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Neonatology

OA101

The current pattern of facility-based perinatal and neonatal mortality in Sagamu, Nigeria

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Background: Perinatal and neonatal mortality rates have been described as sensitive indices of the quality of health care services. Regular audits of perinatal and neonatal mortalities are desirable to evaluate the various global interventions. The objective was to describe the current pattern of perinatal and neonatal mortality in a Nigerian tertiary health facility.
Materials and Methods: Using a prospective audit method, the sociodemographic parameters of all perinatal and neonatal deaths recorded in a Nigerian tertiary facility between February 2017 and January 2018 were studied.
Results: There were 1019 deliveries with stillbirth rate of 27.5/1000 total births and early neonatal death (END) rate among in-born babies of 27.2/1000 live births. The overall perinatal mortality rate for in-facility deliveries was 53.9/1000 total births and neonatal mortality (till 28 days of life) rate of 27.2/1000 live births. Maternal characteristics included unbooked status (88.2%), at least secondary education (75%) and lower socioeconomic status (80.8%). Severe perinatal asphyxia (36.8%), prematurity (36.8%), severe hyperbilirubinaemia (8.8%), congenital malformations (5.9%) and tetanus (2.9%) were the causes of neonatal deaths while obstructed labour (25.0%) and intra-partum eclampsia (21.4%) were the two leading maternal conditions associated with stillbirths. Gestational age < 32 weeks, age < 24 hours and inborn status were significantly associated with END ($p = 0.002$, $p < 0.001$ and $p = 0.002$ respectively).
Conclusion: The intra-facility perinatal mortality rate was high though stillbirth rate was relatively low. This poses a challenge for the achievement of the Sustainable Development Goals in Nigeria.

OA102

A comprehensive review of Neonatal Morbidity and Mortality in Lagos-Island, South Western Nigeria

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Introduction and Objective: Mortality occurring in the neonatal period accounts for about 46% of all under-five deaths with Nigeria as one of the significant contributors. Therefore, neonatal statistics is vital to the attainment of the Sustainable Developmental Goal 3 (SDG 3) which aims to reduce neonatal mortality to as low as 12 per 1000 live births in 2030. Our objective is to describe the pattern of morbidity and mortality in the inborn and out born units of Massey Street Children's Hospital, Lagos-Island South Western Nigeria over a 12 month period.
Materials and Method: Retrospective data of consecutive admissions into the neonatal units from August 1st 2017 to July 31st 2018 were analysed.
Results: A total of 2186 babies were admitted into the inborn and out born wards during the study period. 1181 (54%) were males and 1005 (46%) females. 1954 (89.4%) were discharged and 22 (1%) discharged against medical advice (DAMA). Major admissions were Prematurity 829 (37.9%), Asphyxia 486 (22.2%), Neonatal Sepsis 288 (13.2%) and Neonatal Jaundice 189 (8.6%). The total mortality was 203 (9.3%) with Prematurity accounting for 137 (67.5%) and Perinatal Asphyxia 42 (20.7%) of the mortalities.
Conclusion: Neonatal deaths are mostly due to prematurity. Other preventable morbid conditions contribute to it. Advancement in neonatal care is therefore essential in the accelerated attainment of the SDG 3.

OA103

Acute Kidney Injury In Asphyxiated Neonates: The Utility Of Serum Neutrophil Gelatinase-Associated Lipocalin In Early Diagnosis

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Introduction: The increased morbidity and mortality from acute kidney injury (AKI) following birth asphyxia

can be reduced by early diagnosis with prompt intervention. Neutrophil Gelatinase-Associated Lipocalin (NGAL) has been demonstrated to be a highly sensitive early marker of acute kidney injury following birth asphyxia, thus could be utilized for early detection of renal dysfunction for early intervention to prevent long term sequalae. Studies on the clinical utility of serum and urine biomarkers of AKI in neonates are limited in Africa and almost non-existent in Nigeria. This study was therefore carried out to determine the clinical utility of serum NGAL as an early marker of acute kidney injury in asphyxiated neonates in the newborn unit of the University of Uyo Teaching Hospital, Uyo, Akwa Ibom State of Nigeria.
Methods: This was a descriptive cross-sectional study of one hundred and four asphyxiated term neonates and one hundred and four healthy controls matched for gestational age, conducted between July 2015 and February 2016. Their serum NGAL levels were measured within 6 hours of life using the highly sensitive Enzyme Linked Immunosorbent Assay0 (ELISA) technique. Using serum creatinine and urine output criteria, patients were discriminated into AKI and no AKI groups.
Results: The serum NGAL levels in subjects ranged from 30-247ng/ml with mean value of 105.65±57.30ng/ml which was remarkably higher than levels in controls that ranged from 16-88ng/ml with mean value being 46.13±16.10ng/ml ($p<0.001$). With serum creatinine criteria, 11.5% of the subjects had AKI while 34.6% had AKI with urine output criteria. Subjects of the AKI group had significantly higher serum NGAