. normal: 19.5°R/L). Regression analysis indicates EA is a significant predictor of ear position (AOR: 1.159; 95% CI: 1.055 to 1.274).

Conclusion: The study demonstrated that HL, HW, and MH were not significantly associated with EP, while EA was a predictor of ear position.

ABK/070

Missed Opportunities for Vaccination among Children aged 12 to 23 Months in Calabar South, Cross River State, Nigeria

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Background: Immunisation coverage disparities leave many children vulnerable to vaccine-preventable diseases. The situation in urban slums in Cross River State (CRS) remains undocumented.

Objectives: This study aims to assess missed opportunities for vaccination (MOV) among children aged 12–23 months in Calabar South, CRS, Nigeria.

Methods: A community-based cross-sectional analytical study was conducted among children aged 12–23 months. Information was obtained from caregivers. Data collection occurred from August to September 2023. A sample of 460 was determined using Cochran's formula, adjusted for a 10% non-response rate and a design effect of 1.25. Data were collected using a pre-tested, semi-structured, interviewer-administered questionnaire via Kobo Toolbox. Analysis was done using SPSS version 25.0. Descriptive statistics were presented, associations tested using Chi-square, and significant variables were pulled into a multivariate logistic regression at $p < 0.05$.

Results: There were 190(41.3%) male and 270(58.7%) female children in the study. Among caregivers, 65 (14.1%) were males, while 395(85.9%) were females; the majority were mothers (92.0%), aged 30–39 years (42.8%), with secondary education (61.3%). MOV prevalence was 8.0%. OPV0 was the most missed vaccine, while PENTA1 and BCG were the least. The main reason cited for MOV was the perception that the child was 'too old.' In multivariate binary logistic regression, lower age of caregiver and having timely vaccination reduced the likelihood of MOV.

Conclusion: Strengthening routine immunisation, retraining health workers on a "no MOV" policy, and targeted caregiver education are needed to reduce MOV in Calabar South.

ABK/071

Expanding Access to Paediatric Expertise Through Digital Health Solutions: Building Parental Confidence and Improving Outcomes

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Background: Inadequate access to timely paediatric guidance often delays care-seeking and leads to unnecessary health facility visits among parents of newborns and young children. Digital health solutions can enhance caregiver knowledge, boost confidence, and promote informed early decision-making.

Objectives: To evaluate the effectiveness of The Newborn Platform, a digital paediatric support system, in enhancing parental knowledge and confidence, promoting safe, effective home-based care, and reducing unnecessary facility visits.

Methods: We conducted a descriptive review using feedback from 360 mothers surveyed from a cohort of 868 enrolled on The Newborn Platform. The platform offers continuous access to paediatricians through a secure, subscription-only online system, guiding newborn care, nutrition, illness prevention, first aid, and early case management. Responses were analysed to evaluate parental knowledge, confidence, and patterns of care-seeking behaviour.

Results: The service demonstrated high acceptance and perceived value. 99.7% of mothers were willing to recommend it, and 85% already had. A majority (89.2%) reported acquiring substantial new knowledge, while 10.6% gained some, contributing to enhanced confidence in managing minor childhood issues and informed home-based decision-making. Additionally, 95% indicated they would have preferred access before delivery. Prompt responses to queries were linked to decreased dependence on avoidable facility visits.

Conclusion: These findings indicate that The Newborn Platform is a valuable digital support system for strengthening parental knowledge and facilitating safe home-based paediatric care. Incorporating similar platforms into routine maternal and child health services could optimise care-seeking behaviour and improve child health outcomes, particularly in low-resource settings.

ABK/072

Patterns and Causes of Child Mortality in the Cross River Health and Demographic Surveillance System

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Background: Nigeria's high under-five mortality rate is hampered by inadequate cause-of-death surveillance. The Cross River Health and Demographic Surveillance System (HDSS) began full operation in 2012 and currently follows up a population of 177,590 (51.5% females and 48.5% males) from 46,643 households.

Objectives: This study presents sociodemographic characteristics and causes of death from the Cross River HDSS.

Methods: Data were collected through a 6-month longitudinal surveillance of the population, tracking pregnancies, births, deaths and their causes using verbal autopsies, migrations, vaccination, and household socioeconomic status.

Results: Among the 268 deaths reported, 53.7% were males. Stillbirths accounted for the majority (54.5%, n=146) of deaths, followed by early neonatal death (24.3%, n=65), then post-neonatal deaths, 16%(n=43). Most deaths occurred in facilities (80.6%, n=216), and neonatal (n = 225) deliveries primarily occurred at secondary and tertiary facilities. Maternal age was predominantly between 20 and 39 years. Intrauterine hypoxia, congenital malformations and foetal infection were the main causes of stillbirths. Maternal factors linked to stillbirths included mainly severe hypertension with eclampsia, uterine rupture, chorioamnionitis, and prolonged labour. Early neonatal deaths were associated with severe birth asphyxia, respiratory distress syndrome, and prematurity. Among children aged 12 to 59 months, deaths were caused by retinoblastoma, sickle cell anaemia, and severe acute malnutrition, with bacterial infections as immediate causes.

Conclusion: Maternal hypertension and asphyxia are major contributors to stillbirths and early neonatal deaths. Facility-based deaths suggest opportunities for quality improvement in obstetric and neonatal care. The HDSS datasets could inform policy to reduce Nigeria's child mortality.

ABK/073

Knowledge of Oxygen Therapy in Paediatric Healthcare Workers: A National Survey in Nigeria

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Background: Oxygen therapy is one of the most common medical interventions in paediatrics because of the huge burden of respiratory illnesses in this cohort. Globally, about 20% of hospitalised children will require oxygen, and 1.4 million deaths have been reported due to suboptimal therapy.
Objectives: To assess the knowledge of healthcare workers regarding oxygen therapy in paediatric patients at Nigerian tertiary hospitals.
Methods: This was a cross-sectional study of doctors and nurses in 22 tertiary hospitals across Nigeria (a minimum of three centres each from six geopolitical zones). Participants were recruited via multistage sampling. A validated acute oxygen therapy (AOT) questionnaire was used to collect data from subjects. The overall AOT scores were classified as good (score ≥80%), fair (60-<80%) and poor (60%).
Results: Of the 1235 respondents, 775 (62.8%) were females, with M: F of 1:1.7. The mean (SD) age of the respondents, doctors and nurses, was 35.91 (8.4) and 36.57 (9.9) years, respectively. About half, 661(53.5%) of the participants were aware of the World Health Organisation (WHO) guideline on oxygen therapy. The proportion of respondents with overall good, fair and poor AOT knowledge was 298 (24.1%), 733 (59.4%) and 204 (16.5%), respectively. Junior cadre workers constituted the majority (160, 22.9%) with poor knowledge. A lower proportion of doctors (105/855) had poor AOT knowledge compared to nurses (99/380). Odds ratio (OR) 0.40; 95% CI: 0.29-0.54
Conclusion: Knowledge of paediatric AOT is suboptimal and can lead to increased morbidity and mortality in children. Interventions like periodic training can improve health indices.

ABK/074

Community-Based Health Insurance and Pediatric Health Outcomes in Low-Income Nigerian Households: A Systematic Review

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Background: Nigeria's challenging economic climate exposes low-income households to major financial barriers in accessing essential paediatric care, resulting in preventable illness and avoidable child deaths. While Community-Based Health Insurance (CBHI) is widely advocated as a pro-poor intervention to protect vulnerable families, its true impact on paediatric health outcomes in low-income settings remains unclear due to fragmented evidence.
Objectives: This systematic review assesses how CBHI influences paediatric health outcomes, healthcare utilisation, financial protection among low-income Nigerian households.
Methods: Using the PRISMA guidelines, we searched PubMed, Scopus, African Journals OnLine (AJOL), Web of Science, and Embase for studies published between 2005 and 2025. Eligible designs included randomised trials, quasi-experimental studies, longitudinal cohorts, and facility-based comparative evaluations reporting measurable paediatric outcomes. Study quality was independently appraised using Joanna Briggs Institute (JBI) tools. A narrative synthesis was conducted, with random-effects meta-analysis applied where appropriate.
Results: Fourteen high-quality studies, covering over 40,000 children across Nigeria, met inclusion criteria. CBHI enrolment was associated with improved complete immunisation rates (pooled OR 1.76; 95% CI 1.40–2.21) and increased utilisation of primary paediatric care (OR 1.61; 95% CI 1.29–2.01). Insured children experienced about 20% reduction in preventable morbidities and reduced catastrophic out-of-pocket expenditure. However, variations in scheme design affected the magnitude of benefits.
Conclusion: CBHI shows strong potential to enhance paediatric health outcomes, increase service utilisation, and shield poor households from financial hardship. Strengthening scheme sustainability, governance, and integration with primary healthcare systems remains essential for advancing Universal Health Coverage and achieving Sustainable Development Goal 3.

ABK/075

Shaken Baby Syndrome Awareness in Ilorin, Nigeria: Identifying Digital-First Pathways for Health Education

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Background: Shaken Baby Syndrome (SBS) is a preventable form of paediatric abuse; raising public awareness is essential for achieving Sustainable Development Goal 3 regarding child health. In the modern digital era, the efficacy of traditional health campaigns is diminishing, creating potential knowledge gaps. In Nigeria, local data on awareness and preferred communication channels regarding this syndrome are scarce.

Objectives: To assess awareness of Shaken Baby Syndrome in Ilorin, Nigeria, and to identify effective media channels for data-driven health education.

Methods: A descriptive cross-sectional study was conducted in January and February 2025 at the University of Ilorin Teaching Hospital following ethical approval. A validated, structured questionnaire was administered to 388 consenting women of reproductive age (18–49 years), selected via convenience sampling from various hospital departments. Data analysis involved descriptive statistics and the Chi-square test.

Results: The majority of women were unaware of SBS (70.36%), and 92.53% had not encountered any traditional campaign such as flyers, outreaches, and radio presentations. The most preferred information channels were social media (31.66%) and communication from healthcare workers (30.75%). Higher education, newborn care experience, and younger age were positively correlated with better awareness ($p<0.05$).

Conclusion: Awareness of Shaken Baby Syndrome was poor, with traditional campaigns reaching fewer than 10% of women. Strategies must align with preferences for social media and medical staff communication. Integrating data-driven digital campaigns with structured clinical counselling offers a practical pathway to improve awareness and support child protection efforts.

ABK/076

Machine Learning Detection of Social Media Misinformation on Childhood Vaccination in Nigeria and Its Impact on SDG-3

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Background: In Nigeria, childhood vaccination has been hampered due to low coverage and increased online misinformation, especially on social media. Scalable digital tools like machine learning systems are necessary to detect these deceptive messages.

Objectives: This study aimed to identify dominant themes of social media misinformation on childhood vaccination in Nigeria and develop a machine learning model to detect and classify such misinformation.

Methods: A total of 12,480 social media posts related to childhood vaccination were retrieved from Facebook, X (Twitter), and WhatsApp groups using predefined keywords. After deduplication and relevance screening, 5,420 eligible posts were retained for analysis. From these, 1,200 posts were randomly selected and manually annotated by two independent reviewers as either misinformation or accurate information. Inter-rater reliability was high (Cohen's $\kappa = 0.87$). Three machine learning models: Logistic Regression, Support Vector Machine, and Bidirectional Long Short-Term Memory were trained and evaluated using an 80:20 train-test split.

Result: Among the 5,420 analysed posts, 38.6% were classified as misinformation. The Bidirectional LSTM model outperformed other models, achieving an accuracy of 93.4%, precision of 92.1%, recall of 90.5%, and an F1-score of 0.91. The SVM achieved an F1-score of 0.84, while Logistic Regression recorded 0.79. The analysis identified three dominant misinformation clusters: vaccine safety concerns (46%), infertility myths (32%), and religious or foreign conspiracy claims (22%). Exposure to misinformation was associated with a 27% reduction in caregiver willingness to vaccinate.

Conclusion: Machine learning offers a robust method to identify vaccine-related misinformation on Nigerian social media.

ABK/077

Epidemiology and Quality of Life of Pre-school and School-aged Children with Atopic Dermatitis in Ikeja Local Government Area

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Background: Atopic dermatitis (AD) is the most common chronic inflammatory skin disorder in children, presenting with dry, itchy, eczematous lesions and often linked to a personal or family history of atopy. It can impair sleep, emotions, social interactions, and overall quality of life (QoL). Diagnosis is clinical, based on criteria such as the Hanifin and Rajka and UK Working Party (UKWP). Severity is commonly measured using a scoring system such as the Scoring Atopic Dermatitis (SCORAD). In Nigeria, most epidemiological studies have been hospital-based or outdated, limiting generalizability.

Objectives: The prevalence and severity of AD among preschool and school-aged children were determined, as well as QoL and the most affected domains. Additionally, the association between sociodemographic factors, as well as disease severity and the quality of life of children with atopic dermatitis was assessed.

Methods: An analytical cross-sectional study was conducted among 2,500 children aged 1–12 years in Ikeja LGA, Lagos. AD was diagnosed using UKWP criteria, severity assessed with SCORAD, and QoL evaluated using infant dermatitis QOL index (IDQOL), children's dermatology life quality index (CDLQI), and paediatrics quality of life inventory (PedsQL) tools. Each child with AD was age- and sex-matched with two controls.

Results: AD prevalence was 1.2%, with a mean SCORAD score of 24.46 ± 20.79; 73.3% had mild disease. Mean IDQOL/CDLQI score was 12.6 ± 7.4. Children with AD had significantly lower PedsQL scores (85.1 vs. 100.0, p = 0.009).

Conclusion: AD prevalence was 1.2%, mostly mild, but associated with significant QoL impairment, particularly among older children.

ABK/078

Alopecia as Seen Among Children in a Paediatric Dermatology Clinic in Southern Nigeria

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Background: Alopecia refers to hair loss from the scalp or body. The common causes in children include traction, fungal scalp infections, autoimmune conditions like alopecia areata, trichotillomania, and stress-related telogen effluvium.

Objectives: To determine the prevalence and causes of alopecia among patients in our practice.

Methods: This was a retrospective study of 468 patients seen in the clinic over 18 months (January 2024-June 2025). Socio-demographic and relevant clinical data were obtained from the medical case files using a study proforma. Diagnoses of dermatological conditions were largely clinical, but microbiologic and histopathologic confirmation was obtained where necessary.

Results: The mean age of the study participants was 6.06±2.20 years with a male-female ratio of 1:1.1. The prevalence of alopecia was 15.4%. The leading causes of alopecia included Tinea capitis (40%), seborrheic dermatitis (22%), alopecia areata (18%), and traction alopecia (8%). The majority of cases (86%) had a favourable outcome with hair regrowth following treatment of the underlying cause. Most cases of poor outcome were seen among children with alopecia areata.

Conclusion: Alopecia was seen among 15.4% of the patients in our practice, and Tinea capitis was the leading cause. The majority of affected children had complete hair regrowth following treatment of the underlying cause.

ABK/079

Barriers to the Provision of Adolescent Health Services in Nigeria: Paediatricians' Views

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Background: Adolescents require good health services to address their numerous health problems. However, there are barriers which could hinder adolescents' access to good health services, compromising their quality of life and with resultant

negative consequences. Paediatricians' perspectives on the barriers to adolescents' access to, and the provision of adolescent health services is important for effective interventions.

Objectives: The study was designed to determine the Nigerian paediatricians' perspectives about the barriers in adolescents' access to, and the provision of health services to adolescents.

Methods: This was a cross-sectional study among paediatricians who attended the 2024 Paediatric Association of Nigeria conference. A semi-structured questionnaire was used to obtain data, which was analysed with descriptive statistics, Chi-square test and binary logistic regression at $\alpha_{0.05}$.

Results: There were 115 paediatricians; 91.1% were married, and 70.4% practised in urban areas. Lack of privacy and confidentiality was the most common perceived barrier that adolescents experience while accessing health services, while lack of training in adolescent health and lack of adolescent-specific clinical resources were the most cited barriers that the paediatricians experience while providing adolescent health services. Married paediatricians were less likely to perceive that adolescents encounter significant barriers while accessing health services (OR= 0.15, 95% CI: 0.03 – 0.71), while those practising in urban areas were likely to report significant barriers in providing health services for adolescents (OR=3.0, 95% CI: 1.27 – 7.08).

Conclusion: The paediatricians perceived significant barriers in adolescent health service provision. Addressing these barriers could improve adolescent health services in Nigeria.

ABK/080

Perception and Willingness to Use m-Health for Health Care Among Young People in Ibadan Metropolis

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Background: Mobile health (m-Health) holds significant public health potential as it can be independently utilised to enhance healthcare delivery. With the growing access of young Nigerians to smartphones, m-Health provides a good platform for improved health engagement. However, limited research exists on young people's views of m-Health for healthcare in Nigeria.

Objectives: This study assessed the perception and willingness of young people to use m-Health for healthcare in Ibadan, Nigeria.

Methods: A cross-sectional survey was conducted among young people aged 10–24 years attending pre-varsity centres in Ibadan. Data were obtained using self-administered questionnaires and analysed using descriptive statistics, Chi-square tests, and binary logistic regression at $\alpha_{0.05}$.

Results: There were 440 participants, mean age was 16.8±1.8 years, 228(51.8%) were females, 229(52.0%) were in A-level class and 252(57.3%) had high socioeconomic status. Almost all, 413(93.3%), had personal mobile phones, of which 393(89.3%) were smartphones. Regarding m-Health, 274(62.3%) and 332(75.5%) had good knowledge and positive perceptions respectively, but only 233(52.9%), expressed willingness to use it. Willingness to use mHealth was significantly higher among A-level students compared to others (56.5% vs. 43.5%). Good m-Health knowledge and positive perception were significantly associated with being in an A-level class. Those with high socioeconomic status were more likely to have a positive perception of m-Health (OR= 1.65, 95% CI: 1.05-2.61).

Conclusion: Willingness to use m-Health among the young people in this study was low. Further research to unravel the reasons for this is required for targeted interventions to promote willingness to use m-Health among young people in Ibadan.

ABK/081

Prevalence and Predictors of Bacteraemia in Under-Fives with Radiologically Confirmed Community-Acquired Pneumonia in a Tertiary Hospital in South-South Nigeria

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Background: Community-acquired pneumonia is a leading cause of under-five morbidity and mortality in Nigeria. Culture-directed therapy is associated with improved outcomes while offering opportunities to reduce unnecessary broad-spectrum antibiotic use and hospital stay.

Objectives: This study aimed to determine the prevalence and predictors of bacteraemia in under-fives with radiologically confirmed pneumonia in a tertiary hospital in South-south Nigeria.

Methods: This cross-sectional study involved 372 children aged 2-59 months with clinical pneumonia who were admitted to the children's emergency unit of the University of Uyo Teaching Hospital. Sociodemographic and clinical information were obtained using an interviewer-administered questionnaire. Chest radiographs were done for all participants, while blood culture was performed in those with radiologically confirmed pneumonia. Logistic regression models were used to find associations between sociodemographic and clinical variables, and blood culture results. A p-value of <0.05 was taken as statistically significant.

Results: The prevalence of bacteraemia among children aged 2-59 months with radiologically confirmed pneumonia was 28.7%. Younger age [(aOR (95% CI): 1.15 (1.06 - 1.25); p< 0.001], lack of exclusive breastfeeding [3.32 (1.26-8.80); p=0.015], incomplete immunization [3.84 (1.40-10.49); p=0.009], presentation to hospital greater than five days from symptoms onset [2.61 (1.10-6.19); p=0.030] and neutrophilia [3.70 (1.58-8.66); p=0.003] significantly increased the odds of bacteraemia among children with radiologically confirmed pneumonia.

Conclusion: There is a high prevalence of bacteraemia in under-five children with radiologically confirmed pneumonia. Sociodemographic and clinical variables are significant associates of bacteraemia in radiologically confirmed pneumonia and should be considered when planning investigations in this cohort of patients.

POSTER PRESENTATIONS

CARDIOLOGY

ABK/12/001P

Beyond Patent Ductus Arteriosus: A Case of Aortopulmonary Window in Infancy

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Background: Aortopulmonary window is a rare congenital cardiac anomaly that arises from incomplete fusion of the aorticopulmonary septum, leading to abnormal communication between the ascending aorta and the main pulmonary artery. Large defects present in early infancy with congestive heart failure, recurrent respiratory infections, and feeding difficulties. Misdiagnosis as patent ductus arteriosus is common due to overlapping clinical findings. Early surgical repair is critical to prevent irreversible pulmonary vascular disease.

Objectives: To highlight the diagnostic value of echocardiography and the importance of early recognition of aortopulmonary window in infants presenting with heart failure and continuous murmurs.

Case presentation: A 5-month-old male presented with a two-month history of recurrent tachypnea, worsened during feeding. Examination showed tachypnea, hepatomegaly, and a grade 3/6 continuous murmur at the left upper sternal border. Oxygen saturation was 94% on room air. Echocardiography revealed dilated left-sided chambers and main pulmonary artery, with a 6 mm communication between the ascending aorta and pulmonary artery, consistent with a Type I aortopulmonary window and significant left-to-right shunt. The infant was stabilised with oral antifailure therapy and referred for definitive surgical correction.

Discussion: Clinical findings of aortopulmonary window can closely mimic patent ductus arteriosus, underscoring the need for high suspicion in infants with heart failure and continuous murmur. Echocardiography is crucial for defining anatomy and guiding timely intervention.

Conclusion: This case reinforces the importance of early diagnosis and prompt surgical correction of aortopulmonary windows to prevent progression to

pulmonary vascular disease and improve long-term outcomes.

ABK/91/002P

The Association Between Iron Deficiency and Nutritional Status Among Nigerian Children with Cyanotic Congenital Heart Disease

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Background: Increased erythropoiesis secondary to chronic hypoxia in cyanotic CHD predisposes to iron deficiency due to increased iron demand. Iron deficiency causes growth retardation in children through multiple metabolic processes that increase catabolism and suppress appetite. The association between iron deficiency and nutritional status of Nigerian children with cyanotic CHD is understudied.

Objectives: This study determined the prevalence of iron deficiency and its association with the nutritional status of children with cyanotic CHD at two tertiary hospitals in Nigeria.

Methods: A cross-sectional study was conducted among 71 consecutively recruited children (6 months–15 years) with cyanotic CHD at FMC, Abeokuta, and LUTH, Idi-Araba. Iron deficiency was determined using serum ferritin and C-reactive protein assays according to WHO criteria. Nutritional status was determined using the z-scores of anthropometric indices from WHO growth charts.

Results: The prevalence of iron deficiency was 35.2%. The prevalence of underweight, stunting, wasting, and thinness were 37.9%, 40.8%, 39.3% and 39.4%, respectively. Only the weight-for-height z-score (wasting) was significantly associated with iron deficiency in this study (p= 0.028).

Conclusion: Iron deficiency is a significant problem among children with cyanotic CHD and is associated with poor nutritional outcomes among them. Iron and nutritional status assessments should be an integral part of their management to aid early detection and institute appropriate interventions to reduce morbidity and mortality among them.

ABK/201/003P

Congenital Absence of the Sternum in a Newborn: A Case Report

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Background: Congenital absence of the sternum is a rare anterior chest wall defect, representing less than 0.15% of thoracic congenital anomalies. It may occur in isolation or as part of Cantrell's pentalogy or PHACES (Posterior fossa anomalies, Haemangioma, Arterial anomalies, Cardiac defects, Eye anomalies, Sternal defects) syndrome.

Objectives: To highlight the importance of early surgical intervention in congenital absence of the sternum.

Case Presentation: A 68-hour-old term female neonate, brought by parents on account of midline chest wall defect at birth. She achieved spontaneous breathing immediately after birth. Pregnancy was booked; mother had gestational diabetes mellitus with good glycaemic control. No teratogenic exposure, infection, or radiation during pregnancy.

There was a visible V-shaped gap at the upper chest with inward chest wall movement during respiration, visible cardiac pulsation, but without herniation of viscera. No associated craniofacial, abdominal wall or limb defect. Chest Computed Tomography (CT) scan showed complete absence of the sternum. Echocardiography showed Patent Foramen Ovale and Patent Ductus Arteriosus.

CTSU reviewed and planned for early surgical repair. By day 8 of admission, she had primary surgical repair of the anterior chest wall. Postoperative recovery was uneventful. She was discharged in stable clinical condition for follow-up.

Discussion: The sternum protects vital mediastinal structures. Its absence poses risks of respiratory compromise and cardiac injury. The prognosis depends on the extent of the defect and the presence of associated anomalies.

Conclusion: Isolated absence of the sternum generally has excellent outcomes following early surgical intervention.

ABK/202/004P

The Relationship between Maternal Hypertension and Early Neonatal Blood Pressure in Yenagoa Local Government Area, Bayelsa State

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Background: Hypertension in pregnancy is a medical emergency that can adversely affect the health of the mother, her fetus, and newborn child.

Objectives: This study aimed to determine the mean SBP, DBP, and MAP of neonates of both hypertensive and normotensive mothers delivered at ≥28weeks in Yenagoa LGA, Bayelsa State in the first 2 days of life, to compare both, and to determine the relationship between severity of maternal hypertension and early neonatal BP among the neonates of hypertensive mothers.

Methods: It was a comparative cross-sectional study carried out between 16th July and 20th December 2022 among 160 neonates of hypertensive mothers (subjects) and 160 sex and gestational age-matched controls from the postnatal wards of four government-owned hospitals in Yenagoa LGA. Information on neonatal anthropometry, oscillometric BP, clinical examination, and their mothers were obtained using a proforma.

Results: The mean SBP, DBP, and MAP of the subjects were 65.1 ± 7.8 mmHg, 34.1 ± 7.3 mmHg and 45.9 ± 9.8mmHg, respectively, on day 1, and 65.0 ± 8.7 mmHg, 34.8 ± 5.5 mmHg and 46.4 ± 9.3mmHg respectively, on day 2 of life. Subjects had higher BP than the controls on days 1 and 2. There was a weak positive correlation between neonatal BP and maternal hypertension at different points during pregnancy

Conclusion: Maternal hypertension has a weak positive effect on neonatal BP. However, monitoring of neonatal BP is important to pick out any isolated abnormal cases.

ABK/206/005P

Massive Purulent Pericardial Effusion in an Immunocompetent Adolescent – A Case Report

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Background: Purulent pericardial effusion is the accumulation of purulent fluid in the pericardial space. It is a life-threatening condition that is capable of rapid progression to mortality from cardiac tamponade and consequent circulatory collapse. It is rare in the paediatric age group; however, factors such as immunosuppression, untreated infections, and infected cardiothoracic procedures increase the risk.

Objectives: To emphasise the need for early presentation and prompt management of all cases of sepsis, to prevent life-threatening complications, as we also highlight the challenges of care in resource-poor settings.

Case Presentation: We report the case of a 10-year-old male adolescent who was managed for massive purulent staphylococcal pericardial effusion and multifocal septic arthritis. He had an urgent pericardiostomy. He was managed successfully and discharged to the outpatient clinic.

Discussion: Purulent pericardial effusion is a life-threatening condition that combines severe infection with risk of potential circulatory compromise. Staphylococcus aureus, cultured in the index patient, has been reported as the most frequently implicated organism. Purulent pericardial effusion follows hematogenous spread of infecting organisms, usually after delayed treatment of sepsis in otherwise immunocompetent individuals. It is, however, noteworthy that certification of immune competence in an individual is only possible after extensive screening for immunodeficiencies, which is not feasible in resource-poor settings.

Conclusion: Purulent pericardial effusion is a life-threatening condition that can affect apparently immunocompetent children. Efforts should be made to improve parental health-seeking behaviour and improve access to health care.

ABK/241/006P

Cor Triatriatum Sinistrum with Dextrocardia in a Human Immunodeficiency Virus (HIV)-exposed Infant

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Background: Cor Triatriatum is a congenital cardiac defect in which either atrium is divided into compartments by a thin fibromuscular membrane(s), usually from failure of resorption of the common pulmonary vein during infancy.

Objectives: To summarise and discuss a case of Cor Triatriatum with dextrocardia.

Case Summary: A four-month-old male infant presented with poor weight gain since birth, cough and fast breathing of two weeks. Poor weight gain occurred despite adequate feeding. Patient's mother was HIV-positive and on HAART. On presentation, he was small for age, febrile, mildly pale, dyspnoeic and tachypnoeic, with features of malnutrition. Breath sounds were vesicular with bi-basal fine crepitations. The heart rate was 136 beats/minute, with a right parasternal bulge and a 3/6 pansystolic murmur. Initial diagnosis was bronchopneumonia in an HIV-exposed infant. Chest X-ray showed dextrocardia and patchy lung opacities. Echocardiography revealed dextrocardia and a normal-sized left atrium divided into two compartments by fibromuscular bands. The patient received Intravenous antibiotics and nutritional rehabilitation and improved.

Discussion: Cor Triatriatum typically presents in infancy with poor growth and breathing difficulties, including orthopnoea; usually as a result of associated low cardiac output, and this was seen in our patient. Pulmonary congestion with lung field haziness is a common finding and was noted in the patient. Echocardiography confirms the diagnosis; management is mainly conservative.

Conclusion: Cor Triatriatum, though rare, occurs even in our environment. A high index of suspicion is essential for increased diagnosis.

ENDOCRINOLOGY

ABK/1/007P

Anticonvulsant-Induced Diabetes Mellitus in a Nigerian Adolescent

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Background: Sodium valproate (VPA), a widely used anti-epileptic drug, has side effects including weight gain, insulin resistance, and dyslipidemia with increased risk of diabetes mellitus (DM), raising concerns about long-term metabolic risks.

Objectives: To demonstrate the link between VPA and diabetic ketoacidosis (DKA) and the need to closely follow up patients on such an anticonvulsant.

Case Presentation: The index patient is a 13-year-old female adolescent who presented with generalised body weakness, polyuria, polydipsia, and episodes of convulsion. She had been on treatment for epilepsy for about five years, initially on carbamazepine, but VPA was added for optimal seizure control.

Significant examination findings were fever, weight: 37kg, height: 150cm, weakness, restlessness, tachypnea and dyspnea with an acidotic breathing pattern.

The random blood glucose at presentation was unrecordably high; urinalysis: glucose ++++, ketone ++. Initial assessment of DKA with suspected type 1 DM and background epilepsy was made. She was resuscitated with normal saline and had insulin infusion. Remarkable improvement occurred with VPA withdrawal and insulin therapy. She's been on regular follow-up in both paediatric neurology and endocrinology clinics with good glycemic control.

Discussion: This case points to the need to monitor blood glucose in patients on VPA. Although it acts primarily through gamma-aminobutyric acid (GABA) pathways in the brain but has diabetogenic effects, including weight gain and obesity, insulin resistance, pancreatic β-Cell dysfunction, mitochondrial toxicity, hormonal imbalance and alteration in GLUT1 activity.

Conclusion: The association of VPA with metabolic complications necessitates vigilance, regular monitoring, and individualised patient management.

ABK/4/008P

Hashimoto Thyroiditis in a Nigerian Adolescent

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Background: Hashimoto thyroiditis is an immune-mediated thyroid disorder which results in progressive thyroid dysfunction, manifesting as subclinical or overt hypothyroidism.

Objectives: To help clinicians consider a diagnosis of Hashimoto thyroiditis where clinical features of hyperthyroidism are seen in a patient with thyroid function tests showing hypothyroidism.

Case Presentation: A 14-year-old boy presented with progressively increasing neck swelling of a year, with associated bilateral proptosis. He had heat intolerance and hyperphagia. Examination revealed a firm, smooth, non-tender, bilateral neck mass. The neck ultrasound showed enlargement of both thyroid glands, heterogeneous echotexture, and multiple anechoic nodules. Vascularity increased bilaterally. Thyroid-stimulating hormone was elevated, with low free T3 and free T4. Thyroid autoantibody detection could not be done due to financial constraints. A clinical diagnosis of Hashimoto thyroiditis was made. The patient was commenced on levothyroxine 100 µg once daily and has remained stable.

Discussion: Hashimoto thyroiditis can have varied clinical presentations ranging from a hyperthyroid state in the early phase of thyroiditis to overt hypothyroidism in the late phase when the thyroid gland is fibrosed and stops producing thyroid hormone. A high index of suspicion is required for correct diagnosis and proper management.

Conclusion: Hashimoto thyroiditis is a known cause of both hyperthyroidism and hypothyroidism depending on the phase at presentation.

ABK/34/009P

Determination of Vitamin D Status of Infants at the Federal University of Health Sciences Teaching Hospital, Azare: A Pilot Study

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Background: The global variation in the prevalence of Vitamin D deficiency in infants informs the World Health Organization's recommendation for region-specific, research-supported guidelines on vitamin D supplementation.

Objectives: This pilot study was conducted in FUHSTHA, Bauchi State, to assess the feasibility of a proposed multicenter study on the status of vitamin D in infants.

Methods: Following ethical approval and parental consent, study infants from the Paediatric Department were consecutively recruited until the sample size of 56 was attained. A structured questionnaire was applied to obtain socio-demographic and clinical information. Ambiguous questions were noted, and the participant encounter time was documented. Mother and infant blood samples were analysed for 25-hydroxycholecalciferol, calcium, albumin, alkaline phosphatase and other electrolytes. Cost of laboratory investigations was computed. Socio-demographic information and laboratory results were tabulated. Vitamin D deficiency and insufficiency rates were computed, but the study was not powered for inferential statistics.

Results: Clinical and laboratory information from 53 infant-mother pairs with complete results was analysed. The mean serum Vitamin D levels were 27.3(14.6) ng/ml for infants and 13.0 (10.9) ng/ml for mothers. Ten infants and 18 mothers had serum Vitamin D levels below 10ng/l, giving Vitamin D deficiency rates of 19.2% and 34.6% for infants and mothers, respectively. The Vitamin D insufficiency rates were 3.5% and 57.7%, respectively. The consent decline rate was 10%, and the participant encounter time was 45minutes. The cost of laboratory investigations was determined.

Conclusion: The adopted methodology can achieve the objectives of the main study, but the questionnaire requires modifications to ease data collection.

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ABK/127/010P

Untreated Diabetes Mellitus: The Hidden Culprit behind Recurrent Vaginal Candidiasis: A Case Report

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Background: Type 1 diabetes mellitus (T1DM) is a chronic metabolic disorder requiring careful management to prevent complications. Adolescents with diabetes mellitus are vulnerable to infections, including vaginal candidiasis.

Objectives: To report a case of recurrent vaginal candidiasis in an adolescent with untreated DM.

Case presentation: A 14-year-old diagnosed with T1DM at the age of 13 years at a peripheral centre; She, however, did not receive any medical care since her diagnosis, but rather resorted to orthodox care. She presented with recurrent vaginal itching and discharge of one year's duration. The discharge progressively became copious and foul-smelling, leading to social isolation and stigmatisation from her peers and siblings. She also reported irregular menstruation, progressive weight loss, polyuria and polydipsia. Investigations revealed glycated haemoglobin> 14%, and vaginal swab yielded growth of Candida albicans. She was then commenced on a basal-bolus insulin regimen along with oral and topical antifungals following extensive diabetes education. Within two weeks, symptoms significantly improved, and she was able to mingle with her peers and siblings without fear of stigmatisation. Adequate education, adherence and lifestyle modifications also contributed to her improved outcome.

Discussion: Hyperglycaemia aids the colonisation of Candida albicans. A comprehensive approach to management is crucial, and healthcare providers should be aware of the risk of infections in patients with untreated and poorly controlled DM.

Conclusion: Untreated DM can present with vaginal candidiasis as seen in our patient, emphasising the need for detailed diabetes education at diagnosis and prompt treatment to ensure good glycaemic control and prevent complications.

ABK/195/011P

Isochromosome Turner Syndrome Co-Existing with Waardenburg Syndrome in a Nigerian Girl: A Case Report

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Background: Turner syndrome (TS) is a chromosomal disorder characterised by the partial or complete deletion of one X chromosome in individuals with a typical female phenotype. Waardenburg syndrome (WS) is clinically suspected by the presence of pigmentary deficiency of the hair and skin, synophrys, heterochromia, and hearing loss.

Objectives: To report TS co-existing with symptoms of WS.

Case Presentation: A 15-year-old female presented with short stature, delayed secondary sexual development, secondary amenorrhea and non-progressive patchy depigmentation of the skin and hair. Her height was 124.8cm (-5.79 S.D), and Tanner staging was B1, PH3. Examination findings met the clinical criteria for WS without heterochromia or hearing impairment. TFT was euthyroid; FSH – 40.22 IU/L ↑ (0.5 - 12) and LH – 38.67 IU/L ↑ (1.5 – 10.0) showed signs of ovarian failure. Estradiol – 45.95 pg/ml (29.73 – 189.19)/ 0.17 nmol/L (0.05 – 0.97). Pelvic USS had a conclusion of a congenitally small uterus and ovaries. Her bone age was delayed at 11 years, and karyotype reported one normal X and an isochromosome of the long arm of the second X chromosome, giving three copies of the long arm of chromosome X and 1 copy of the short arm; 46, X, i(X)(q10). The IGF-1 was low 154ng/ml. Both parents and the child were counselled about the co-existing conditions, the need for growth hormone and other hormone replacement therapies alongside psychological review. She has commenced GH, and a follow-up visit is scheduled.

Conclusion: WS, though rare, can co-exist with other conditions and should be clinically suspected using the defined criteria.

ABK/197/012P

Neonatal Diabetes Mellitus With K-ATP Channel (KCNJ11) Mutation: A Case Report

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Background: Neonatal diabetes mellitus (NDM) is a rare form of diabetes, often associated with genetic mutations affecting pancreatic beta-cell function. Intrauterine growth retardation (IUGR) is commonly seen in transient NDM.

Objectives: To report a case of neonatal DM.

Case Presentation: An 8-week-old male infant presented with persistent hyperglycaemia. He was delivered at term, weighing 2.2kg and managed for neonatal meningitis and diabetic ketoacidosis at the referral centre. Investigations; HbA1c 7.9%, C-peptide 0.61ug/l, IAA 2.0IU, ICA 6.82nU/ml. Genetic studies revealed a K-ATP channel mutation (KCNJ11). Despite initial management with basal-bolus insulin, normoglycaemia was only achieved following commencement of glibenclamide. The patient was lost to follow-up at 12 months, with normal growth and development at the last visit.

Discussion: Neonatal DM is caused by an abnormality in one of the genes involved in the development and function of pancreatic beta cells (Chromosome 6q24 anomalies, K-ATP channel defects and INS gene mutation). Most Permanent NDM is caused by mutations in the two KATP channel genes (KCNJ11, ABCC8) and the INS gene, while 70% of transient NDM is caused by a chromosome 6q24 anomaly. Presentation and outcomes depend on the cause. It may mimic sepsis. The treatment may be with sulphonylurea, as seen in this patient, and/or with insulin.

Conclusion: High index of suspicion is essential in infants with persistent hyperglycaemia, particularly in the presence of IUGR. Early recognition and genetic testing can guide treatment decisions. Long-term follow-up is essential to assess sustained normoglycemia and developmental outcomes.

ABK/200/013P

Severe Complications Following Delayed Referral of Paediatric Diabetic Ketoacidosis: A Report of Two Cases

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Background: Diabetic ketoacidosis (DKA) is a critical hyperglycaemic emergency necessitating precise treatment and timely adjustments to treatment, guided by continuous clinical and biochemical monitoring.

Objectives: This report aims to emphasise the importance of prompt referral to centres with established expertise in DKA management and to highlight the inherent risks associated with delayed intervention.

Cases Presentation:

Case 1: An 8-year-old male presented at the referring hospital with a two-week history of symptoms of hyperglycaemia. His referral to a facility with experts was, however, delayed by approximately 48 hours after diagnosis in a state of impaired consciousness. The DKA in this newly diagnosed patient was complicated by acute
kidney injury (AKI) and severe electrolyte derangements, which delayed his transition to multiple daily injections (MDI) and resulted in a 25-day hospital stay. He ultimately achieved a favourable recovery with good glycaemic control and renal function. He is currently doing well on follow-up.

Case 2: A 13-year-old female with a week-long history of polyuria, unexplained weight loss, dyspnoea, and weakness. She had been admitted to the referring hospital for two days, where she received only intravenous fluids despite being identified hyperglycaemia. She was transferred to our facility, unconscious in severe DKA complicated by elevated intracranial pressure, following the parents' request. It took over 96 hours before resolution of symptoms and transition to MDIs.

Conclusion: Prompt referral of paediatric DKA cases to specialised centres with expert care is recommended to prevent complications, reduce morbidity, shorten hospital stay and ultimately contribute to optimal patient outcomes.

ABK/219/014P

Trends And Inequalities in Early Life Obesity In Nigeria Between 1990 And 2022: Insight from the WHO Global Health Observatory Data

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Background: Sub-Saharan Africa faces a dual burden of nutritional issues, with obesity emerging as a major concern alongside undernutrition. Obesity, which is linked to many chronic diseases, is increasing rapidly, even among children and adolescents in Nigeria. A prevalence of 2.8% was reported among children aged 5-18 years in Southern Nigeria, and 3.3% in Kano.

Objectives: This study examines the trends in obesity prevalence among children and adolescents in Nigeria, as well as the existing inequalities from 1990 to 2022.

Methods: Data on child and adolescent obesity from the WHO Global Health Observatory (GHO) for Nigeria between 1990 and 2022 were analysed using the WHO HEAT online software to examine the trends and inequalities in obesity among children aged 5-19 years in Nigeria. Inequalities were measured across age and sex using Difference (D), Ratio (R), Population Attributable Fraction (PAF), and Population Attributable Risk (PAR).

Result: The prevalence of obesity among children and adolescents in Nigeria has risen 7-fold from 0.5% (1990) to 3.8% (2022), a 6-fold rise among 5- 9-year-olds (0.75% to 5.06%), and >7-fold among adolescents (0.39% to 2.98%). Inequalities deepened over time by age (Difference: 0.4 in 1990 to 2.1 in 2022; PAF: 26.8% in 1990 to 20.8% in 2022), and minimal disparities by sex (Difference: 0.3 in 1990 to 0.6 in 2022; PAF: 27.9% in 1990 to 0% in 2022).

Conclusion: Early life obesity continues to rise in Nigeria with deepening inequalities, especially by age. Targeted interventions are necessary to reduce obesity in early life and to close the inequality gaps.

ABK/233/015P

Alkaptonuria in Two Siblings at the University College Hospital Ibadan

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Background: Alkaptonuria is a rare autosomal recessive disorder resulting from an inherited deficiency of Homogentisic acid oxidase with resultant accumulation of Homogentisic acid (HGA) and its oxidative metabolites in blood, connective tissue and urine. Incidence is 1: 250,000 -1 million live births. Treatment is with Oral Nitisinone.

Objectives: To describe the challenges in the management of Alkaptonuria in young children.

Case Presentation: Both siblings (boys ages 11 years and 3 years respectively) were noticed to have darkening of urine a few hours after voiding. One of them had been erroneously managed for schistosomiasis. Clinical examination was normal. Urine organic acid profile showed grossly elevated Homogentisic acid. Oral ascorbic acid twice daily at 500 mg did not improve their clinical symptoms. They are to commence oral Nitisinone and periodic monitoring of plasma tyrosine levels.

Discussion: Alkaptonuria is characterised by deposition of homogentisic acid leading to ochronosis and ochronotic osteoarthropathy; however, dark urine a few hours after voiding is the childhood manifestation. Other complications such as musculoskeletal, cardiac, ear and eye occur as age advances. The use of antioxidants such as high-dose ascorbic acid has been proposed, but it does not reduce homogentisic acid excretion as was the case in the siblings. Nitisinone, which inhibits the enzyme that produces HGA, was recently approved for use in children, and the siblings have been planned to commence it.

Conclusion: Alkaptonuria, though rare, can occur in the population; early diagnosis is possible through organic acid profile and genetic testing; treatment with Nitisinone is now approved in children.

ABK/189/016P

Maternal Use of Shatavari-Containing Herbal Lactagogues - A Cause of Infantile Breast Enlargement: A Case Report

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Background: Breast enlargement is common in infants, often a normal response to falling maternal oestrogen levels, which triggers the release of prolactin from the newborn's pituitary gland. Maternal use of certain medications or herbal supplements, often aimed at improving breastmilk production, can contribute to mammary hyperplasia in some infants.

Objectives: We report a case of an over-the-counter (OTC) herbal lactagogue-induced breast enlargement.

Case Presentation: An 8-month-old female infant presented with progressive bilateral breast enlargement first noticed at 4 months, about 3weeks after commencement of an OTC herbal lactagogue capsule containing 'shatavari' as its main ingredient. Examination revealed Tanner stage III breast development, no pubic hair or axillary hair development. Investigations revealed elevated prolactin and oestrogen levels and prepubertal LH/FSH. Ultrasound revealed gynaecomastia with retro-areolar nodular heterogeneously hypoechoic structures. The medication was discontinued and the breast size progressively reduced over 8 months to Tanner stage I. Likewise, a reduction in the serum prolactin and oestrogen levels.

Discussion: This case highlights the importance of considering exogenous hormonal exposure in infants with breast enlargement. 'Shatavari' (Asparagus racemosus Wild) is believed to have oestrogen-like effects that stimulate prolactin production in lactating mothers but can potentially cause breast tissue growth in breastmilk-exposed infants.

Conclusion: This case emphasises the need for healthcare providers to inquire about maternal use of herbal supplements or other medications during lactation when evaluating infants with breast enlargement. Prompt discontinuation of the medication can lead to symptom resolution, as seen in this case.

GASTROENTEROLOGY/NUTRITION

ABK/106/017P

Social Determinants of Malnutrition Among Hospitalised Children in Ilorin, Nigeria: Implications for Family and Community-Based Interventions

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Background: Malnutrition remains a critical public health challenge in Nigeria, contributing to nearly half of under-five mortality and over one million deaths annually. Hospitalised children are especially vulnerable, yet limited evidence exists on the social determinants affecting their nutritional status.

Objectives: To identify the social determinants associated with malnutrition among hospitalised children in Ilorin, North-Central Nigeria.

Methods: A hospital-based cross-sectional study was conducted in two government hospitals. Information on socio-economic status, household food security, and other potential social determinants of nutritional status was collected using structured questionnaires and anthropometric measurements following World Health Organisation (WHO) growth standards.

Results: Among 298 hospitalised children with median age 17.3 [IQR: 7.5–53.1] months (male-to-female ratio 1.3:1), 88.2% (242/298) had at least one abnormal anthropometric index as defined by the WHO. The prevalence of underweight, wasting, and stunting among participants was 57.6% (134/233), 37.8% (88/233), and 58.4% (174/298), respectively. Children of mothers with a monthly income less than #70,000, who do not receive informal social support, and use other types of toilets aside flush toilets had higher likelihood of malnutrition, [AOR (95% CI): 10.9 (1.42–83.58), 2.57 (1.06–6.28), and 2.00 (1.04–3.73)] respectively.

Conclusion: Malnutrition is highly prevalent among hospitalised children in Ilorin. Key predictors include low maternal income, poor social support, and inadequate sanitation. Interventions promoting women's economic empowerment, improved sanitation, and family- and community-based support systems are essential to reduce child malnutrition.

ABK/116/018P

Zinc Therapy in The Home Treatment of Diarrhoea by Mothers of Under-Five Children in a Tertiary Paediatric Clinic

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Background: Zinc, an easily available, cost-effective intervention, improves diarrhoea outcomes among under-five children. Its use is, however, suboptimal in developing countries.

Objectives: To assess mothers' practice of zinc therapy in the home management of diarrhoea among under-five children.

Methods: A cross-sectional study was conducted among mothers of under-five children attending the Paediatric Out-patient Clinic in Rivers State. Mothers' responses to specific questions on zinc therapy practice were collected. One mark was given for each correct response and collated as a practice score. Those with scores greater than 50% had good practice.

Results: A total of 145 mothers aged 22-50 (32.6±5.) years participated in the study, and 120 (82.8%) had heard of zinc therapy in the treatment of diarrhea. Only 92(76.7%), however, used it on their children. Seventy (58.3%) said zinc helped in the faster resolution of diarrhoea. Pharmacists/chemists (31.7%), health care workers (HCW) in hospitals (27.5%) and mothers (17.5%) made the prescriptions. Only 71 (59.2%) mothers gave zinc at the correct dosage, and 31(25.8%) right duration of treatment. Seventy-eight (65%) mothers had good practice. Poor practice of zinc therapy, though not significant, was higher among unmarried mothers and those with higher parity of 3 or more.

Conclusion: This study highlights an urgent need to educate mothers on the appropriate administration of zinc to children to enable them enjoy the benefits of zinc therapy in diarrhoeal illnesses.

ABK/171/019P

Infant Feeding Practices among Adoptive Mothers in an urban Nigerian community: Challenges and Cultural Influences

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Background: Optimal feeding practices are fundamental to a child's survival, growth, and development. In Nigeria, factors surrounding adoption complicate breastfeeding decisions and may lead to early introduction of complementary foods. Understanding feeding patterns among adoptive mothers is crucial to improving counselling and child nutrition outcomes.

Objectives: To assess infant feeding practices and challenges among adoptive mothers in Onitsha and explore their attitudes toward breastfeeding and donor human milk.

Methods: A descriptive cross-sectional study was conducted among 62 adoptive mothers recruited through purposive and snowball sampling. Data were collected using structured questionnaires and semi-structured interviews and analysed with descriptive statistics and thematic analysis.

Results: The mean age of the mothers at adoption was 48.5±6.3years, most were of middle socioeconomic class, and 79% had a tertiary education. Only 46.8% received breastfeeding counselling, often post-adoption. Although 75.8% believed breastfeeding was beneficial, 35.5% attempted it, and 82.3% were unaware of lactation aids. Cultural perceptions of induced lactation as "unnatural," advanced maternal age, and inadequate healthcare support were major deterrents. About 38.7% expressed willingness to breastfeed if adequately supported. The majority (87.1%) declined donor human milk, citing cultural and hygienic concerns. Early introduction of complementary foods was common.

Conclusion: Adoptive mothers in this community are aware of breastfeeding benefits but face cultural, informational, and physiological barriers. Limited counselling and ignorance of lactation aids contribute to low breastfeeding attempts. Pre-adoption counselling incorporating feeding practices, improving professional competence in induced

lactation, and promoting culturally sensitive lactation support can enhance breastfeeding acceptance and infant feeding outcomes among adoptive families.

HAEMATOLOGY/ONCOLOGY

ABK/23/020P

Secondary Malignant Neoplasm in a Toddler with Isolated Hemi-Hyperplasia in Abeokuta, Nigeria: A Case Report

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Background: Cancer-predisposing syndromes (CPS), including hemi-hyperplasia, are recognised risk factors for secondary malignant neoplasms (SMNs) in children. Isolated hemi-hyperplasia is a congenital overgrowth condition marked by asymmetric enlargement of a body part, generally regarded as a partial expression of Beckwith–Wiedemann syndrome (BWS), which is a well-established CPS.

Objectives: To highlight the risk of SMN in children with cancer-predisposing syndromes such as isolated hemi-hyperplasia.

Case Presentation: We report a two-year-old female with isolated hemi-hyperplasia of the right lower limb who developed secondary acute myeloid leukaemia (AML) within six months of completing treatment for nephroblastoma. She received chemotherapy for both the primary and secondary malignancies and subsequently had a haematopoietic stem cell transplantation (HSCT). She, however, died about a year later from transplant-related complications.

Discussion: Secondary malignant neoplasms are morphologically and histologically distinct tumours developed by an individual within months to years after diagnosis with a primary tumour. Childhood cancer survivors are at increased risk of SMNs following exposure to chemotherapy and radiotherapy, and the risk increases with the presence of cancer-predisposing conditions. Acute myeloid leukaemia is the most frequently reported SMN, and secondary malignancies are generally associated with unfavourable outcomes, as observed in our patient. Hemi-hyperplasia results from genetic mutations or sporadic events but could also be idiopathic. The underlying cause of hemi-hyperplasia in our patient could not be established, however, due to financial and logistical limitations.

Conclusion: The report highlights the increased susceptibility and need for surveillance for SMN in individuals with tumour-predisposing conditions.

ABK/157/021P

Nephrotic Syndrome and Acute Kidney Injury as a Clinical Presentation of Acute Lymphoblastic Leukaemia. A Case Report

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Background: Nephrotic syndrome (NS) is a rare clinical manifestation of acute lymphoblastic leukaemia (ALL).

Objectives: To describe a case of NS co-existing with ALL, a rare clinical manifestation that can mask ALL and requires a high index of suspicion.

Case Presentation: A 9-year-old girl was diagnosed with ALL following presentation with recurrent fever, pallor and abdominal distention. Complete blood count showed hyperleukocytosis, severe anaemia and thrombocytopenia. Bone marrow cytology confirmed the diagnosis of ALL. She was noticed to have developed generalised oedema before commencement of chemotherapy. Urinalysis showed 4 pluses of protein without haematuria. She had elevated blood pressure (> 99th centile). There was hypalbuminaemia 2.0 g/dL and hyponatremia 125 mmol/L, metabolic acidosis (15 mmol/L) and azotaemia (urea 94 mg/dL) and oliguria (urine output 0.7 mls/kg/hour) and a diagnosis of acute kidney injury (AKI) secondary to tumour lysis syndrome with nephrotic syndrome in ALL was made.

She had supportive therapy (fluid regimen, albumin and antihypertensive) and subsequently commenced induction of remission chemotherapy. The oedema regressed, and her urinalysis became normal by the end of induction chemotherapy with disease remission.

Discussion: AKI secondary to TLS is a life-threatening complication of hyperleukocytosis. Its co-existence with nephrotic syndrome, a rare clinical manifestation of ALL, is rare. NS in ALL can be due to infiltration of the kidney by the tumour cells and is immune-mediated. The treatment modality is chemotherapy.

Conclusion: Nephrotic syndrome is a rare manifestation of ALL. Treating the underlying leukaemia leads to remission of the NS.

ABK/120/022P

Acute Lymphoblastic Leukaemia Presenting as Pleural and Pericardial Effusions – A Case Report

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Background: Acute lymphoblastic leukaemia (ALL) accounts for approximately one-third of all childhood cancers. The most common symptoms include fatigue, easy bruising or bleeding, frequent infections, fever, and bone and joint pains. It can also have uncommon presentations such as fractures, haematemesis, and ascites. ALL presenting as pleural effusion is very uncommon, and pericardial effusions are even rarer.

Objectives: To highlight the need for a high index of suspicion in the presence of unusual symptoms resulting in delayed diagnosis, as this impacts patient outcome.

Case Presentation: A nine-year-old male child with chest pain, cough, dyspnoea, weight loss and fever, of three weeks' duration, presented with haemorrhagic bilateral pleural and pericardial effusions. He was initially investigated for pulmonary tuberculosis and pneumonia. Regular hematologic parameter checks were within the normal range until a repeat done 23 days into admission became suggestive of leukaemia; this was confirmed with bone marrow cytology. The pericardial and pleural effusions resolved as soon as chemotherapy was commenced. The child is responding well to chemotherapy.

Discussion: Paediatric leukaemia rarely causes serous effusions, especially as the first manifestation. Our patient presented with symptoms of common illnesses and his initial blood parameters were within the normal range, so ALL was not diagnosed until three weeks after presentation.

Conclusion: Acute lymphoblastic leukaemia could masquerade with features of common conditions. Delay in making a diagnosis may lead to worse patient outcomes, so a high index of suspicion is required when unusual findings are observed.

ABK/151/023P

Evaluation of the Performance of Two Point of Care Testing Devices for Haematological Services: A Mixed Population Study

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Background: Packed Cell Volume (PCV)/Hb concentration (Hbconc) and Hb genotype determination are common haematological investigations in the sub-Saharan Africa (SSA) region. Various factors impinge on their results' timeliness and accuracy.

Objectives: To assess the performance of two Point of Care Testing Devices (POCTDs) among children and adults, compared to commonly used standard testing techniques for patients in SSA.

Methods: The performance of two POCTDs (Veri-Q Hb/PCV metre and Sickle Scan) were explored relative to Automated Haematology Analyser and Hb electrophoresis testing techniques using blood samples of a mixed study population of 160 children and adults. Bland and Altman method was used to test the agreement of test methods alongside other accuracy tests.

Results: There was strong agreement between the Veri-Q Hb/PCV metre and Automated Haematology Analyser, with biases of 0.69 and -0.12 for PCV and Hbconc, respectively. There were strong correlations between the PCV and Hbconc measured by the device and the standards. PCVrho=0.84; $p<0.0001$; 95% CI 0.78 to 0.88, and Hbconcrho=0.85; $p<0.0001$; 95% CI 0.80 to 0.89, respectively.

The diagnostic accuracy of the Veri-Q Hb/PCV metre at detecting severe anaemia (Hbconc<7g/dl) was high with sensitivity: 93.3%, Specificity: 97.8%, Positive predictive value (PPV): 82.4% and Negative predictive value (NPV): 99.2%.

Similarly, the accuracy of the Sickle SCAN was perfect with sensitivity, specificity, positive predictive

and negative predictive values of 100%, 100%, 100%, and 100% respectively for the Hb genotypes AA, AS, AC, and SS.

Conclusion: The two POCTDs evaluated had excellent performances and could be valuable tools for haematological services in the resource-constrained settings of most SSA countries.

ABK/172/024P

Xeroderma Pigmentosum: Clinical Diagnosis in Two Nigerian Siblings

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Background: Xeroderma pigmentosum (XP) is a rare autosomal recessive disorder caused by defects in nucleotide excision repair, leading to extreme photosensitivity, pigmentary skin changes, early-onset malignancies, and occasional neurologic degeneration. Diagnosis and management are particularly challenging in low- and middle-income countries (LMIC) due to limited access to specialised diagnostic testing.

Objectives: This report describes two siblings with classical features of XP to highlight the typical clinical presentation and challenges in care.

Case Presentation: A three-year-old girl presented with a two-year history of generalized hyperpigmented, pruritic skin rashes affecting the scalp, face, limbs, and lips, accompanied by ocular redness, excessive tearing, and severe photophobia that worsened with sun exposure. Examination revealed a persistent non-healing ulcer on the anterior tongue, whitish spots and fleshy growths over the cornea, and reduced vision in both eyes. A similar pattern of skin and ocular disease was observed in her older male sibling, who also had a large, non-healing scalp ulcer. Based on these findings, a clinical diagnosis of XP was made. Caregivers were counselled on strict sun avoidance, consistent use of sunscreen, multidisciplinary follow-up, and the need for genetic testing for definitive confirmation.

Discussion: In low-resource settings, diagnosis of XP is largely clinical, with lesion biopsies used mainly to assess suspected malignancies, as definitive molecular testing is often inaccessible. There is currently no curative therapy for XP. Management focuses on lifelong ultraviolet protection and symptomatic treatment of complications.

Conclusion: Early clinical recognition of XP remains crucial for timely intervention, reduction of complications, and improved survival outcomes.

ABK/177/025P

Rhabdomyosarcoma: Clinical Characteristics and Outcome

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Background: Rhabdomyosarcoma is the most common soft tissue malignant tumor in children and adolescents, accounting for 4.5% of all childhood cancers. Rhabdomyosarcoma (RMS) cells originate from skeletal muscle progenitor cells. It is included in the group of small blue, round cell tumours of childhood along with neuroblastoma, lymphoma and primitive neuroectodermal tumours. Despite advances in diagnostic and treatment methods to improve survival rates, children with advanced RMS and recurrent diseases have a poor prognosis.

Objectives: To determine the demography, clinical characteristics, and outcome of patients with Rhabdomyosarcoma over the last 3 years

Methods: A retrospective and prospective study of clinical records of Paediatric patients diagnosed with Rhabdomyosarcoma between January 2023 and October 2025 at the University of Port Harcourt Teaching Hospital were surveyed. Their demography, clinical characteristics, and outcome were analysed

Results: Of the 23 patients seen, males were more affected, with a Male to female ratio of 3: 1. There were two peak age incidences, Children < 5 years and in the adolescence period 12- 16 years. About 44% presented with head and neck RMS, 35% had RMS of the lower limbs, 13% had bladder RMS and 8% had vaginal RMS. More than 50% of the patients presented with stage 3 or stage 4 disease, 40% had reoccurrence of the disease. Forty-eight percent of the

patients were lost to follow -up and 30% died from complications of the disease.

Conclusion: More males were affected; head and neck were the most common site for RMS. Advanced disease at presentation and high default rate were contributing factors to poor outcome

ABK/190/026P

Passive Immune Thrombocytopaenia in Twin Infants, secondary to Maternal Autoimmune Disease

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Background: Passive immune thrombocytopaenia (PIT)in infants is a clinically significant condition. It results following transfer of maternal anti-platelet antibodies transplacentally or via breastmilk, particularly in mothers with autoimmune disorders.

Objectives: This report aims to highlight the occurrence of PIT beyond the neonatal period and the treatment strategies employed.

Case Presentation: A set of female twins presented at 4-months of age with recurrent melaena, nasal and gum bleeds of 2 months, fever of 2 weeks and tachypnoea and generalised weakness of 2 days. They were severely pale and in heart failure. Laboratory evaluation revealed severe anaemia and profound thrombocytopaenia (14 $x10^9$ /l and 8 x 10^9/L respectively). Their mother had severe anaemia in the third trimester of pregnancy, requiring repeated blood transfusions and following admission of the twins, was further evaluated and diagnosed with Systemic Lupus Erythematosus. The twins had fresh whole blood transfusions, initial treatment with intravenous methylprednisolone with no improvement and subsequently received Intravenous Immunoglobulin which led to a rapid rise in platelet counts and resolution of bleeding.

Discussion: The effect of maternal anti-platelet antibodies in the baby may persist beyond the neonatal period even up till 4 months of age, as in this report. Despite paucity of literature on this as a cause of immune thrombocytopaenia in infants, a high index of suspicion should be maintained.

Conclusion: In infants presenting with unexplained or persistent thrombocytopaenia, maternal autoimmune status if not previously known, should be evaluated. Intravenous Immunoglobulin is very effective in treatment of steroid-refractory passive immune thrombocytopaenia.

ABK/199/027P

Colorectal Carcinoma in Childhood - Case Reports and Review of Literature

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Background: Colorectal carcinoma is rare in children and is not often considered in their evaluation for recurrent abdominal symptoms. Although the tumour is highly aggressive and invasive in childhood, the initial symptoms and signs may be non-specific and could mimic other common childhood ailments.

Objectives: To create awareness of the occurrence of colorectal cancers in childhood and highlight the challenges in its management.

Case Presentation: We report two cases of colorectal cancer; a 14-year-old male adolescent who had three months history of recurrent abdominal pain, progressive abdominal swelling and weight loss. Abdominal palpation revealed a lower abdominal mass extending to the left lumbar region. An inoperable large bowel tumour with widespread metastatic deposits was found at exploratory laparotomy. He was managed for advanced signet ring cell carcinoma based on histology reports, utilizing FOLFOX regimen.

The second case was a 10-year-old female adolescent who had recurrent abdominal pain and passage of currant jelly stool of three weeks' duration. Abdominal examination and sonographic findings were in keeping with intussusception, for which she had surgical resection. Histologic report indicated mucinoid adenocarcinoma; however, further treatments were declined on account of financial constraints.

Discussion: Childhood colorectal cancer typically presents as advanced disease. Outcome is worse in resource-poor settings where lack of awareness of its occurrence in the paediatric age group, inadequate

diagnostic facilities, and poverty constitute barriers to early intervention.

Conclusion: Colorectal cancer is an aggressive tumour in childhood. A high index of suspicion by healthcare providers is necessary to improve clinical outcomes.

INFECTIOUS DISEASES

ABK/31/028P

Suspected Viral Haemorrhagic Fevers in Children: A Five-Year Review of Clinical Presentation and Outcome at Federal Teaching Hospital, Gombe.

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Background: Viral Haemorrhagic Fever (VHF) is a group of multi-systemic febrile syndromes caused by several families of viruses. It is a disease of public health concern requiring a high index of suspicion and affecting all age groups. Data on paediatric VHF is generally scarce, especially in Northern Nigeria.

Objectives: To report the clinical presentations and outcomes of children admitted with suspicion of VHF at the Holding area, Federal Teaching Hospital Gombe (FTHG).

Methods: This was a five-year retrospective-descriptive study conducted at the VHF Holding area of FTHG. Case notes of children aged <18 years admitted between January 2020 and December 2024 were retrieved. Data on socio-demographics and clinical and laboratory findings were extracted and analysed using SPSS version 24.

Results: Of the 241 total patients isolated from suspected VHF in the period under review, 51(21.2%) were children. Nineteen (37.3%) of the paediatric admissions were referrals as suspected cases, while 28(54.9%) were transferred from the EPU. Males were 30(58.8%) and M: F was 1.4:1. Their mean-age was 10.0±0.77 years, adolescents were 28(54.9%) while only 1(1.9%) was an infant. Majority 46(90.2%) were from low socioeconomic class.

Fever was reported in 49(96.1%), abnormal bleeding in 17(33.3%) and 9(17.6%) were unconscious. History of contact was present in 13(25.5%), 2(3.9%) tested positive for Lassa virus RT-PCR (both of which had a history of contact with a suspected case), and 1(1.9%) tested positive for yellow fever. Confirmation of VHF could not be ascertained in 20(39.2%), while mortality was recorded in 14(27.5%).

Conclusion: Although confirmed VHF was low, a history of contact should raise the suspicion of VHF.

Keywords: Children, Viral Haemorrhagic Fever, Lassa fever, Suspicion, Outcome

ABK/32/029P

A Rare Presentation of Deep Venous Thrombosis in a Nigerian Adolescent with Pulmonary Tuberculosis at the Federal Teaching Hospital Gombe

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Background: Tuberculosis (TB) remains a global public health challenge. Although myriad extra-pulmonary TB cases have been studied, the association between TB and deep venous thrombosis (DVT) is unclear and scarcely reported in children/adolescents.

Objectives: To highlight an atypical presentation of DVT in a Nigerian adolescent with TB.

Case Presentation: A 16-year-old male presented with cough of one month, weight loss and low-grade fever of three weeks, and difficulty breathing of one week. He was unimmunized and from a low socioeconomic class. He was wasted, dyspnoeic, afebrile with a BMI of 16.2kg/m^2 and features of right pleural effusion. Chest x-ray showed features of right-sided effusion and consolidation; PCV 26%, WBC and platelets were normal; ESR =71mm/hr; Sputum GeneXpert was negative; TB-Diagnostic Algorithm score - 28. Diagnosis was pulmonary TB with right-sided pleural effusion. Anti-Kochs was commenced, and a Closed Thoracostomy Tube drain was inserted.

He developed a painful, diffuse left-arm swelling two weeks into admission. There was no history of trauma. X-ray of the limb was normal; Doppler ultrasound scan revealed DVT of the basilic/cephalic veins. Clotting profile was normal, while D-dimer levels

were unavailable. He commenced Tab Rivaroxaban 20mg daily for three months. The swelling resolved over a week, and he was discharged after 26 days.

Discussion: Cases of DVT in patients with TB have been reported, emphasising the potential association between TB/Anti-Koch and DVT. Our report buttresses the need for further research on this subject.

Conclusion: Non-traumatic limb swelling should raise suspicion for DVT in adolescents with TB.

ABK/37/030P

Burden, Clinical Spectrum, Predictors of Severe Anaemia, and In-hospital Outcomes of Paediatric Severe Malaria in a Tertiary Hospital

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Background: Severe malaria (SM) remains a leading cause of childhood morbidity and mortality in Nigeria, with severe malarial anaemia (SMA) driving transfusion demand and poor outcomes. Recent contemporary hospital-based data from Southwestern Nigeria are limited.

Objectives: To describe the burden, clinical spectrum, predictors of severe anaemia, and in-hospital outcomes of paediatric SM at a tertiary hospital in Southwest Nigeria.

Methods: We retrospectively reviewed case records of children aged 1 month–14 years admitted with SM to Olabisi Onabanjo University Teaching Hospital, Sagamu, between January–December 2023. Demographic, clinical, laboratory, treatment, and outcome data were extracted. Predictors of SMA were assessed using logistic regression.

Results: Of 699 paediatric admissions, 65 (9.3%) were confirmed SM cases; 55.4% were <5 years, and 72.3% males. Nearly two-thirds were underweight, and 89% belonged to low-middle socioeconomic classes. The most frequent WHO severity criteria were multiple convulsions (35.4%), prostration (33.8%), cerebral malaria (16.9%), and SMA (16.9%). Eleven children developed SMA; pallor as a presenting complaint was the strongest independent predictor (adjusted OR 8.94, 95% CI 1.60–49.8, p=0.012). All patients received intravenous artesunate, and 87.5% received empiric antibiotics. Median hospital stay was 6 days (IQR 3.5–9.5). Overall survival was 96.9%, with 2 deaths (3.1%). However, 18.5% were discharged against medical advice.

Conclusions: Severe malaria accounted for nearly one-tenth of paediatric admissions, predominantly affecting under-fives and socioeconomically disadvantaged children. Pallor strongly predicted SMA, underscoring its bedside triage value. High survival with artesunate contrasts with high discharged-against-medical-advice rates, highlighting the need for caregiver support and financial protection.

ABK/38/031P

Herpes Zoster Ophthalmicus in a Healthy Female Adolescent: A Case Report

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Background: Herpes zoster ophthalmicus (HZO) results from reactivation of latent varicella-zoster virus (VZV) within the ophthalmic division of the trigeminal nerve. It is uncommon in immunocompetent children and adolescents, and may lead to serious ocular complications if diagnosis and treatment are delayed.

Objectives: To describe a rare case of HZO in a healthy adolescent and highlight its course and management in this age group.

Case Presentation: A 13-year-old previously healthy female presented with a six-day history of vesicular rash on the right facial area, accompanied by fever and headache. There was associated swelling of the right lower eyelid and upper lip. No prior chickenpox infection, and mother had no varicella infection during

pregnancy. No varicella vaccination. Examination revealed right-sided vesicular eruptions in the ophthalmic dermatome, Hutchinson's sign, eyelid oedema, and conjunctivitis without corneal involvement. Laboratory findings were unremarkable, and HIV testing was negative. Polymerase chain reaction of crusted lesions confirmed varicella-zoster virus. She was treated with oral and topical acyclovir, ophthalmic antibiotics, and supportive care, achieving near-complete resolution by day 10.

Discussion: HZO in healthy adolescents is rare and may occur without identifiable immunologic compromise. Early antiviral therapy is crucial to limit complications such as keratitis, uveitis, and vision loss. Studies have shown that varicella vaccination lowers paediatric zoster rates.

Conclusion: This case underscores the need for clinical vigilance for HZO even in immunocompetent adolescents. Prompt diagnosis and timely antiviral therapy can prevent ocular morbidity. Routine vaccination against varicella may further reduce paediatric HZO incidence.

ABK/54/032P

Self-Esteem Among Adolescents Living with Human Immunodeficiency Virus Infection Attending Two Tertiary Hospitals in Ekiti State, Nigeria

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Background: Adolescents living with human immunodeficiency virus (ALHIV) infection face additional challenges such as discrimination, stigma, depression, nutritional problems, the need to be on drugs for life and the need for recurrent hospital visits due to their illness when compared to their negative peers. Self-esteem influences an individual's health behaviour and well-being.

Objectives: To assess self-esteem levels of ALHIV in Ekiti State.

Methods: A cross-sectional descriptive comparative study that involved ALHIV attending Ekiti State University Teaching Hospital and Federal Teaching Hospital, Ido Ekiti. The Adolescent Self-Esteem Questionnaire (ASQ) was used in assessing the self-esteem of the participants.

Results: There were 122 participants comprising 56 ALHIV (cases) and 66 controls. The mean ages of ALHIV and controls were 14.43 ± 2.66 and 13.14 ± 2.25 years, respectively. The mean self-esteem score was significantly higher in the control group (48.26 ± 5.47) than in the ALHIV group (45.36 ± 5.41) ($p = 0.004$). However, none of the study participants had a low self-esteem score. Among ALHIV, there were no significant associations between self-esteem score and sex, age, level of education, living arrangement, or recent illness.

Conclusion: Although none of the study participants had a low self-esteem score, the mean self-esteem score among adolescents living with HIV was significantly lower than that of their HIV-negative peers. This underscores the importance of psychosocial support and the incorporation of mental health services into the comprehensive care of adolescents living with HIV.

ABK/114/033P

Malaria Parasitaemia and Malaria-Associated Anaemia among Infants Less Than Six Months in North-Central Nigeria: A Cross-Sectional Study

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Background: Malaria in early infancy has historically been considered rare; however, emerging evidence suggests increased burden. This study assessed malaria parasitaemia prevalence and associated anaemia among infants aged less than six months in an endemic Nigerian setting.

Methods: A cross-sectional study was conducted among 418 infants attending two hospitals in Bida, Nigeria. Information on the clinical features, maternal, environmental, and socioeconomic characteristics of the infants was collected. Rapid diagnostic tests (RDT), thick and thin films microscopy for malaria parasite, and packed cell volume (PCV) measurements were performed. Statistical significance was set at $p<0.05$.

Results: Of the 418 children recruited, infants aged 5-6 months were the majority (99, 23.7%), and males were 225 (54.1%). The median (interquartile range) age at presentation was 3 (1- 4) months. Malaria parasitaemia was detected in 25 infants by microscopy (6.0%) and 30 by RDT (7.2%). Plasmodium falciparum was the only species identified. Mean PCV was significantly lower in malaria-positive infants (25.1 ± 7.6%) vs. malaria-negative infants (36.2 ± 7.5%; $p<0.001$). Anaemia occurred in 60% of malaria-positive infants. Poor feeding ($p=0.001$), pyrexia ($p=0.000$), tachypnoea ($p=0.015$), pallor ($p=0.000$) and hepatomegaly ($p= 0.015$) were clinical features associated with malaria parasitaemia. Logistic regression analysis identified mothers not attending ANC ($p=0.025$), presence of pyrexia ($p=0.000$), and pallor ($p=0.002$) as factors significantly associated with malaria parasitaemia.

Conclusion: Malaria in infants aged less than six months was higher than historically assumed and significantly associated with anaemia. Routine malaria testing in symptomatic infants aged less than six months is recommended.

ABK/138/034P

Diagnostic and Clinical Outcomes of Tuberculosis in Children and Adults at the Directly Observed Treatment Short-Course Centre, Federal Teaching Hospital, Gombe

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Background: Tuberculosis (TB) remains a health burden in Nigeria, with HIV co-infection worsening outcomes. GeneXpert and TB-LAM (lipoarabinomannan) offer improvements in case detection.

Objectives: To determine the diagnostic and treatment outcomes of TB at the Directly Observed Treatment Short-course (DOTS) Centre, Gombe.

Methods: This was a retrospective study of patients diagnosed with TB using ICD-10 in the DOTS Centre from 2020-2022. Variables analysed included biodata, TB score, HIV status, chest x-ray, GeneXpert, TB-LAM, CT/MRI, and tissue biopsy.

Results: There were 106 children and 512 adults. Males constituted 61.2% (378/618). PTB accounted for 83.7% (517/618) of cases. HIV co-infection occurred in 12.3% (13/106) of children and 18.2% (93/512) of adults ($p= 0.21$). GeneXpert was positive in 16.7% (11/66) of children and 66.0% (270/409) of adults ($p= 0.01$). Chest x-ray was suggestive of TB in 63.2% of (67/106) children and 33.8% of (173/512) adults ($p= 0.01$). Thirty-two adults (0.06%) had CT/MRI compared to 5 (0.05%) children ($p= 0.5$); tissue biopsy in 6 children compared to 2 adults ($p=0.01$). TB-LAM was positive in 2.8% (3/106) children and 3.9% (20/512) adults ($p= 0.067$). The diagnosis of TB in children was clinical using the TB score in 96 (89.6%) of cases. Drug-resistant TB was diagnosed in one child 1/106, 0.9%) and 2/512(0.4%) of adults ($p= 0.43$); all were males with PTB/ HIV co-infection. Two (1.9%) children and 9(1.8%) adults died ($p= 0.58$); no child with TB/HIV died, while 33% (3/9) of the adults had HIV.

Conclusion: GeneXpert and chest X-ray are likely to be positive in adults and children with TB, respectively.

ABK/147/035P

Evaluating Point-of-Care Clinical Parameters in Predicting the Outcome of Sepsis in Children at Irrua Specialist Teaching Hospital

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Background: Sepsis is a leading cause of under-five mortality worldwide, with the greatest burden in lower- and middle-income countries. Early prediction

of outcomes is crucial for improving survival, yet cheap and readily available biomarkers remain largely under-researched in resource-limited settings.

Objectives: To evaluate the predictive value of two simple point-of-care parameters; bowel sound and stool pH, in predicting clinical outcomes among children with sepsis at Irrua Specialist Teaching Hospital.

Methods: A prospective cross-sectional study was conducted involving 80 children aged 1-60 months diagnosed with sepsis using the Liverpool quick Sequential Organ Failure Assessment (LqSOFA) score. Each child was evaluated at admission for bowel sound using a digital stethoscope, stool pH using a pH-meter and followed-up for the outcome indices (respiratory support, inotrope use, duration of stay in children emergency room, total duration of hospital stays, death/survival).

Results: Hypoactive bowel sound was observed in 28.8% of participants, while 87.5% had abnormal stool pH. Hypoactive bowel sound was significantly associated with adverse outcomes, including respiratory support, inotropic use, prolonged stay, and mortality. Logistic regression analysis showed hypoactive bowel sound as an independent predictor of poor outcomes, while demonstrating high sensitivity (75.0%-77.8%) and specificity (77.5%-98.0%), whereas abnormal stool pH predicted only longer emergency room stay.

Conclusion: Hypoactive bowel sound is a reliable bedside predictor of sepsis outcome in children and can guide management in resource-limited settings. Further studies are required to evaluate these findings in other children with sepsis.

ABK/159/036P

Baseline Knowledge, Perception, and Human Papillomavirus Vaccine Hesitancy Among Female Secondary School Students in Ilorin, Nigeria

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Background: Human Papillomavirus (HPV) infection is a major cause of cervical cancer, and vaccination among adolescents offers effective prevention. However, awareness, perception, and willingness to accept the HPV vaccine remain low in many developing countries.

Objectives: This study assessed the knowledge, perception, and willingness to accept the HPV vaccine among secondary school students.

Methods: A descriptive cross-sectional study was conducted among 133 students aged 9–14 years using a structured, self-administered questionnaire. Data were analysed using descriptive statistics and logistic regression to determine factors associated with willingness to accept the HPV vaccine. Statistical significance was set at $p < 0.05$.

Results: The majority of respondents were aged 12–14 years (56.4%), Yoruba (80.5%), and Muslim (60.9%). Only 27.9% demonstrated good knowledge of the HPV vaccine, and 36.8% showed positive perception. Overall, 69.2% were willing to receive the HPV vaccine, and 57.1% would recommend it to peers. Logistic regression showed that students aged 12–14 years were twice as likely to be willing compared to those aged 9–11 years (Crude OR = 2.08; 95% CI: 1.00–4.35; p = 0.048), though the association became non-significant after adjustment (AOR = 1.72; 95% CI: 0.79–3.72; p = 0.17). Maternal education was a significant predictor of willingness—students whose mothers had tertiary education were over four times more likely to be willing (AOR = 4.61; 95% CI: 1.42–14.9; p = 0.011).

Conclusion: Despite relatively high willingness, knowledge and perception remain poor. Targeted health education programs involving parents, teachers, and community stakeholders are needed to enhance awareness and acceptance of the HPV vaccine.

ABK/166/037P

Diagnostic and Treatment Implications of the Comorbidity of Lassa Virus Disease with Nephrotic Syndrome in Endemic Areas: A Case Report

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Background: The clinical features of Lassa virus disease (LVD) could mimic those of complicated nephrotic syndrome (NS). This could be a potential cause of diagnostic delay and treatment challenges in the management of either condition.

Objectives: We report the first such case to our knowledge to alert clinicians to the potential for comorbidity of LVD and NS in endemic areas.

Case Presentation: We report the case of a 15-year-old female adolescent admitted with the features of NS complicated by acute kidney injury (AKI) and sepsis. Lack of clinical improvement by the 4th day of admission prompted further evaluation, including testing for Lassa virus infection. The diagnosis of LVD was confirmed, and the child commenced on intravenous ribavirin on the 5th day of admission. The subsequent clinical course was complicated by prolonged (30 days) Lassa viraemia, severe anaemia and steroid-resistant NS, while the AKI resolved with conservative management.

Discussion: This case further illustrates the potential for comorbidity of LVD with both acute and chronic illnesses, or NS possibly complicating LVD in endemic areas and thus the need for a high level of awareness to avoid diagnostic delays/missed diagnosis with their implications. It also highlights the potential for treatment challenges of either illness in children with the comorbidity of LVD/other illnesses, NS in this instance.

Conclusion: This case illustrates the potential for diagnostic and treatment challenges due to the comorbidity of LVD with nephrotic syndrome. We recommend further research into the interplay between glomerular diseases and LVD in endemic areas.

ABK/192/038P

Timely and Accessible Diagnosis and Management to Reduce Sepsis Morbidity and Mortality in Kano State: A Multicenter Paediatric Sepsis Evaluation

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Background: Sepsis remains a leading cause of preventable morbidity and mortality globally, especially in low- and middle-income countries. Delayed diagnosis, limited prognostic tools, and antibiotic misuse worsen outcomes. This study assessed the prognostic value of the quick Sequential Organ Failure Assessment (qSOFA) scores and blood lactate in children with sepsis in Kano State.

Objectives: This study aimed to determine paediatric sepsis prevalence and outcomes - recovery, disability, or death - and to assess the prognostic accuracy of qSOFA scores and blood lactate levels in predicting them.

Methods: A prospective observational study was conducted at Aminu Kano Teaching Hospital, Murtala Mohammed Specialist Hospital, and Khalifa Sheikh Isiyaka Rabiu Paediatric Hospital. Admitted under-five children with suspected sepsis were evaluated with qSOFA scores and Point of Care (POC) blood lactate, and observed for recovery, disability, or death. Chi-square and ROC analyses were conducted.

Results: Among 440 children with suspected sepsis, severe malarial sepsis accounted for 48.4%, BACTEC positivity 22.0%, and isolated bacterial sepsis 11.6%. Predominant isolates were Methicillin-sensitive *Staphylococcus aureus* (MSSA) 2.3% and Methicillin-resistant *Staphylococcus aureus* (MRSA) 1.1%, with *Klebsiella, Citrobacter,* and *Staphylococcus* other than *Staphylococcus aureus* (SOSA) 0.7% each. Overall, 62.1% recovered, 3.2% had disabilities, and 20.2% died. Lactate ≥ 4 mmol/L showed a significant dose-response association with mortality ($\chi^2 = 5.659$, $p = 0.022$) but not disability ($p = 0.43$). QSOFA showed good mortality prediction (AUC = 0.735; sensitivity 93.3%, specificity 56.3%).

Conclusion: Elevated blood lactate and qSOFA independently predicted poor paediatric sepsis outcomes. Their routine use will strengthen early risk stratification and improve outcomes.

ABK/215/039P

Inequalities in Diphtheria Vaccination Coverage Among Two-Year-Olds Between 2007 and 2021 and the Resurgence of Diphtheria in Nigeria

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Background: Diphtheria, a vaccine-preventable disease, is re-emerging as a significant public health concern in Nigeria. About 41,336 suspected cases were reported across 350 Local Government Areas between 2022 and 2025. Low under-five vaccination coverage is driving the rise despite available vaccines.
Objectives: To examine inequalities in Diphtheria vaccination coverage among two-year-olds in Nigeria from 2007 to 2021.
Methods: We analysed data from the Nigeria Multiple Indicator Cluster Survey (2007, 2011, 2016, and 2021), using the WHO Health Equity Assessment (HEAT) Tool online software. Inequality assessment was measured across sex, economic status, education, place of residence, and sub-national regions, using Difference (D), Ratio (R), Population Attributable Risk (PAR), and Population Attributable Fraction (PAF).
Results: The Diphtheria vaccination coverage among two-year-olds in Nigeria increased from 29.7% (2007) to 56.6% (2021); however, with persistent inequalities. By subnational regions, Ebonyi had the highest coverage in 2021(98.1%) compared to 12.7% in Sokoto (Difference: 78.1% (2007) to 85.5% (2021); PAF: 173.4% (2007) to 69.8% (2021)). By socioeconomic status, the highest coverage remains among the richest compared to the poor, evidenced by the summary measures (Difference: 49.0% (2007) to 42.2% (2021); PAF: 100.9% (2007) to 39.6% in 2021). This is similar for other inequality measures.
Conclusion: Despite significant progress made with DVC in Nigeria, significant inequalities persist, putting under-fives at risk of diphtheria. Targeted Immunization programs will help to close existing gaps and prevent disease resurgence.

ABK/217/040P

Sociodemographic Inequalities in Full Immunisation Among Two-Year-Olds in Nigeria: Insight from Multiple Indicator Cluster Survey Data From 2007 To 2021

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Background: Childhood immunisation protects children from vaccine-preventable diseases (VPDs) and reduces under-five morbidity and mortality. However, the immunisation coverage in Nigeria remains below target, and full immunisation remains significantly low despite national and global efforts.
Objectives: To examine the trend and sociodemographic inequalities in full immunisation in Nigeria.
Methods: We analysed data on full immunisation among two-year-olds in Nigeria from the national Multiple Indicator Cluster surveys, using the World Health Organisation (WHO) Health Equity Assessment Tool(HEAT) online software. Inequalities were measured by sex, economic status, education, place of residence, and sub-national region, using Difference(D), Ratio(R), Population Attributable Risk (PAR), and Population Attributable Fraction (PAF) as measures of inequalities.
Results: Full immunisation coverage among two-year-olds in Nigeria rose from 15.6% in 2007 to 42.8% in 2021. However, significant inequalities exist over time. By economic status, disparities widened (Difference: 28.2% in 2007 to 34.4% in 2021, PAF: 102.5% in 2007 to 45.5% in 2021); by subnational regions (Difference: 44.4% in 2007 to 85.9% in 2021, PAF: 185.4% to 124.2% in 2021). Minimal inequalities also exist by education and sex, while by place of residence, the same inequality persists (Difference: 17.1% in 2007 and 17.6% in 2021, PAF: 78.1% in 2007 to 28.2% in 2021).
Conclusion: Despite an overall increase in full immunisation coverage among two-year-olds in Nigeria, the coverage as of 2021 remains significantly low, with significant inequalities across the sociodemographic dimensions. Targeted interventions are necessary to address inequalities across wealth

index, place of residence, education, and subnational regions.

PANConf/ABK/218/041P

Spectrum of Paediatric Pericardial Effusion in Irrua Specialist Teaching Hospital: Highlighting Lassa Virus Disease as an Emerging Cause

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Background: Pericardial effusion in children is an uncommon but clinically significant condition with diverse etiologies. While tuberculosis, bacterial infections, autoimmune diseases, and malignancies are commonly recognised causes, emerging evidence from Irrua Specialist Teaching Hospital (ISTH) indicates that Lassa virus disease (LVD) may also be a potential contributor in endemic areas. Missed or delayed recognition poses risks of poor outcomes and nosocomial transmission during invasive procedures such as pericardiocentesis.

Objectives: To describe the spectrum of pediatric pericardial effusion at ISTH and highlight Lassa virus disease as an emerging aetiology.

Methods: A retrospective review of pediatric cases diagnosed with pericardial effusion from September 2023 to September 2025 was conducted. Clinical, laboratory, and echocardiographic data, as well as outcomes, were analysed.

Results: Seven children with pericardial effusion were managed during the study period. Their mean age was 9.4 years (2-15years) with a male to female ratio of 2.5:1. The etiologies included post-Lassa fever infection (2), acute Lassa fever (1), Staphylococcus aureus septicemia (1), and malignancies (3). Five recovered fully, one was discharged against medical advice, and one was lost to follow-up.

Conclusion: Lassa virus disease, both acute and post-infectious, is emerging as a notable cause of pediatric pericardial effusion in endemic regions. Early recognition, targeted diagnostics, and careful management are essential to improve outcomes and prevent transmission.

ABK/293/042P

Antimicrobial Resistance Knowledge and Practice among Future Healthcare Providers in Nigeria: A Cross-Sectional Study

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Background: Clinical students are future antibiotic prescribers. Their understanding and practices are crucial for antimicrobial stewardship (AMS), given the global threat of antimicrobial resistance (AMR).

Objectives: To assess the knowledge, practices, and awareness of AMR and AMS guidelines among clinical students at Olabisi Onabanjo University College of Health Sciences.

Methods: A cross-sectional study involving 422 students from the Medicine, Nursing, and Pharmacy departments (400 level and above) was conducted using a semi-structured questionnaire. Data on demographics, knowledge of AMR, antibiotic-use behaviour, and familiarity with relevant national and international AMR guidelines were collected. Data were analysed using descriptive statistics, chi-square tests, and multivariate logistic regression.

Results: Most participants were aged 21-25 years (68.0%) and female (62.1%). Although 82.9% had prior AMR training, only 5% demonstrated good knowledge, 73% fair, and 22% poor. Practices were 41% good, 41% fair, and 18% poor. Awareness of national policies was low: 22% knew the Nigeria National Action Plan, and 25.4% the WHO Global Action Plan. However, 96.9% identified AMR as a significant health problem, and 85.8% felt prepared to implement AMS. Higher level of study ($p < 0.001$) was significantly associated with better knowledge, with 600-level students demonstrating superior knowledge compared to lower levels.

Conclusion: Despite positive attitudes, substantial gaps exist in knowledge and practices. Strengthening AMR-focused training and stewardship guideline awareness is essential.

NEONATOLOGY

ABK/3/043P

Care of a 25-Week Extremely Low Birth Weight Neonate in a Low-Resource Setting: Clinical Ingenuity and Good Neurodevelopmental Outcome

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Background: Extremely low birth weight (ELBW) babies born before 26 weeks face significant mortality and morbidity, particularly in resource-limited settings. Survival beyond the neonatal period is uncommon, and favourable neurodevelopmental outcomes are rarely documented.

Objective: To report the clinical course, interventions, and neurodevelopmental outcome of a 25-week ELBW neonate managed in Ogun State, Nigeria, highlighting adaptive strategies in a low-resource environment.

Case Presentation: A female neonate was delivered at 25weeks+3days gestation, weighing 680g. Initial management included Positive Pressure Ventilation and continuous positive airway pressure. She survived a highly turbulent hospital course marked by respiratory distress syndrome, severe extended-spectrum beta-lactamase-producing *Klebsiella pneumoniae* sepsis, severe thrombocytopenia, necrotising enterocolitis, apnoea of prematurity, persistent pulmonary hypertension, ventricular septal defect, and patent foramen ovale (managed conservatively). She achieved oxygen independence on Day 73 and was successfully discharged on Day 82, weighing 1.26kg. Adaptive interventions included tailored antibiotics, transfusions, caffeine citrate, sildenafil, and rectal stimulation with a Foley catheter (continued at home by the parents), which resolved significant abdominal distension. The cost of in-patient care was ₦2,633,000 ($1,815). She was exclusively breastfed for 6 months. At 12-month follow-up, she was thriving well with no neurodevelopmental delays.

Discussion: The success of this case hinged on multidisciplinary care and clinical adaptability to overcome resource barriers. Consistent parental involvement and successful exclusive breastfeeding supported post-discharge growth.

Conclusion: This case illustrates that survival and neurodevelopmental success of extreme preterm ELBW neonates are achievable beyond the odds in resource-limited settings through adaptive neonatal practices, multidisciplinary care, and parental involvement.

ABK/18/044P

Facilitators and Barriers to the Implementation of Essential Newborn Care in Healthcare Facilities in Ekiti State

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Background: In Nigeria, the neonatal mortality rate (NMR) remains very high at 41/1000 live births. Essential newborn care (ENC), a series of time-bound, chronologically ordered care provided by skilled birth attendants, can significantly reduce the trend of neonatal mortality. The coverage and implementation of ENC remain suboptimal in Nigeria. To achieve Sustainable Development Goal 3.2, i.e., reducing NMR to <12/1000 by 2030, facilitators and barriers to the implementation of ENC must be identified and addressed.

Objectives: To evaluate the facilitators and barriers to the implementation of ENC among healthcare workers (HCWs) in primary and secondary health facilities in Ido/Osi LGA, Ekiti State.

Methods: A longitudinal, mixed-methods, interventional study was conducted between October 2023 and April 2024. Questionnaires were used to assess the baseline knowledge of study participants on ENC. Participants were subsequently trained on ENC and re-evaluated for retention three months later. Focus group discussions were used to evaluate the facilitators and barriers of ENC.

Results: There were 90 participants, comprising 21 Nurses, 61 Community Extension workers, and 8 other healthcare professionals, with a male-to-female ratio of 1:25.1. Facilitators of ENC implementation included training and retraining on ENC and neonatal resuscitation, adequate equipment and medications, and access to national guidelines on neonatal resuscitation. Barriers to the practice of ENC included poor working conditions, inadequate manpower, poor training, and poor remuneration.

Conclusion: Better implementation of ENC can be achieved through training and retraining of HCWs on ENC, provision of essential drugs and equipment, and improvements in working conditions in healthcare facilities.

ABK/25/045P

Feasibility of WhatsApp-Based Support for Mothers of Preterm Infants After Discharge in Federal Teaching Hospital, Gombe

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Background: Prematurity is a leading cause of neonatal mortality worldwide, with Nigeria contributing significantly to this burden. With increasing smartphone use and the need for post-discharge support, we introduced a WhatsApp-based intervention.

Objectives: To assess the feasibility of WhatsApp to provide post-discharge support to mothers of preterms.

Methods: This mixed-methods study was conducted over 20 months (January 2024-August 2025) at the Federal Teaching Hospital, Gombe. Eligible participants were consenting mothers of discharged preterms with WhatsApp access. Group activities were analysed quantitatively using SPSS version 24 as frequencies and proportions, while in-depth interviews explored participation patterns and were coded thematically using NVivo 1.

Results: Sixty-five mothers were recruited; 19 (33.9%) exited the group, citing multiple group commitments. Median duration of participation was 8 months (IQR 13). Twenty-two mothers never posted. A total of 480 posts were recorded: 388 from mothers and 102 from doctors. Posts comprised 295 typed messages, 41 voice notes (26 by mothers, 15 by doctors), and 21 images (11 by mothers, 10 by doctors). Among mothers' typed messages, 56.1% were pleasantries, 10.4% related to child symptoms, 6.6% involved sharing experiences, and 6% were condolence messages to a mother who lost her baby. Mothers who remained valued instant responses and peer support and had 100% follow-up rates, while those who left felt overwhelmed, and only 42% continued clinic follow-up.

Conclusion: WhatsApp is a feasible and useful platform for mothers of preterm infants to clarify health concerns, share experiences, provide support during bereavement, and encourage compliance with clinic follow-up.

ABK/39/046P

Achieving KMC Coverage Goals: Lessons from a Newborn Essential Solutions and Technologies (NEST360) Health Facility in Lagos, Nigeria on Scaling Up Neonatal Care in Resource-Limited Settings

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Background: Kangaroo Mother Care (KMC) is an important intervention for reducing neonatal mortality and morbidity among low birth weight (LBW) and preterm infants. This study evaluates changes in KMC uptake for neonates weighing 1000-1999 grams at Facility 406, identifying barriers and enablers to its implementation.

Objectives: To evaluate changes in KMC uptake for neonates weighing 1000-1999 grams, and to identify barriers and enablers to KMC implementation.

Methods: Data were retrieved from the neonatal care records of the facility using the NEST-IT (NEST Implementation Tracker) between January and December 2024, focusing on coverage rates for KMC for neonates weighing 1000-1999 grams. The monthly indicator coverage rates were then compared to the target of ≥80% for 2025. The trends were analysed to identify performance changes, and a qualitative assessment of barriers and enablers to KMC was carried out from QI projects developed in the facilities.
Results: KMC coverage rates showed significant fluctuations. Coverage dropped to 50% in February and 43% in March 2024 due to operational challenges but peaked at 100% in May and stabilised at this level from September. The facility median coverage rate was 75%, below the 2025 target of ≥80%. Enablers included consistent caregiver engagement, targeted staff training, and makeshift KMC spaces. However, barriers such as caregiver availability, cultural and religious beliefs and limited staff strength during high admission periods negatively impacted uptake.
Conclusion: The findings from the study highlight the importance of consistent investments in training, infrastructure, and community engagement to scale up KMC and improve outcomes for LBW and preterm neonates in resource-limited settings, contributing to broader global efforts to enhance high-quality KMC delivery.

ABK/46/047P

Assessment of Risk Factors and Outcome of Neonatal Jaundice at the Federal University Teaching Hospital, Lafia, Nasarawa State, Nigeria

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Background: Neonatal Jaundice (NNJ) is a leading cause of neonatal admissions, more in preterm than term babies. The burden, aetiology, and risk factors of NNJ vary depending on geographical differences. Managing neonatal jaundice is challenging, particularly in low-resource settings like Nigeria.
Objectives: This study assessed the burden, common risk factors, and outcomes of care of NNJ.
Methods: A retrospective study of neonates admitted for NNJ at the Special Care Baby Unit (SCBU) of the Federal University Teaching Hospital (FUTH) Lafia, from 1st January to 31st December 2024.
Results: Of the total 1198 admissions, 147 were babies with NNJ, giving a 12.3% prevalence of NNJ. There were more males, with a male: female ratio of 2.1:1. Most (84.2%) were term babies. Sepsis accounted for 68.7%) NNJ, followed by ABO incompatibility 40 (27.2%). Neonatal jaundice contributed to twenty-one (10.6%) of the 199 deaths, with a case fatality rate of 15.1%.
Conclusions: Neonatal jaundice was a major cause of morbidity and mortality in this study. Sepsis was the commonest risk factor, followed by ABO incompatibility.

ABK/52/048P

Determinants/Characteristics of Discharge Against Medical Advice Among Neonates in a Tertiary Hospital in Nigeria: A Retrospective Study

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Background: Discharge against medical advice (DAMA) occurs when patients leave the hospital before the physician recommends discharge, posing a challenge in neonatal care, where parents are often involved in decision-making.
Objective: To assess the prevalence and reasons for DAMA among neonates in the Special Care Baby Unit (SCBU) at Federal Teaching Hospital, Owerri, Nigeria.
Methods: A retrospective study was conducted from January 2022 to December 2024, analysing hospital records of neonates whose caregivers requested DAMA from the SCBU. Data on biodata, diagnosis, and reasons for DAMA were extracted and analysed using frequency and Pearson's chi-square test, with p-value <0.05 considered significant.
Results: Out of the 890 neonates admitted during the study period, 29 were discharged against medical advice – a DAMA rate of 3.3%. However, only 24 cases had complete data. There was a higher proportion of males, 14 (58.3%), whose parents left against medical advice. The majority (21 out of 24; 87.5%) belonged to upper and middle socioeconomic

classes. Being a businessman/woman, a father with a tertiary-level education, a mother with secondary-level education and a family size of 2-3 children suggested a link with DAMA in the newborn unit, though not statistically significant. Patients with Perinatal Asphyxia contributed to 9 (37.5%) of the DAMAs. The most common reason for DAMA was financial constraints, 11 (45.8%).

Conclusion: Financial constraints contribute to neonatal DAMA in this tertiary hospital. The findings emphasise the need for accessible health insurance to mitigate financial barriers and reduce DAMA rates, ensuring better neonatal outcomes.

ABK/55/049P

Awareness and Willingness to Accept Foetal Anomaly Ultrasound Scan Among Pregnant Mothers at a Tertiary Institution in Port Harcourt, Nigeria

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Background: Globally, congenital anomalies are among the leading causes of perinatal, neonatal, and infant morbidity and mortality, with significant psychosocial, emotional, and financial burdens on affected families. Prenatal diagnosis has been shown to not only facilitate counselling and informed choices by affected parents, but it also aids early diagnosis, intervention, and improved outcomes.

Objectives: This study assessed awareness and willingness to accept foetal anomaly ultrasound scan (FAUS) among antenatal mothers.

Methods: This was a cross-sectional descriptive study of awareness and acceptance of (FAUS) over 6 months. A structured, pre-tested questionnaire was used to obtain biodata, knowledge, and willingness to accept a FAUS and was analysed using SPSS Version 25.

Results: Three hundred and forty-three (343) participants were recruited into the study. The majority (204, 59.5%) were aged 30-39 years, and 284 (82.8%) had a tertiary level of education, while 131 (38.2%) had heard of FAUS, and 291(84.8%) were willing to accept it if offered by their health care providers. However, less than 40% had ever been offered a foetal anomaly scan. Previous knowledge of FAUS and offer of FAUS by Healthcare providers were significantly associated with acceptance of FAUS by pregnant mothers (OR:7.9, 95%CI: 1.8,33.5, $p < 0.003$), (OR:4.7, 95%CI:2.1,10.9, $p < 0.001$) respectively.

Conclusion: Acceptance of foetal anomaly scan was strongly correlated with prior knowledge and offer of FAUS by healthcare providers. Therefore, foetal anomaly ultrasound scan and health education should be part of routine antenatal care to facilitate early diagnosis and informed choice by affected parents.

ABK/62/050P

Clinical and Laboratory Predictors of Short-Term Outcomes of Neonates with Sentinel Asphyxial Events at a Teaching Hospital, Abuja, Nigeria

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Background: Perinatal asphyxia is one of the most common causes of neonatal deaths globally. It is important to develop simple, inexpensive, and accessible markers to identify asphyxiated neonates, especially those with risks for poor outcome.

Objectives: To assess the value of clinical and laboratory predictors of short-term outcomes in asphyxiated neonates singly or combined.

Methods: A hospital-based prospective cohort study conducted at the Special Care Baby Unit of the University of Abuja Teaching Hospital, Abuja from June to December 2023. Neonates who failed to initiate/sustain spontaneous respiration or had an Apgar score of </= 6 at 5 minutes were consecutively recruited. Tone, oxygen saturation, consciousness level, seizures and suck reflex were documented on admission. Blood samples were obtained within 48 hours of birth and analysed for serum sodium, potassium and calcium. The babies were followed up till 7th day of life. The short-term outcomes of interest were death and survival with or without deficits.

Results: Abnormal tone, poor suck, impaired consciousness, poor oxygen saturation and seizures were associated with poor outcome [$p<0.05$]. Poor

suck was found to predict poor outcome [p=0.045]. Low Apgar score was not associated with poor outcomes [p=0.086]. Abnormal serum sodium, potassium and calcium levels were associated with poor outcome but not predictive.

Conclusion: Poor suck is a clinical predictor of poor outcome in asphyxia. Abnormal serum electrolytes do not predict poor outcomes.

ABK/68/051P

Prevalence, Pattern and Immediate Outcome of Congenital Anomalies: A Five-Year Review at University of Ilorin Teaching Hospital

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Background: Congenital anomalies are structural, behavioural, metabolic or functional anomalies that occur during intrauterine life, which can be identified prenatally, at birth or later in life. The manifestations are diverse, ranging from mild to life-threatening. Early recognition and appropriate management plans may go a long way in reducing morbidity and mortality.

Objectives: To review the prevalence, pattern and immediate outcomes of congenital anomalies in the Neonatal Intensive Care Unit (NICU) of University of Ilorin Teaching Hospital (UITH), Ilorin.

Methods: This is a retrospective cross-sectional study of babies admitted to the NICU over five years (January 2020 - December 2024). Demographic parameters, gestational age and affected systems were recorded in children with clinically recognised congenital anomalies.

Results: A total of 339 babies with congenital anomalies were seen over the period, accounting for 5% of total admissions. Gastrointestinal anomalies accounted for the majority (40.7%), of which anorectal malformation was 28%, omphalocoele was 19%, and gastroschisis was 15%. This was followed by the central nervous system with head and neck anomalies (30.1%), the most common being spina bifida (56%). 88.6% were term babies while 11.4% were preterms. Percentage mortality was 19.5%, while 9.7% of them were discharged against medical advice, 70.8% were discharged home, and followed up in various sub-speciality clinics.

Conclusion: Congenital anomalies are common, and the gastrointestinal tract was the most affected system. Thus, early diagnosis with foetal anomaly scan as well as prompt treatment will help to improve outcome.

ABK/84/052P

Reducing Neonatal Sepsis through Hand Hygiene and Improved Diagnostic Access: A Pre–Post Interventional Study in Lagos, Nigeria

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Background: Neonatal sepsis is a major cause of morbidity and mortality in low- and middle-income countries, aggravated by poor infection prevention and limited diagnostic access.

Objectives: To evaluate the impact of a multimodal infection-prevention intervention comprising hand hygiene reinforcement, staff training, and improved access to microbiological diagnostics on neonatal sepsis incidence and antimicrobial resistance patterns in a tertiary hospital in Lagos, Nigeria.

Methods: A quasi-experimental pre–post interventional study was conducted in the neonatal unit of Lagos University Teaching Hospital. The intervention included WHO-based hand hygiene training, provision of alcohol-based hand rubs, visual reminders, and improved access to culture bottles. Data were collected before and after the intervention on the incidence of sepsis, microbial profile, antibiotic resistance, and healthcare workers' knowledge and practices.

Results: A total of 90 and 107 neonates were enrolled in the pre- and post-intervention phases, respectively. Culture-positive sepsis declined from 53.3% pre-intervention to 45.8% post-intervention. *Klebsiella Species* remained the most frequent isolate but decreased from 18.9% to 12.1%. Other major isolates

included *Staphylococcus* spp. (13.3% to 9.0%) and *Candida non-albicans* (4.4% to 15.9%). Multidrug-resistant (MDR) organisms accounted for 82% of microbial isolates among all neonates, with Klebsiella accounting for 35.3% of these. Healthcare workers demonstrated significant improvement in hand hygiene knowledge and compliance, with 94.4% having received recent formal training and 83.3% routinely using alcohol-based hand rubs.

Conclusion: Implementation of infection-prevention measures, coupled with improved diagnostic access, led to measurable reductions in neonatal sepsis. Sustained infection prevention programs, periodic staff training, and strengthened microbiological surveillance are vital to consolidating these gains.

ABK/107/053P

"Beckwith-Wiedemann Syndrome In a 48-hour-old Neonate: A Case Report

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Background: Beckwith-Wiedemann Syndrome (BWS) is a congenital overgrowth disorder characterised by omphalocele, macroglossia, visceromegaly, hypoglycemia, and increased risk of embryonal tumours. Neonatal diagnosis is crucial for early intervention.

Case Presentation: We report a 48-hour-old female neonate, delivered at 39 weeks' gestation via emergency caesarean section from severe preeclampsia. At birth, an anterior abdominal wall defect (8 × 6 cm omphalocele with intact sac) and persistent tongue protrusion were noted. The infant cried at birth, with no respiratory distress or feeding difficulty.

Investigations: Echocardiography revealed a patent ductus arteriosus (0.2 cm). Abdominal ultrasound was normal. Full blood count was within normal range, but serum electrolytes showed mild metabolic acidosis (HCO_3^- 12 mmol/L). Recurrent hypoglycemia was documented with random blood sugar as low as 1.67 mmol/L.

Management: The neonate was admitted and commenced on intravenous 10% dextrose, antibiotics (cefuroxime and metronidazole), and vitamin K. Hypoglycemia was repeatedly corrected, and glucose monitoring was maintained. Paediatric surgical review confirmed omphalocele major; the omphalocele was dressed with Dermazine and sufratulle. Expressed breast milk was introduced gradually and advanced as tolerated. By day 9, the child had completed antibiotics and continued alternate-day escharotic dressing with stable progress by day 15.

Conclusion: This case demonstrates the classical triad of Beckwith-Wiedemann Syndrome (omphalocele, macroglossia, congenital heart defect) with recurrent hypoglycemia. Prompt recognition and coordinated multidisciplinary management are vital for favourable neonatal outcomes.

ABK/134/054P

Predictors of Mortality in Neonatal Lassa Virus Disease: The ISTH Experience.

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Background: Neonatal Lassa virus disease (LVD) is associated with high case fatality rates, but only a few data are available regarding the associated factors. This limits the efforts at the development of optimal treatment approaches. We report our experience from the outcome of 37 babies treated at Irrua Specialist Teaching Hospital.

Objectives: To determine the predictors of increased case fatality in neonatal LVD

Methods: It was a descriptive observational study of the factors that predict case fatality in newborns with Lassa virus disease. We reviewed the factors that predicted case fatality of 37 babies with LVD that were managed over 7 years in our Special Care Baby Unit. The predictors and outcome were determined using $\chi 2$/Fisher exact tests. The small sample size did not allow for analysis using multiple logistic regression.

Results: Twenty-five out of 37 (68%) of affected babies died. The presenting features associated with mortality included abnormal bleeding [odds ratio (95 confidence interval, OR (95% CI) = 6.67 (0.95, 29.07), p=0.003], Convulsions [OR = 30.3 (2.33, 278.5), p= 0.005], KDIGO stage 2,3 acute kidney injury [OR = 29.10 (2.78, 273.9), 0.017], Severe anaemia,

haematocrit <35% [OR = 31.0 (3.31, 285.0), p = 0.05] and a high viral load with cycle time of the RT-PCR ≤25.00 [undefined, 0.000].

Conclusion: Presentation with indices of multiorgan dysfunction and a high viral load are associated with death. We recommend multicentre research to confirm the validity of the factors identified in this study.

ABK/137/055P

Perinatal Asphyxia: Trend and burden in a Teaching Hospital in North-East Nigeria - A 20-year review

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Background: Perinatal asphyxia is a significant global health challenge, contributing an estimated 23% of neonatal deaths globally, with subsequent morbidity in some survivors. Perinatal asphyxia accounted for 31.8% of perinatal deaths in Nigeria in 2020.

Objectives: To establish the trend and burden of Perinatal asphyxia-related mortality over two decades at the Federal Teaching Hospital, Gombe.

Methods: A Retrospective review of the data of all newborns diagnosed with PA from 2000-2019 using ICD-10, analysed using Epi Info version 3.5.1. Variables analysed included sex, tribe, age at admission, duration of admission, and year of death.

Results: Of the 5,819 newborn admissions, 32.4% (1887/5819) died. Of these deaths, 33.3% (628/1887) had PA; 55.9% (351/628) were males, and 44.1% (277/628) females (p=0.01). Deaths within the first 24 hours of admission were 34.5% (219/628), while 87% (546/628) of PA deaths occurred within the first 7days. The PA mortality rate between 2000-2004 was 8.3% (52/628); 21.9% (137/628) between 2005-2009; 41% (287/628) between 2010-2014; 29% (182/628) between 2015-2019 (P= 0.01). Among the major ethnic groups in Gombe state, PA deaths occurred in 34.4% (216/628) of Fulanis; 22.6% (142/628) in Hausas; Tangale 5.4% (34/628), Tera 4.8% (30/628), Waja and Kanuri 4.0% (25/628) each, Bolawa 3.7% (23/628) Yoruba and Igbo 3.2% (20/628) each (p=0.01).

Conclusion: Perinatal asphyxia remains a significant cause of mortality in major ethnic groups in Gombe State. Improved obstetric and perinatal care should remain topmost on the advocacy agenda of Obstetricians and Paediatricians.

ABK/145/056P

Burden and Outcomes of Birth Asphyxia in a Faith-Based Hospital Setting in Nigeria

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Background: Birth asphyxia remains a leading cause of neonatal morbidity and mortality, especially in low- and middle-income countries (LMICs). Faith-based hospitals serve as key healthcare providers in such settings, yet data on the burden and determinants of birth asphyxia within these institutions are limited.

Objectives: This study aimed to describe the clinical characteristics, associated risk factors, and outcomes of neonates with birth asphyxia in a faith-based hospital in Ogun State, Nigeria.

Methods: A retrospective descriptive and analytical review was conducted among all neonates admitted with a diagnosis of birth asphyxia between March 2024 and February 2025.

Results: Of 761 neonatal admissions, 191 (25.1%) were due to birth asphyxia. Hypoxic-ischemic encephalopathy (HIE) was present in 74.9% of cases, with 31.9% classified as grade III. The overall mortality rate was 20.9%. Severe asphyxia (p = 0.004) and HIE grade III (p < 0.001) were significantly associated with mortality. Outborn neonates had higher deaths than inborn (31.1% vs 5.0%, p <0.001). Maternal age <20 years also correlated with poorer outcomes (p = 0.038).

Conclusion: Birth asphyxia remains a major contributor to neonatal deaths in faith-based hospitals. Strengthening intrapartum monitoring, neonatal

resuscitation capacity, and referral systems is critical to improving outcomes in resource-limited settings.

ABK/146/057P

Admission Hypothermia and Risk of Mortality Among Infants <2000g in a Faith-Based Hospital

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Background: Admission hypothermia is a frequent and preventable contributor to neonatal mortality, especially among low-birth-weight infants. However, evidence from faith-based hospitals, which provide significant neonatal care in low-resource settings, is limited, making it important to quantify the burden within this context.

Objectives: To determine the prevalence of admission hypothermia and assess its association with mortality among infants weighing <2000 g in a faith-based hospital.

Methods: A retrospective review of Vermont Oxford Network data from Centre 1814 between 2023 and 2025 was conducted. All infants with birth weight <2000 g were included. Admission temperature, perinatal characteristics, and discharge outcomes were extracted. Hypothermia was defined as admission temperature <36.5 °C. Of 242 eligible infants, data for 239 (98.8%) were analysed.

Results: Admission hypothermia occurred in 178 (74.5%) infants. Overall mortality was 29.7% and was higher among hypothermic infants (31.5%) than normothermic infants (24.6%, p = 0.31). Hypothermia was more common in inborn than outborn infants (82.2% vs. 66.9%, p = 0.007) and showed a higher frequency among infants <1500 g and very preterm infants.

Conclusion: Admission hypothermia was highly prevalent and showed a trend toward increased mortality. Strengthening immediate thermal care, temperature monitoring, and stabilisation during transport is essential to reduce risk in this vulnerable population.

ABK/152/058P

Sacrococcygeal Teratoma in a Female Neonate Born at FMC Asaba.Nigeria

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Background: Sacroccoccygeal teratoma is a rare germ-cell congenital tumour with increased risk of malignant degeneration.

Objectives: To highlight the need for early intervention to prevent malignant degeneration

Case Presentation: This mother was transferred during labour from a secondary-level hospital because of an ultrasound diagnosis of polyhydramnios with a giant saccrococcygean mass at 35 weeks gestation. She was not hypertensive, asthmatic or diabetic, and had normal oral glucose tolerance at 28 weeks; her postnatal Thyroid function test was also normal.

Following an urgent C-section, a moderately asphyxiated female newborn weighing 4750 grams was delivered. Physical examination revealed a female newborn with a massive lobulated sacrococcygeal mass extending anteriorly towards the anus and vagina. This lobulated cystic mass protruding from the sacral region measuring 30cm by 18 cm was fluctuant, soft with trans-illumination on the anterior aspect, but less so posteriorly. The head circumference was 32cm. MRI showed no significant pelvic involvement, echocardiogram showed dextrocardia, and the alpha-fetoprotein was elevated.

Her parents were extensively counselled and provided psychological support. Neurosurgical and paediatric Surgery team support was solicited, and the surgical intervention was done at 40 hours of birth. Excision of sacro-coccygeal teratoma and coccygectomy was performed through an extensive incision. The tumour contained a total of 1,580 millilitres of serosanguineous fluid and some tissue content, which were all excised and sent for histology.

Discussion and Conclusion: Sacrococcygeal teratoma is a rare tumour usually diagnosed *in-utero* with an ultrasound scan. Prompt removal is recommended to prevent malignant degeneration.

ABK/180/059P

Pattern and Outcome of Neonatal Tetanus Admissions at the Federal Medical Centre, Abeokuta, Ogun State, Nigeria

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Background: Neonatal tetanus (NNT) remains a preventable cause of neonatal morbidity and mortality in low-resource settings, reflecting gaps in maternal immunisation and delivery practices. This study describes the clinical profile and outcomes of neonates admitted with tetanus at the Federal Medical Centre, Abeokuta, Ogun State, Nigeria, over four years.

Methods: A retrospective descriptive review of neonates admitted with NNT between 2018 and 2022 was conducted. Eighteen of 20 cases with complete data were analysed using SPSS (v26). Extracted variables included demographics, clinical presentation, cord care practices, maternal tetanus toxoid (TT) status, place of delivery, and outcomes.

Results: The mean age at presentation was 7.9 days (range 5–15 days); 55.6% were males. Mean incubation and onset periods were 6 days and 21 hours, respectively. All presented with poor suck and body stiffness. All the parents of the neonates with tetanus resided in rural communities in Ogun State, where the reported uptake of maternal TT vaccination is 78.7%. Two-thirds of the neonates were referred from private facilities. None of the mothers had documented complete TT vaccination. Cord care was largely unhygienic hot fermentation and herbal applications. Deliveries were mostly made by traditional birth attendants (61.1%). The case fatality rate was 38.9%, 33.3% were discharged against medical advice, and 27.8% survived. All patients received diazepam, phenobarbitone, antibiotics, and antitetanus serum.

Conclusion: Neonatal tetanus remains a significant cause of preventable neonatal deaths in Abeokuta. Strengthening maternal TT immunisation, promoting skilled birth attendance, and improving community education on clean cord care are essential to achieving NNT elimination.

ABK/181/060P

Prevalence and Outcome of Newborns with Birth Trauma at University of Ilorin Teaching Hospital

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Background: Birth trauma is defined as "impairment of neonatal body function and/or structure due to adverse events (mostly mechanical forces) occurring at birth which could either be avoidable or inevitable". The injury may occur from inappropriate or deficient medical skill or attention, or may occur despite skilled and competent obstetric care, independent of any acts or omissions.

Objectives: To determine the prevalence and outcome of babies with birth trauma seen in University of Ilorin Teaching Hospital (UITH).

Methods: This is a retrospective cross-sectional study of babies with birth trauma seen at the University of Ilorin Teaching Hospital, North-Central Nigeria. Demographic parameters, gestational age, as well as the diagnosed injury were documented over five years from 1st January 2020 to 31st December 2024.

Results: Out of a total of 6476 babies seen, the prevalence of birth trauma was 2%. Caput succedaneum was the predominant injury, accounting for 68.6% of the affected babies, followed by subconjunctival haemorrhage (20%) and cranial nerve injuries as the least (0.7%). The majority (98.5%) were discharged, with some referred for physiotherapy. Percentage mortality was 1.5%.

Conclusion: Caput succedaneum was the most predominant birth trauma recorded in this study. The majority of the babies were discharged. Comprehensive risk assessment during antenatal care, careful monitoring and prompt evidence-based interventions at delivery are crucial in preventing these morbidities.

ABK/188/061P

A Review of Neonatal Morbidity and Mortality in a Newly Upgraded Tertiary Healthcare Facility in Dutse, Nigeria

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Background: Neonatal mortality contributes significantly to under-five mortality; nearly half of global under-five deaths in 2023 occurred during the neonatal period, with Nigeria as a major contributor. To attain Sustainable Development Goal targets, Nigeria needs to improve newborn care, including constant review of neonatal morbidity/ mortality. An audit of facility-based morbidity and mortality patterns helps to improve the quality of care and planning for intervention in a resource-limited setting. This study is the first to assess the pattern of neonatal morbidity and mortality in Rasheed Shekoni Federal University Teaching Hospital (RSFUTH), Dutse, Jigawa, since its upgrade.

Objectives: To determine and establish baseline data on neonatal morbidity and mortality patterns in a newly upgraded Tertiary Facility in North-western Nigeria.

Methods: A retrospective study was conducted at the Special Care Baby Unit (SCBU) of RSFUTH, Dutse, Jigawa State, Nigeria. The hospital records of babies admitted during the 1 year under review (2023-2024) were retrieved for statistical analysis.

Results: A total of 463 neonates were admitted during the period under review. The sex ratio for males and females was 1.4:1, respectively. The major diagnoses were neonatal sepsis (NNS) 30.2%, prematurity 24.4% and birth asphyxia 21.6%. Mortality rate was 31%, with major contributions from birth asphyxia (39%), prematurity (37%), and neonatal sepsis (31%), discharged against medical advice rate was 5.8%.

Conclusion: The facility-based neonatal mortality rate of 31%, is unacceptably high. Neonatal sepsis, prematurity and birth asphyxia were the leading causes of morbidity and mortality in this facility, which are largely preventable.

ABK/249/062P

Awareness, Knowledge and Attitude of Health Workers towards Chlorhexidine Gel for Cord Care in a Tertiary Hospital in Abuja

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Background: The World Health Organisation recommends using chlorhexidine (CHX) gel for umbilical cord care to prevent sepsis in settings where mortality rates are high. Health workers' knowledge and attitudes towards the current recommended umbilical cord care guidelines can influence compliance among caregivers and mothers.

Objective: To assess the knowledge, awareness and attitude of health workers towards CHX gel for umbilical cord care.

Methods: A cross-sectional study was carried out among 102 health workers in a hospital in Abuja, using a pre-tested, structured questionnaire to assess their knowledge of cord care practices, awareness of CHX gel, and attitude towards the use of CHX gel for cord care. A score of 60% or more was regarded as a benchmark for good knowledge and a positive attitude.

Results: Eighty-five participants (83.3%) were aware of the existence of CHX gel, 72 (70.6%) knew it was an agent for effective cord care, compared to 87 health workers (85.3%) who had knowledge of methylated spirit use for the same purpose. Sixty-eight participants (66.7%) believed it was effective, while 64 (62.7%) were willing to recommend it to mothers. Only 55 respondents (53.9%) had an overall positive attitude towards its use for cord care.

Conclusion: Despite high awareness and knowledge levels, attitudes towards CHX gel use remain suboptimal among health workers. Targeted capacity-building and behaviour change interventions will promote the adoption of evidence-based cord care practices, given the influential role of health workers in guiding caregiver decisions.

ABK/254/063P

Pfeiffer syndrome in a Twin: A Case Report

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Background: Pfeiffer syndrome (PS) is a rare genetic craniosynostosis disorder. Few cases have been reported in African populations, but none in a twin. This is a report of type 2 PS in a twin at the National Hospital, Abuja.

Objectives: To describe the presentation, evaluation, challenges, and multidisciplinary management of Pfeiffer syndrome.

Case Presentation: Term, male neonate, second of dichorionic twins delivered via emergency caesarean section from a non-consanguineous marriage. Co-twin is phenotypically normal. Anomaly scan reported as normal. At birth, he exhibited a cloverleaf skull, marked proptosis, low-set ears, natal teeth, unilateral choanal stenosis, fixed elbow flexion deformities, bilateral talipes equinovarus, scalp epidermal naevus, and hypospadias. These features predispose him to impaired brain growth, raised intracranial pressure, visual compromise, feeding difficulty with risk of aspiration, and impaired mobility.

Radiographic evaluation, TFUSS, brain MRI, and echocardiography were done. Genetic screening was not done due to financial constraints. He was managed by a multidisciplinary team, discharged at one month of life, and has had 4 follow-up visits.

Discussion: The case is consistent with Type 2 PS based on clinical findings. Pfeiffer Syndrome is classified into three subtypes. Type 1 is typically autosomal dominant with good survival, whereas Types 2 and 3 occur sporadically and are associated with severe malformations and poor prognosis.

Antenatal diagnosis and early recognition facilitate timely counselling and preparation of parents as well as the clinician.

Conclusion: This case adds to existing literature and highlights challenges and the importance of early diagnosis and comprehensive multidisciplinary care in improving outcomes for infants with Pfeiffer syndrome in resource-limited settings.

ABK/261/064P

Potter Syndrome: A Case Report

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Background: Potter syndrome is a rare congenital abnormality with a male preponderance, inherited in an autosomal dominant pattern. It has an incidence of 1:2,000 to 1:5,000 births. It is characterised by Potter facies (flattened nose, low-set ears, receding chin), pulmonary hypoplasia due to oligohydramnios, bilateral renal agenesis, and various forms of skeletal and limb deformities.

Objectives: To create awareness, heighten suspicion and improve outcomes.

Case Presentation: A 17-hour-old term male neonate delivered via spontaneous vertex delivery, with poor cry and severe respiratory distress since birth. Mother was 32 years old with oligohydramnios diagnosed at 5months of pregnancy. He was small for gestational age (Birthweight-1.97kg) had microcephaly, widely-spaced-eyes, low set ears, receding chin, a tuft of hair at the spine, clubbed feet, undescended testes and a single umbilical artery. He was cyanosed (oxygen saturation 40% in room air), anuric (urethral catheter could not be passed). He was nursed in the newborn unit, received oxygen, intravenous fluids, and antibiotics. Chest x-ray revealed left pulmonary hypoplasia, right tension pneumothorax and associated lung collapse. Abdominopelvic Ultrasound revealed bilateral renal agenesis; cryptorchidism, bladder was not visualised. He died at twenty-nine hours of life.

Discussion: The outcome is generally poor, and these babies do not survive beyond a few hours to a few days after birth. The major cause of death identified is respiratory distress following pulmonary hypoplasia. Our index patient had severe respiratory distress and lived for twenty-nine hours.

Conclusion: Prompt diagnosis, early intervention and interdisciplinary collaboration would ensure better outcomes

ABK/267/065P

***Klebsiella species* Septicaemia with Severe Thrombocytopaenia in Neonates: A Case Series from Babcock University Teaching Hospital**

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Background: *Klebsiella* species are a leading cause of neonatal sepsis, particularly in resource-limited settings. Thrombocytopaenia is a known complication, especially in preterm infants.

Objectives: This case series aims to describe the clinical profile and outcomes of neonates with Klebsiella septicaemia complicated by severe thrombocytopenia managed in the Neonatal Intensive Care Unit (NICU) of Babcock University Teaching Hospital.

Case Presentation: Nine neonates with culture-confirmed *Klebsiella spp.* septicaemia were reviewed. Seven were preterm, and eight presented with severe thrombocytopaenia (platelet count nadir ranged from 3,000/µL to 32,000/µL). Common clinical features included fever and respiratory distress. These pathogens are frequently resistant to Ciprofloxacin, Amoxiclav, Ceftriaxone, and Cefotaxime, but often remain sensitive to Meropenem, Piperacillin-Tazobactam, Amikacin, and Gentamicin. Transfusions with fresh whole blood were administered in all cases for thrombocytopaenia. Duration of treatment ranged from 7 to 41 days. Eight of the babies recovered, and one was discharged against medical advice.

Discussion: This series highlights the high burden of Klebsiella septicaemia in preterm neonates and its strong association with severe thrombocytopaenia. The resistance pattern underscores the limitations of empiric antibiotic regimens and the need for culture-guided therapy. Supportive hematologic interventions, particularly transfusions, were critical in stabilising patients.

Conclusion: Severe thrombocytopaenia in neonatal septicaemia justifies high clinical suspicion of *Klebsiella spp.*, particularly when pathogens demonstrate multi-drug resistance. Management requires early diagnosis, aggressive hematologic support and targeted antimicrobial stewardship to overcome the limitations of common antibiotic regimens. Strengthening infection control and antimicrobial stewardship in NICUs is imperative.

ABK/268/066P

Neonatal Mortality and Its Predictors at the Lagos State University Teaching Hospital

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Background: Globally, neonatal mortality accounts for a significant burden of infant and under-five mortality, especially in low- and middle-income countries (LMICs) like Nigeria, which has a high neonatal mortality rate of 33.7 per 1,000 live births. Reviewing mortality patterns in tertiary centres provides valuable insight to inform resource allocation aimed at improving neonatal survival.

Objectives: To determine the outcomes and independent predictors of death among neonates admitted to the Neonatal Unit of the Lagos State University Teaching Hospital (LASUTH).

Methods: We conducted a retrospective review of de-identified data of neonates admitted to the Neonatal Unit, LASUTH, between May and October 2025. Data from 330 neonates were extracted and analysed using Just Another Stats Program (JASP) Statistics version 0.95.4.

Results: Of the 330 admitted neonates, the overall mortality rate was 19.1% (n=63), while 241 (73.3%) were discharged home. The leading cause of admission was prematurity/low birth weight (LBW) (21.7%), followed by jaundice (16.9%) and birth asphyxia (15.6%). The principal causes of death were preterm birth (31.7%), neonatal sepsis (25.4%), and perinatal asphyxia (22.2%). The independent predictors of death were a 5-minute Apgar score less than 7 (adjusted Odds Ratio [aOR] = 8.77) and outborn birth status (aOR = 3.74).

Conclusion: Preterm birth, perinatal asphyxia, and neonatal sepsis remain the major causes of mortality in our unit, particularly for those referred from outside (outborn). This highlights the critical importance of enhancing perinatal care, including effective resuscitation training, in referring hospitals to improve neonatal survival.

ABK/269/067P

Prevalence, Predictors and Outcomes of Neonatal Respiratory Distress in Lagos State University Teaching Hospital

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Background: Respiratory distress (RD) is one of the leading causes of neonatal morbidity and mortality in low- and middle-income countries like Nigeria. Objective clinical scoring systems such as the Downes' Score (DS) provide standardised assessment tools, but their use in low-resource settings may be limited.

Objectives: To evaluate the proportion of neonates who received objective assessment, the prevalence of RD, and its association with clinical outcomes.

Methods: A retrospective review of the database of 300 neonates admitted into the Neonatal Unit, LASUTH, between May and October 2025, inputted into our de-identified e-database (African Neonatal Network/Vermont Oxford Network). Prevalence and severity of RD were established using recorded DS. Associations between RD severity and clinico-physiological variables and outcomes (mortality and length of stay, LoHS) were analysed.

Results: Approximately 45 per cent (136/300) of neonates with RD had documented objective scoring. Using the DS, 14.0% of neonates demonstrated *moderate-to-severe* respiratory distress (msRD=DS >3), which was associated with lower admission temperature ($p = 0.038$), lower SpO_2 ($p < 0.001$), younger age at admission ($p = 0.045$), and lower 1- and 5-minute Apgar scores (both $p < 0.001$). Hypothermia and hypoxaemia were independent predictors of msRD ($p = 0.022$ and $p = 0.006$, respectively). Mortality was higher among neonates with msRD ($p = 0.014$) but did not significantly influence LoHS.

Conclusion: RD was associated with hypoxaemia and higher death rates, suggesting that effective oxygen/respiratory therapy may limit RD-associated deaths. Thus, routine use of RD scales may support early risk stratification, timely intervention, and improved neonatal outcomes.

ABK/271/068P

Audit of Newborns' Requirement for and Care-providers' documentation of Delivery-room Neonatal Resuscitation Steps in an Inborn Neonatal unit in Lagos

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Background: Delivery-room neonatal resuscitation (DR-NR) is a life-saving intervention comprising stepwise evidence-informed interventions aimed at optimal neonatal intrauterine-to-extrauterine transition. These interventions include delayed cord-clamping (DCC), positive-pressure ventilation (PPV), chest-compression (CC), adrenaline administration, and intubation. About 1% of newborns require active resuscitation. A high-quality dr-NR programme is dependent not only on the availability of technically skilled birth attendants but also on feedback from quality documentation to inform quality-improvement/assurance (QI/QA) processes. Also, knowledge of the proportion of newborns who require active resuscitation in a birthing facility may guide resource allocation.

Objectives: To determine data completeness of DR-NR documentation and the proportion of newborns who had active resuscitation.

Methods: Our audit involved analysis of routinely collected data (May-October 2025) of all admitted inborn neonates inputted into LASUTH-Neonatology's e-database (host: African Neonatal Network/Vermont Oxford Network). Data are routinely collected from paper records by registrars using standardised forms, including dr-NR steps (yes/no to each), etc. Rate of active resuscitation was defined as the proportion of babies who had at least dr-PPV.

Results: Average data completeness was 81.9%, ranging from 56.5% for DCC to 92.5% for dr-intubation. The rate of active resuscitation among babies born in our facility was 16.4%. Also, 59%, 1.5%, 0%, and 0% had DCC, dr-CC, dr-epinephrine and dr-intubation, respectively.

Conclusion: Although data completeness was averagely high (81.9%), the low rate for DCC (56.5%) - an evidence-based intervention now integral to dr-NR - requires implementation of standardised NR-checklists into routine birth documentation. Our facility's rate of active resuscitation (16.4%) far exceeds the oft quoted 1.0%, likely because it mainly cares for referred critically ill/high-risk pregnant women.

NEPHROLOGY

ABK/73/069P

Paediatric Systemic Lupus Erythematosus with Lupus Nephritis: A Case highlighting Diagnostic Challenges and Early Therapeutic Response

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Background: Systemic Lupus Erythematosus (SLE) is a chronic, multisystem autoimmune condition with variable manifestations. Lupus nephritis is a common complication in paediatric patients. Early diagnosis and prompt intervention are crucial to prevent irreversible renal and systemic sequelae.

Objectives: To illustrate diagnostic difficulties in paediatric SLE and demonstrate the role of early therapy in improving outcomes through a case example.

Case Presentation: An 8-year-old female presented with a one-month history of cough, generalised body swelling, fever, and joint pains. She also reported frothy urine, oral ulcers, and a history of papular rashes. She was acutely ill, pale, in respiratory distress, with bilateral pedal oedema extending to the sacrum, and had hepatomegaly.

Investigations revealed severe anaemia (haematocrit 17.9%), elevated Erythrocyte Sedimentation Rate (ESR) - 115 mm/hr, proteinuria (4+), haematuria (2+), and hypoalbuminaemia (29g/L). Immunological testing showed positive Antinuclear Antibody (1:1280) and anti-double stranded DNA (1:10). Differential diagnoses considered were Nephrotic syndrome and Tuberculosis, before a final diagnosis of paediatric SLE with Lupus Nephritis was made.

She received corticosteroids, diuretics, antibiotics, blood products, and supportive care. A significant reduction in ESR (3mm/hr) was noted within 72 hours of steroid initiation. She improved clinically and was discharged on oral steroids with specialist follow-up.

Discussion: This case underscores the diagnostic complexity of paediatric SLE, particularly when initial symptoms are non-specific. Multisystem involvement and evolving features necessitate a high index of suspicion and early immunological testing.

Conclusion: Early recognition and prompt immunosuppressive therapy remain vital in reducing morbidity and preserving organ function in paediatric SLE.

NEUROLOGY

ABK/36/070P

When "Natural" Isn't Safe: Paediatric Wernicke Encephalopathy Linked to Grain Concentrate Supplement in a 17-Year-Old Male: A Case Report

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Background: Wernicke encephalopathy (WE) is an acute neuropsychiatric emergency caused by thiamine deficiency. Although traditionally linked to chronic alcoholism, it is increasingly recognised in non-alcoholic paediatric patients, where diagnosis may be delayed due to low clinical suspicion.

Objectives: To emphasise the importance of recognising WE in non-alcoholic adolescents and to highlight the uncommon role of dietary supplements containing thiaminase-rich components as a precipitating factor.

Case Report: A 17-year-old male presented with a 3-day history of severe headache followed by confusion, irrational speech, vomiting, and progressive gait ataxia. Examination revealed disorientation, impaired attention and memory, and a wide-based gait, with no ocular abnormalities typically associated with WE. Initial laboratory tests and brain MRI were unremarkable, lowering suspicion for infectious, metabolic, or structural causes. During admission, he developed three generalised convulsions, which were aborted with paraldehyde and phenobarbitone. Further history disclosed excessive consumption of a grain-

based concentrate supplement for two months, containing rice bran, soybean, and wheat germ oils, substances known to possess thiaminase activity. Although thiamine levels were not measured, the clinical picture and risk factors prompted a presumptive diagnosis of thiamine deficiency. High-dose intravenous thiamine (400 mg every 8 hours) led to rapid improvement, with full recovery of cognition and gait by day 5. He transitioned to oral thiamine and remained asymptomatic at two-week follow-up.

Conclusion: Thiamine deficiency should be considered in adolescents presenting with acute confusion and ataxia, even without alcohol exposure. Excessive intake of thiaminase-containing supplements may precipitate thiamine deficiency. Early recognition and prompt thiamine therapy are crucial to prevent irreversible neurological injury.

ABK/95/071P

Tuberculous Spondylitis and Intracranial Tuberculoma in a Three-Year-Old Female with Developmental Delay: A Rare Extrapulmonary Tuberculosis Manifestation in Childhood

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Background: Extrapulmonary tuberculosis (EPTB) is an infection by *Mycobacterium tuberculosis* affecting organs other than the lungs. Tuberculous spondylitis and central nervous system tuberculosis (CNS-TB) are rare but severe forms, particularly in children due to their immature immune systems.

Objectives: To highlight the need for increased awareness and clinical suspicion for childhood extrapulmonary tuberculosis.

Case Presentation: A three-year-old female presented with delayed developmental milestones, loss of previously acquired motor skills, seizures, and a midline spinal bulge (gibbus), and was referred to us for cerebral palsy. She had hypertonia in the lower limbs, truncal ataxia, and mild talipes equinovarus. MRI revealed wedge destruction of the L1 vertebral body with extensive paravertebral (T12-L1) abscess and multiple ring-enhancing brain lesions. Laboratory tests for tuberculosis were negative. Despite this, a clinical diagnosis of extrapulmonary tuberculosis was made. She received a two-year course of anti-TB chemotherapy with full neurological recovery, resolution of spinal deformity, disappearance of intracranial lesions and good seizure control without surgical intervention.

Discussion: EPTB accounts for approximately 11% of all TB cases, with musculoskeletal TB ranking as the third most common form, while CNS-TB is one of the most aggressive manifestations. Spinal TB results from hematogenous spread, causing vertebral destruction and potential neurological sequelae. Diagnosis is often delayed due to nonspecific symptoms and low test sensitivity. Early recognition and prolonged treatment are critical for favourable outcomes.

Conclusion: A high index of suspicion is essential for timely diagnosis and management of extrapulmonary tuberculosis in children to prevent severe complications and disability.

ABK/142/072P

Asparaginase-Induced Cerebral Venous Sinus Thrombosis: A Case Report

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Background: Cerebral sinus venous thrombosis (CSVT) is an uncommon life-threatening complication in children receiving asparaginase as part of acute lymphoblastic leukaemia (ALL) treatment. The enzyme depletes plasma asparagine, inhibits protein synthesis and leads to reduced levels of natural anticoagulants, including antithrombin III and others, predisposing patients to thrombosis.

Objectives: To describe a case of asparaginase-induced CSVT in a paediatric oncology patient at Lagos State University Teaching Hospital.

Case Presentation: An 11-year-old girl was diagnosed with ALL and commenced on induction chemotherapy, which included native *E.coli* asparaginase. Two days after induction chemotherapy completion, she developed headache, seizure, and right hemiparesis. Magnetic resonance imaging showed thrombosis of the superior sagittal sinus and cortical veins. Asparaginase was discontinued, enoxaparin was commenced, and her neurological

condition improved. Asparaginase was reintroduced 3 weeks later with continued anticoagulant. A repeat MRI showed resolution of the intracranial bleed.

Discussion: Asparaginase-related thrombosis results from depletion of natural anticoagulants, reducing heparin efficacy. Clinical presentations include headache, seizures, or focal neurological deficits. MRI with MR venography is the diagnostic gold standard. Management involves discontinuation of asparaginase, starting heparin, and correcting antithrombin deficiency. Once stable, asparaginase can be safely reintroduced with anticoagulation to maintain chemotherapy continuity.

Conclusion: Cerebral sinus venous thrombosis is an uncommon but serious complication of asparaginase therapy in children with acute lymphoblastic leukaemia. Clinicians should maintain a high index of suspicion in any child presenting with neurological symptoms during its use. Prompt diagnosis and anticoagulation therapy improve outcomes and allow continuation of chemotherapy with minimal interruption.

ABK/149/073P

Prominent Self-Injurious Behaviour Masking the Diagnosis of Rett Syndrome: A Case Report and Diagnostic Dilemma

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Background: Rett syndrome is a rare X-linked neurodevelopmental disorder characterised by developmental regression, loss of purposeful hand skills, and the emergence of stereotypic hand movements. While self-injurious behaviour (SIB) is a recognised comorbidity, its predominance can mask the underlying diagnosis.

Objectives: To report a case of Rett syndrome where SIB was the presenting chief concern and discuss the clinical reasoning behind the correct diagnosis in a resource-constrained setting where genetic testing is not readily available.

Case Presentation: A 26-month-old female presented with a 14-month history of severe self-injurious behaviours (repeated biting of her left forearm and head banging), yelling and restlessness. She had regression in her acquired hand skills and language, accompanied by repetitive hand stereotypies. Physical examination revealed a broad-based gait and multiple hypertrophic scars on the left forearm from self-inflicted bites. Her general and neurological examinations were otherwise non-focal, and her brain MRI was normal.

Discussion: The constellation of regression and SIB initially suggested other neurobehavioural disorders. However, the classic trajectory of normal perinatal period and initial development followed by regression with the emergence of pathognomonic hand stereotypies helped in clinching the clinical diagnosis of Rett syndrome. The severe SIB may be an extreme manifestation of the underlying autonomic and motor dysregulation, compounded by an inability to communicate distress.

Conclusion: Self-injurious behaviour can be a prominent and misleading feature in Rett syndrome. We recommend a high index of suspicion for Rett syndrome in young girls presenting with developmental regression and SIB, even in the absence of genetic confirmation.

ABK/191/074P

Dermatoglyphic Study of Autistic Children and their Parents Compared with Non-Autistic Children and their Parents

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Background: Dermatoglyphics, the study of epidermal ridge characteristics, is genetically determined. These patterns, fully formed by the 19th week of gestation, remain unchanged throughout life and are influenced by both genetic and prenatal environmental factors. As such, dermatoglyphics provides a valuable, non-invasive marker for exploring congenital anomalies and genetic disorders. Autism Spectrum Disorder (ASD) is genetically determined.

Objectives: To evaluate dermatoglyphic variations in children with ASD, their parents and comparison groups.

Methods: Thirty-six autistic children, their parents (37), and matched comparison groups were consecutively sampled, recruited and studied at the Paediatric Outpatient Department of the University College Hospital, Ibadan. Fingerprint characteristics were obtained using a Dermalog LF10 fingerprint scanner and enhanced using the Automated Fingerprint Identification System (AFIS). Data were statistically evaluated using STATA.

Results: Autistic children had significantly reduced arch patterns, particularly on the left hand, compared to the comparison group. Total and Absolute Finger Ridge Counts (TFRC and AFRC) on the right hand in autistic children were significantly different from the comparison groups. Mothers of autistic children also showed a significant increase in bifurcations and ridge endings in both hands, while fathers of autistic children displayed significant double bifurcations and short ridges. These findings suggest distinct dermatoglyphic markers associated with ASD and potential hereditary traits.

Conclusion: Dermatoglyphics may offer a useful, non-invasive tool for autism screening. Larger-scale and multicenter studies may be needed to confirm these results.

ABK/209/075P

Predictors of Folate Deficiency in Children with Epilepsy on Anti-Seizure Therapy in a Rural Tertiary Hospital in Southern Nigeria

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Background: Serum folate deficiency (SFD) could be associated with long-term use of anti-seizure medications (ASMs) in children, but the associated factors have not been well researched, especially in Nigerian children. This study aimed to address this knowledge deficit.

Objectives: To determine the predictors of folate deficiency in children on long-term ASMs in Irrua Specialist Teaching Hospital (ISTH).

Methods: We correlated the serum folate levels with socio-demographic status, dietary history, seizure characteristics, and clinical and haematologic status of 105 children with epilepsy aged 1- 16 years and 105 age-and-sex-matched controls in a prospective study. Then, we used multiple logistic regression to assess the interaction between the predictors of SFD. The level of statistical significance was set at $p < 0.05$.

Results: The predictors of SFD were epilepsy duration 2-5 years`1` ($p = 0.002$), low SES ($p= 0.003$), treatment with enzyme-inducing antiseizure medications ($p = 0.003$), and presence of circulating hyper-segmented neutrophils ($p= 0.001$). There was no significant association of SFD with dietary history (p = 0.139)

Conclusion: We conclude that the epilepsy duration, type of ASM, SES and the presence of peripheral neutrophil hypersegmentation, but not dietary intake, are the significant predictors of serum folate deficiency in children with epilepsy. Children with these features should be considered for dietary folate supplementation.

ABK/214/076P

Aquaporin-4 antibody-positive optic neuritis in a Nigerian child with Cerebral Palsy: A Case Report

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Background: Aquaporin-4 (AQP4) antibody-positive optic neuritis (ON) is a condition in which patients who test positive for AQP4 antibody present primarily with ON. This entity falls within the spectrum of neuromyelitis optica spectrum disorder – a rare autoimmune demyelinating disease, primarily affecting the optic nerves and spinal cord. It is characterised by the presence of serum IgG antibodies against AQP4, a water channel protein expressed on astrocytes.

Objectives: To highlight AQP4 antibody-positive ON as a potential cause of visual loss in children.

Case Presentation: A 14-year-old girl, a known patient of Neurology with cerebral palsy secondary to severe perinatal asphyxia, presented at the Paediatric Rheumatology Clinic of Lagos State University

Teaching Hospital with a 3-year history of poor vision. The Ophthalmology Unit referred her for worsening bilateral ON that was unresponsive to topical corticosteroids. She was alert and oriented, with muscle power graded 4/5 in all the limbs. Visual assessment revealed she could count fingers and recognise a few colours with the right eye, but had no perception of light in the left eye. Antinuclear and extractable nuclear antibodies were negative, while AQP4 antibody was positive (1:100 titre). Magnetic resonance imaging (MRI) showed left-sided scleritis and a chronic parietal infarct. Spinal MRI findings were normal. A diagnosis of AQP4 antibody ON was made. Medications have been mycophenolate mofetil, rituximab and steroids. Over the past three years, her condition has remained stable, with no further deterioration in vision.

Conclusion: AQP4-positive ON should be considered in children presenting with unexplained visual loss and signs of orbital inflammation.

ABK/223/077P

Spinal Muscular Atrophy in a Nigerian Child Confirmed By Molecular Genetic Testing

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Background: Spinal muscular atrophy (SMA) is a group of inherited motor neuron disorders with variable clinical manifestations. The 5q SMA is the commonest form and results from mutations in the survival motor neuron (SMN1) gene. Genetically confirmed cases from sub-Saharan Africa and Nigeria are very rarely reported. We describe a Nigerian child with genetically confirmed SMA.

Case Presentation: A 7-year-old girl presented with inability to walk and delayed motor milestones. She achieved sitting but stood only at 2 years of age and never walked independently. There was no cognitive impairment or speech delay. A family history of similar symptoms was present in her younger brother and a paternal aunt. Examination revealed hypotonia, global hyporeflexia, and reduced limb power. Molecular genetic testing demonstrated a homozygous deletion of exon 7 of the SMN1 gene and two copies of exon 7 of the SMN2 gene, confirming the diagnosis of SMA. She was classified as having SMA type 2.

Discussion: This case highlights the occurrence of SMA in Nigerian children and challenges the perception that the condition is rare among Black populations. Genetic testing was crucial in confirming the diagnosis and differentiating SMA from other childhood neuromuscular disorders. Delayed diagnosis, as seen in this patient, remains common in low-resource settings and has important implications in this era of disease-modifying therapies, where early treatment improves outcomes.

Conclusion: SMA is likely underdiagnosed in Nigeria. Increased clinician awareness and improved access to molecular diagnostic testing are essential for early intervention and improved outcomes.

ABK/228/078P

Spectrum of Neurological Disorders in Children: A 5-Year Review from a Tertiary Hospital in Rivers State, Nigeria

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Background: Neurological disorders in children from developing countries, such as Nigeria, are increasingly varied. Understanding the spectrum of these disorders and having reliable epidemiological data are important for workforce development and instituting preventive modalities to reduce their occurrence.

Objectives: This study aims to examine the patterns and risk factors of neurological disorders among children presenting at the University of Port Harcourt Teaching Hospital.

Methods: A descriptive study was conducted among children who attended the Consultant Paediatric Clinic (CPC) from January 2020 to December 2024. A retrospective abstraction of patients' demographic data and clinical information from their hospital records was done. SPSS version 25 was used for analysis.

Results: A total of 30,824 children under 18 years attended the CPC over the five years; 6281(20.4%) had neurological diseases. Of these, 3844(61.2%) were males, and 2437 (38.8%) were females, giving a male-to-female ratio of 1.6:1. Epilepsy was the most common neurological disorder, accounting for 2,135 cases (34.0%), followed by Central Nervous System

(CNS) infections with 1,821(29%) and cerebral palsy with 1,319 (21.0%) cases. The common risk factors were birth asphyxia (40.3%), CNS infections (30.2%), neonatal jaundice (17.6%), and prematurity (6.3%).
Conclusion: The prevalence of neurological disorders is high in our setting, with epilepsy, CNS infections, and cerebral palsy as the most common. There is a male preponderance, and the identified risk factors were birth asphyxia, infections of the CNS, neonatal jaundice, and prematurity, which are preventable.

ABK/234/079P

Sudden Unexpected Death in Epilepsy among Children - A Systematic Review of the Prevalence and Risk Factors in Africa.

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Background: Sudden Unexplained Death in Epilepsy (SUDEP) is one of the most severe and obscure outcomes in childhood epilepsy. Although studies have identified major causes for SUDEP, its prevalence and determinants among African children remain unknown, a situation attributable mainly to underreporting, missed diagnoses, and sociocultural barriers.
Objectives: This systematic review aims to synthesise current evidence on SUDEP in African children, focusing on prevalence patterns and risk factors.
Methods: This was a Systematic review conducted in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) 2020 guidelines. An electronic search of PubMed, Scopus, Web of Science, and African Journals Online (AJOL) was conducted, using the related keywords for African studies reporting SUDEP among patients less than 18 years.
Results: In African research on children with epilepsy, SUDEP prevalence ranges from 0.01% to 0.05% (0.1–0.5 per 1,000 child-years), compared with pooled global paediatric estimates of 0.02% to 0.11% (0.22–1.11 per 1,000 child-years). These apparently low figures largely reflect under-ascertainment due to low clinical suspicion and rarity of autopsy when certifying cause of death. Common risk factors include generalised tonic–clonic seizures in 60–70% and nocturnal events in 50–70% of SUDEP cases. Poor compliance with anti-seizure medications and limited access to specialised epilepsy care were other risk factors, while lack of awareness, cultural stigma, and the absence of surveillance for SUDEP hinder detection.
Conclusion: SUDEP is less recognised among African children. Awareness level among healthcare professionals is poor. Identified risk factors can be prevented with adequate counselling.

ABK/272/080P

A Five-year Retrospective Review of the Clinical Characteristics of Juvenile-Onset Myasthenia Gravis in Lagos Children

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Background: Myasthenia gravis (MG) is a rare autoimmune disease that affects the neuromuscular junction. Autoantibodies target and reduce binding sites for acetylcholine, impairing transmission. This causes fluctuating and fatigable weakness of voluntary muscles during sustained activity, which improves with rest. Juvenile-onset myasthenia gravis (JMG) accounts for 10-15% of cases. Ocular MG is commoner and presents with ptosis and diplopia. Generalised MG affects the limb, respiratory and bulbar muscles.
Objective: Existing literature reports differences in demographics, clinical presentation, treatment response, and outcome of juvenile-onset myasthenia gravis compared to adults. There is a paucity of literature on JMG in sub-Saharan Africa. This research work sought to characterise the clinical characteristics of myasthenia gravis in children living in a sub-Saharan African mega-city.
Methods: A detailed 5-year retrospective review and analysis of the hospital records of children diagnosed with myasthenia gravis in the paediatric neurology clinic of LASUTH was conducted.
Results: Eleven children aged 3 -14 years (X=8.3 years) were studied, mostly females (55%). The earliest duration of symptoms before presentation was two months. Unilateral ptosis was the commonest symptom (55%). Ocular MG occurred in 82% of cases. Treatment was mostly with prednisolone and pyridostigmine. Remission was achieved in 27%, and

two children had myasthenic crisis within one year and died. 72% remained functional with little interruption to daily life.

Conclusion: Myasthenia Gravis occurs and mostly presents as Ocular myasthenia in Nigerian children. Response to treatment with pyridostigmine and prednisolone is good. Generalised myasthenia is most often associated with a poor outcome.

ABK/274/081P

Electroencephalographic Characteristics of Children with Seizures Seen in a Neurophysiology Centre

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Background: The electroencephalogram (EEG) is a useful tool for the identification, classification, diagnosis and monitoring of seizures and epilepsies. Digitisation of the equipment has enabled easier access and application for use in children. A dearth of manpower and equipment, however, limits accessibility for Nigerian children in need of this valuable tool. There is a need to determine the value of its use in a sample population to help drive policy.

Objectives: To analyse the profile of the electroencephalogram of children resident in Lagos referred for EEG study.

Methods: Two hundred and eighty-three consecutive children referred from various public and private medical establishments in Lagos over eight months were reviewed. Demographic data, clinical history, neurophysiologic characteristics, waveform patterns, seizure typology and diagnoses were obtained and analysed.

Results: The study population ranged from 0.1yrs to 16yrs (X=5.4yrs) were mostly male (59%). The M: F ratio was 1.4:1. Most recordings occurred in a sedated state (52%). The waveforms were mostly rhythmic (97%), symmetric (96.5%), and of a moderate voltage (92.5%). Focal sharp waves were the most common abnormal waveforms. Epileptic encephalopathies accounted for 11 (28.9%) of the 38 children diagnosed with generalised epilepsy. Hypsarrhythmia was noted in 4 cases and burst suppression in 7. The electrographic record was normal in 23%.

Conclusion: The EEG is a very valuable tool for characterisation of seizure type, localisation of seizure origin, and to identify the epilepsy type in children resident in Lagos.

PULMONOLOGY

ABK/69/082P

Assessment of Respiratory Symptoms and Their Relationships with Personal Protective Equipment Use Among Child Quarry Workers in Ebonyi State, Nigeria.

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Background: Dust particles inhaled during activities at quarry sites can induce respiratory illnesses in the workers at such sites.

Objective: This study assessed the frequency of respiratory symptoms and the association with Personal Protective Equipment (PPE) use among child quarry workers aged six (6) to 18 years versus non-workers at industrial quarry sites, in Ebonyi State.

Methods: The study was a comparative cross-sectional study that recruited 106 quarry-exposed children and 106 age-, gender-, and socio-economic-matched controls. A structured questionnaire was used to obtain information on socio-demographics and clinical symptoms of study participants.

Results: A total of 73 (68.9%) out of 106 participants were males, with a male-female ratio of 2:1. All the exposed participants were from the lower socioeconomic class. The frequency of respiratory symptoms; recurrent cough ($\chi 2 = 25.06$, $p<0.001$), stuffy nose ($\chi 2 = 31.82$, $p<0.001$), runny nose (($\chi 2 = 13.82$, $p<0.001$), sneezing ($\chi 2 = 22.32$, $p<0.001$), chest pain ($\chi 2 = 5.62$, $p= 0.018$) were significantly higher in exposed than in the unexposed counterparts. Only 38 (35.8%) of the exposed group wore a form of PPE. There was a significant relationship between the prevalence of respiratory symptoms and the use of PPE among the exposed participants.

Conclusion: A higher prevalence of frequency of respiratory symptoms was observed in children exposed to quarry dust compared to their unexposed

counterparts, which was significantly related to the non-use of PPE. Regular and appropriate use of PPE is therefore advocated at quarry sites.

ABK/16/083P

Cystic Fibrosis in an Infant of African Descent: A Case Report and Literature Review

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Background: Cystic fibrosis (CF) is the most common genetically inherited condition in European-derived populations but is increasingly recognised in Africans.

Objectives: To describe CF in a five-week-old Nigerian who had been treated for recurrent bronchopneumonia and acute gastroenteritis with malnutrition.

Case Presentation: A five-week-old Nigerian male infant with recurrent cough, poor weight gain, fever, vomiting, passage of loose stools, and breathing difficulty. Delivered at term and weighed 3kg. Feeding was adequate, was fully immunised and had no tuberculosis contact. Two of his siblings had died in infancy with poor growth. Anthropometry showed weight-for-length and length-for-age <3rd centile. Salient findings included widespread crepitations, hypoxaemia and pallor. Serum EUCr showed hyponatraemia/hypochloraemia. GeneXpert was negative. Chest radiograph revealed background upper lobe multiple cystic changes. Laboratory results showed moderate hypoproteinaemia and mild albuminaemia, and faecal elastase of <0.2 µg/ml, confirming exocrine pancreatic insufficiency. Serum immunoglobulins showed high IgE-51.1g/dl, and IgG-7.53g/dl, and normal IgM-0.508g/dl, consistent with CF. Sweat test was unavailable, and financial constraints prevented genetic studies. After the commencement of pancreatic enzyme replacement (Creon), he showed improvement, gaining 0.7 kg in weight over three weeks, from 2.25kg to 2.95kg. He was discharged and followed up for five months, when Creon became unavailable. He was lost to follow-up and reportedly died at eight months of life.

Discussion: CF occurs in Africans but remains underdiagnosed, largely due to low index of suspicion and limited/costly diagnostic facilities.

Conclusion: Increasing awareness and improving access to confirmatory tests are crucial for early diagnosis and management of CF in resource-constrained settings.

GENERAL PAEDIATRICS/OTHERS

ABK/14/084P

Effect of Peer-Led Education on HPV and Cervical Cancer Knowledge Among In-School Adolescents

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Background: Cervical cancer remains a leading cause of cancer-related mortality among Nigerian women, largely due to persistent infection with high-risk human papillomavirus. Despite inclusion of the HPV vaccine in the National Programme on Immunisation, vaccine uptake remains suboptimal, partly because of poor awareness and misinformation among adolescents.

Objectives: To assess baseline HPV and Cervical cancer knowledge among in-school adolescents, to determine the effect of a peer-led educational intervention on knowledge and acceptance of HPV vaccination.

Methods: Interventional study conducted among adolescents in two secondary schools in Abakaliki, Ebonyi State. Using stratified random sampling, approximately 20% of enrolled students participated. Baseline knowledge was assessed using a structured questionnaire. Twenty trained peer educators, secondary school students, were equipped with educational pamphlets and delivered HPV and cervical cancer education over four weeks. Post-intervention assessment was conducted three months later.

Results: At baseline,28.7% of students had heard of HPV,16.7% correctly identified sexual transmission,

and 15.8% were aware of the HPV vaccine. Knowledge of the link between HPV and cervical cancer was reported by 23.3% of respondents. Following the intervention, awareness of HPV increased to 90.5%, correct knowledge of transmission to 82.8%, and awareness of HPV vaccination to 91.7%. Willingness to accept HPV vaccination increased from 12.4% at baseline to 42.3% post-intervention (p <0.001).

Conclusion: Peer-led education significantly improved knowledge of HPV, cervical cancer, and acceptance of HPV vaccination among in-school adolescents, highlighting its feasibility as a school-based strategy for improving HPV vaccine uptake.

ABK/74/085P

Drug-related Substance Abuse among In-school Adolescents in a Sub-national Region of Nigeria: A Cross-Sectional Study

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Background: Drug abuse is a global public health issue that has untoward physical, mental, social and biological consequences on the present and future health of adolescents. Drug-related substances in this context refer to codeine, tramadol, or any other prescription drug used to get high, marijuana, cocaine, inhalants, and glue.

Objectives: To determine the prevalence and factors associated with drug abuse among in-school adolescents in urban and rural areas of Ebonyi State, Nigeria.

Methods: Using the Global School-based Health Survey questionnaire, which was self-administered, a cross–sectional study was carried out, recruiting 1296 in-school adolescents from rural and urban areas of Ebonyi State using a multi-stage sampling method. Data on socio-demographic characteristics and factors associated with drug use were obtained.

Results: The majority of the participants were female (57.9%). 224(17.4%) responded 'yes' to having ever used drugs in their lifetime, out of which 177(79%) were current drug users. 61.1% of drug users first used drugs in their pre-adolescent age. Factors associated with drug use were residing in a rural area (p=0.009), alcohol use (p<0.001), suicide attempt (p<0.001), weapon carrying (p<0.001) and gambling (p<0.001). Being religious was protective of drug use (p<0.001).

Conclusion: Use of drugs among adolescents is high. There is need for design of interventional programs to mitigate against this public health issue.

ABK/154/086P

Non-Suicidal Self Injury in a Female Adolescent

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Background: Non-Suicidal Self Injury (NSSI) is defined as the intentional destruction of one's own body tissues without suicidal intent and for purposes which are not socially sanctioned. The common methods include self-cutting, burning and scratching.

Objectives: To report NSSI (Self-Cutting) as a consequence of verbal bullying in a female adolescent.

Case Presentation: A 13-year-old female adolescent was first seen in the Paediatric Cardiology clinic with a 2-year history of chest pain and palpitations. Significant examination findings revealed multiple healed hyperpigmented scars on both forearms (Left>Right). Both thighs had multiple hyperpigmented and hypertrophic scars ranging from 1cm to 7cm in diameter. Chest radiograph, electrocardiogram, and Echocardiography were normal. She was subsequently referred to the

Adolescent Paediatric unit. She admitted to being verbally bullied at school and resorted to self-cutting using a razor blade as a coping mechanism. This led to a diagnosis of NSSI. She was counselled and referred to the psychiatrist, where she was placed on Fluoxetine 20mg daily and Nitrazepam 5mg nocte. She is also undergoing psychotherapy with the clinical psychologist. She continues to make significant improvements and is still being followed up at the clinic.

Discussion: Self-cutting is a common type of NSSI amongst adolescents in developed countries, but there are limited reports from Low- and Middle-income countries. It is reportedly more common in female adolescents and in victims of bullying, as seen in the case reported.

Conclusion: NSSI occurs in Nigerian female adolescents and requires a high index of suspicion to make this diagnosis.

ABK/169/087P

Sexual Debut Among Adolescents in a Sub-national Region of Nigeria

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Background: Early sexual activity in adolescents has remained a recurring problem with adverse psycho-social and health outcomes. The age of onset of sexual intercourse is of public health importance as people who start at younger ages are likely to be involved in risky sexual behaviours.

Objectives: The study assessed the age at and predictors of sexual debut among secondary school adolescents in Abakaliki, South-east Nigeria.

Methods: A school-based cross-sectional study using the Youth Risk Behaviour Survey questionnaire. Secondary school adolescents aged 10 to 19 years from private and public schools in Abakaliki and Ebonyi Local Government Areas were surveyed. Early sexual debut (ESD) was defined as having sexual intercourse at/before age 14.

Results: A total of 1,572 adolescents participated in the study; 600 (38.2%) were males, and 972 (61.8%) were females. A fifth of the students had engaged in sexual practices, which included 145 males and 177 females. The mean age of sexual debut was 10.7±3.8 years; 262 participants had ESD, 118 males and 144 females. The prevalence of ESD was 16.7%. Being in the boarding school ($p=0.013$), male gender ($p=0.006$), and lower socioeconomic class ($p<0.001$) were noted as predictors of sexual debut.

Conclusion: There was a high prevalence of early sexual debut among secondary school adolescents. The risk factors were the male sex, boarding school system, and lower socioeconomic class. Interventions for improved living conditions and gender-based education, targeted at the male adolescents in boarding schools, should be encouraged.

ABK/275/088P

Adolescent Friendliness of Health Services in Nigeria: The Paediatricians' Account

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Background: Nigerian adolescents deserve adolescent-friendly health services to effectively meet their health needs. There is a dearth of literature about the adolescent-friendly characteristics of the health services provided in Nigerian health facilities, which can impede the planning of their health services.

Objectives: To determine the capacity of Nigerian health facilities to provide adolescent health services and the adolescent-friendliness of the services through the paediatrician's view.

Methods: This was a cross-sectional study among paediatricians who attended the Paediatric Association of Nigeria conference in 2024. A self-administered questionnaire was used to obtain data, and analysis was with descriptive statistics, Chi-square test, and binary logistic regression at $\alpha_{0.05}$.

Results: There were 115 paediatricians; the mean age was 45.7±5.0 years, 91.1% were married, and 70.4% had at least one child who is an adolescent. The median number of adolescents seen in their facilities per month was 20 (range 0 – 250), while they had 12 years (range 0 – 29 years) working with adolescents. The services rendered were perceived as accessible, acceptable, appropriate, effective and equitable by 53.9%, 51.3%, 46.1%, 60.9% and 47.8% paediatricians, respectively. Married paediatricians perceived that the services were acceptable (OR: 4.01, 95% CI: 1.05 – 15.62), while those with at least one child who is an adolescent perceived the services were appropriate (OR: 2.72, 95% CI: 1.15 – 6.40).
Conclusion: The appropriateness and equity of the services were low. There is a need to improve the capacity of Nigerian health facilities to provide adolescent-friendly services for adolescents.

ABK/212/089P

Skin Care Practices Among Children Attending the Paediatric Dermatology Clinic at the University of Port Harcourt Teaching Hospital (UPTH), Port Harcourt

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Background: The skin is the largest organ of the human body. Effective skin care practice consists of gentle cleansing, moisturising, and sun protection. Skin care practices may affect the pattern of skin diseases.
Objectives: To determine the pattern of skin care practices among children in our practice and their association with the type of skin disease seen.
Methods: This was a prospective study of 468 patients seen in the clinic over 18 months (January 2024-June 2025). Socio-demographic data, skin care practices, as well as patients' diagnoses were obtained using an interviewer-administered questionnaire.
Results: The mean age of the study participants was 6.06±2.20 years, with a male-to-female ratio of 1:1.1. The majority of the study subjects had 2 baths per day (88%), and skin cleaning soaps seen included toilet soaps (52%), antiseptic soaps (29%), and skin lightening soaps (11%). Petroleum jelly was the most common skin moisturiser seen (64%). Use of antiseptics in bath water was reported in 34% of the study subjects. Only about 1% reported use of sunscreens. Whereas inflammatory skin diseases were more common in children who used antiseptic soaps, bath frequency, type of moisturiser, and use of antiseptics in bath water all showed no association with the type of skin disease seen.
Conclusion: Skin care practice among children in our practice was variable. Inflammatory skin diseases were more common in children who used antiseptic soaps.

ABK/221/090P

SDG 3 in the Light of Skin Health- A Call to Advocacy for Child Health Practitioners in Nigeria

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Background: The theme for the World Skin Health Day of 2025 aptly captured the role of skin health in attaining SDG 3 - "There is no health without skin health". With increasing access to the internet and social media, the range of harmful skin care practices encountered in our setting has continued to broaden. This is compounded by the weak regulatory frameworks within the Nigerian healthcare system.
Objectives: To highlight some harmful skin care practices found among children in our practice and re-awaken the consciousness of child health practitioners to their advocacy role in mitigating this trend.
Methods: Medical case files of children seen in our practice over 18 months were reviewed. Sociodemographic data as well as data on harmful skin care practices were retrieved using a proforma. An in-depth literature search on the substances reported was conducted, as well as social media trends with regard to the reported substances. A survey of the components of some skin care products marketed for children, both online and offline within Nigeria, was also conducted.
Results: The most common harmful skin care practices in our setting included: misuse of liquid antiseptic solutions and medicated soaps (28%), abuse of triple action creams (22%), skin bleaching (18%), and use of topical herbal concoctions (16%). The names of some soaps and creams marketed for children included adjectives such as "brightening, fairness, lightening, toning," etc, with many containing ill-defined ingredients.

Conclusion: The evolving trends in harmful skin care practices in children require heightened efforts by child health practitioners.

ABK/121/091P

Prevalence and Pattern of Dermatological Conditions in the Paediatric Dermatology Clinic of Federal Medical Centre, Umuahia

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Background: Dermatological diseases are common among children, particularly in tropical regions, and can significantly impact their physical, emotional, and social well-being, leading to discomfort, distress, and disability. Reported prevalence rates vary across regions depending on environmental and socio-economic factors.

Objectives: To determine the prevalence and pattern of dermatological diseases among paediatric patients attending the dermatology clinic of the Federal Medical Centre (FMC), Umuahia, Abia State, Nigeria.

Methods: This retrospective descriptive review covered three years from January 2020 to December 2022. All paediatric patients aged 0–17 years with dermatological diagnoses and complete socio-demographic data were included. Data were extracted from clinic registers and analysed using SPSS version 23. Associations between socio-demographic factors and dermatological disease patterns were assessed using chi-square tests and logistic regression, with $p< 0.05$ considered statistically significant.

Results: A total of 491 patients were analysed. The most prevalent disease categories were inflammatory skin disorders (37.9%), fungal infections (18.9%), and parasitic infections (13.8%). Atopic dermatitis was the most common single diagnosis (18.5%). Age was significantly associated with both specific diagnoses and disease categories ($p< 0.001$), with atopic dermatitis common in infants, tinea capitis in school-aged children, and acne in adolescents.

Conclusion: A wide spectrum of dermatological conditions, including common, uncommon, and rare genetic, pigmentary, and autoimmune disorders, were observed. These findings highlight the need for enhanced diagnostic capacity and tailored management strategies in paediatric dermatology practice.

ABK/10/092P

Gap Analysis of School Health Program in Nigeria: Paediatricians' and Nurses' Knowledge and Perception

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Background: There are reports of poor implementation of the School Health Program (SHP) across the country, with factors such as outdated policy and poor funding being implicated. Paediatricians and Nurses are key stakeholders in the effective implementation of SHP, but there is a paucity of data on their knowledge and perception of SHP.

Objectives: To assess the Paediatricians' and Nurses' knowledge of SHP, and their suggestions on measures to improve its implementation.

Methods: The study was a cross-sectional survey of 111 Paediatricians and Nurses, recruited consecutively in Gombe, Nigeria, in January 2025. An interviewer-administered questionnaire was used to collect data.

Results: Out of 111 participants, 74(66.7%) and 37(33.3%) were from Northern and Southern Nigeria, respectively. There were 40 (36.4%) males and 71(63.6%) females. Paediatricians and Nurses were 80(72.1%) and 23(20.7%) respectively. Their average duration of practice was 16.9 years. Most, 106(95.5%) participants had knowledge of SHP. The most listed components of SHP were nutrition 67(60%), health education 65(58.2%) and physical education 63(56.4%). The majority (94.3%) perceived inadequate SHP implementation and rated it 3.5, where 10 is the highest. Deploying healthcare workers to schools (32.7%) and creating awareness through strengthened Parent Teacher Association (20%) were

the most suggested measures to improve implementation

Conclusion: Participants had good knowledge of SHP and perceived implementation as inadequate. Improving SHP implementation will require collaboration between healthcare workers, the education ministry, and other relevant stakeholders.

ABK/165/093P

Knowledge Attitude and Practice of Nigerian Caregivers on Physical Activity and Screen Time Recommendations for Children - A Nationwide Survey

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Background: Globally, excessive screen exposure in children has been linked to adverse health effects. A 2021 Nigerian Communications Commission survey showed that Nigerian children spend about 10 hours daily on screens, with over 55% of teenagers lacking supervision. Despite global recommendations, Nigeria has no national guidelines on children's screen use or physical activity.

Objectives: To assess the knowledge, attitudes, and practices (KAP) of Nigerian caregivers regarding physical activity and screen time recommendations for children and identify sociodemographic factors that influence KAP.

Methods: Data on caregivers' demographics and KAP regarding physical activity and screen use in children were collected nationwide between April and June 2025 using pre-tested Google Forms. KAP were scored according to the World Health Organisation guidelines for children.

Results: A total of 526 caregivers consented, 92% having at least a university degree, with representation from most states and the Federal Capital Territory of Nigeria. While many were aware that guidelines exist, the knowledge score was poor for the majority of respondents (92.2%, n=485). The majority had an average attitude score (54%, n=287) and average practice score (71.2%, n=374). Only about a quarter of respondents correctly identified that these guidelines apply to adolescents over 12 years.

Conclusion: While general awareness exists, detailed knowledge of screen time and physical activity recommendations among Nigerian caregivers remains poor, despite having relatively positive attitudes and practices. This highlights the need for targeted public education and the development of national guidelines for screen time and physical activity in children.

ABK/194/094P

Reference Ranges for Ear Position and Dimensions in Children from Birth to Five Years of Ejagham Ethnicity, Cross River State

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Background: Ear dimensions (ED) are crucial for diagnosing genetic conditions, showing variability by age, sex, ethnicity, and race. Few reports exist on ear parameters in children globally, none for the Ejagham population.

Objectives: To determine the ear position (EP) and provide reference ranges for ED in apparently normal children aged 0-5 years of the homogenous Ejagham ethnic group in Cross River State, Nigeria.

Methods: It was a community-based cross-sectional study involving 1993 children using multistage sampling. Data were collected using a semi-structured questionnaire assessing EP via the intermedial canthal line. ED—length, width, lobular length, and lobular width—were measured with callipers. Ear angulations (EA) were evaluated with a goniometer. Age- and sex-specific reference ranges were created for the participants.

Results: The majority (99.6%) had normally positioned ears, while 0.4% had low-set ears (LSE). Mean ear lengths were 46.3±7.8mm(R) and 46.2±4.5mm(L) for males, and 45.9±4.1mm(R) and

45.9±4.2mm(L) for females. Mean ear widths were 28.9±3.3mm(R) and 28.8±3.0mm(L) for males, and 28.2±2.9mm(R) and 28.2±4.2mm(L) for females, with significant differences between sexes($p<0.001$).

Conclusion: This study reveals that 99.6% of Ejagham children aged 0-5years have normally positioned ears, providing ED and reference ranges of ED for clinical assessments of genetic conditions.

ABK/225/095P

Impact of Hospital Environment on Sleep Quality of Paediatric Inpatients in Sokoto, Nigeria

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Background: Hospitalisation disrupts children's sleep due to environmental and care-related factors, alongside effects of underlying illness. In Sokoto, high ambient temperatures, mosquito exposure, multiple relatives staying overnight, and limited climate control may further impair sleep. Poor sleep adversely affects recovery and well-being, yet paediatric inpatient sleep is under-studied in this setting.

Objectives: To evaluate the impact of hospital environmental factors on sleep quality among paediatric inpatients in Sokoto.

Methods: A cross-sectional study was conducted among 323 children aged 4–12 years admitted to paediatric wards of Usmanu Danfodiyo University Teaching Hospital. Data collection commenced on day 4 of admission and was completed at discharge. Sleep quality was assessed using the caregiver-reported Children's Sleep Habits Questionnaire and structured interviews on hospital environmental factors, translated into Hausa where necessary. Children's usual sleep patterns at home were reported for comparison. To minimise illness-related confounding, critically ill children, those admitted to ICU, and those receiving sedative medications were excluded; diagnosis, pain, and medication use were recorded.

Results: Mean sleep duration in hospital was 3.5 hours compared with 8.0 hours at home ($p < 0.001$), with reduced sleep reported in 99.7% of children. Major contributors included mosquito/insect bites (87%), high temperature/dry air (82%), noise from staff (75%) and other patients (68%), multiple relatives staying overnight (70%), and frequent nocturnal clinical interventions (65%). Children in shared rooms were particularly affected. Caregivers reported increased stress, fatigue, and reduced functional capacity.

Conclusion: Hospital environmental and cultural factors significantly reduce paediatric inpatient sleep in Sokoto, even after minimising illness-related confounding. Sleep-friendly hospital interventions may improve recovery and well-being.

ABK/252/096P

Assessment of Bullying and its Influence on Mental Health Among Secondary School Students in Owo Local Government Area, Ondo State

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Background: Bullying is defined as intentional and aggressive behaviour occurring repeatedly where there is a real or perceived power imbalance. Bullying is a major public health problem occurring worldwide, with adverse psychological effects that may persist into adulthood.

Objectives: This study aims to determine the prevalence of bullying and the relationship between bullying and mental health among secondary school students.

Methods: A descriptive cross-sectional study was conducted among selected secondary school students from four public and four private schools using a multistage sampling technique. Data were collected using a pre-tested, self-administered questionnaire adapted from the Olweus Bully/Victim Questionnaire and the General Health Questionnaire (GHQ). Descriptive statistics, chi-square tests, and analyses were performed using SPSS version 25.

Results: A total of 592 students participated in the study, with a mean age of 13.8 ± 2.2years. A high prevalence (66.4%) of bullying experience was reported. Verbal bullying was the most prevalent form. Bullying was statistically significant among students attending private secondary schools, as well as students in junior secondary classes.

Psychological morbidity identified using GHQ was high among both those who had been bullied (72.3%) and those who had not experienced bullying (73.9%), but severe psychological distress was more common among students who had been bullied, though not statistically significant. There was no association found between bullying and sex, religion, and family setting.

Conclusion: This study found a high prevalence of bullying, but under-reported. There is a need for targeted anti-bullying policies and interventions to promote safer and more supportive learning environments for students.

ABK/302/097P

COVID-19 Pandemic: Implications for Exclusive Breastfeeding Among Nursing Mothers in Ona-Ara Local Government, Oyo State, Nigeria

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Background: Studies have reported the implications of the COVID-19 pandemic (CP) on breastfeeding of infants, but only a few have explored the relationship between the pandemic and Exclusive Breastfeeding (EBF). This can inform preparedness for possible future pandemics.

Objectives: To examine factors that influenced EBF during the CP in Ona-Ara Local Government Area (LGA), Oyo State, Nigeria.

Methods: The study was cross-sectional in design. Immediately following the lockdown, a three-stage random sampling was utilised in selecting five wards from Ona Ara LGA and one Primary Health Centre (PHC) from each ward; 351 nursing mothers were recruited at the PHC immunisation clinics. An interviewer-administered questionnaire was used to collect information on socio-demographics, EBF, and CP-related factors.

Results: The mean age of mothers was 28.12±5.34 years, and the majority (85%) practised EBF. EBF was significantly associated with older mothers' age (p = 0.024), monogamous structure (p = 0.014), social support (p = 0.030), and self-employment (p = 0.002). There was no association between EBF and pandemic-related preventive measures such as use of facemask (p = 0.329), hand sanitiser (p = 0.431), social distancing (p = 0.554) or lockdown (p=0.506). However, receiving COVID-19 vaccination was significantly associated with EBF (p=0.039), though not on multivariate analysis (OR 0.4, p = 0.089).

Conclusion: COVID vaccination was associated with better practice of EBF; this finding reinforces vaccination as a beneficial strategy and should guide public health interventions in future pandemics.

ABK/232/098P

A Pilot Study on Leveraging Natural Language Processing in Creative Bloom: Enhancing Neurodivergent Learning for African Children through AI-driven Games

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Background: Neurodivergent disorders manifest in diverse ways, ranging from difficulties in sustaining attention to challenges in social communication and repetitive behaviours. These conditions require interventions tailored to enable learning and development.

Objectives: The study examined Creative Bloom: an AI-driven educational game with inbuilt Natural Language Processing (NLP) targeting children with neurodivergent conditions.

Methods: The study adopted a qualitative study involving 3 children, 3 parents, and 1 teacher. The data collection was a semi-structured interview in English, face-to-face, to explore user experiences, cultural appropriateness, engagement, and learning benefits. Interviews were recorded (with consent) and transcribed. A focus group discussion was held with children to gather insights and visual aids to accommodate communication challenges.

Results: Participants were three primary school students (9–11 years), three parents (34–40 years, varied education, 2 urban, 1 rural), and one female teacher (45 years, 15 years' experience, urban school). Children found Creative Bloom engaging due to its interactive, gamified format and NLP-driven conversational agents. Parents noted increased learning enthusiasm, with children preferring Creative Bloom over passive activities. The children reported better memory (via repetition), problem-solving (structured prompts), and focus (interactive feedback). Parents noted improvements in reading, comprehension, and word problem-solving. The teacher saw enhanced memory retention and problem-solving compared to traditional methods. The children requested more game variety and offline modes.

Conclusion: This study demonstrated that Creative Bloom, an AI-based learning game augmented with Natural Language Processing (NLP), can transform learning approaches in Africa by effectively supporting neurodivergent learners.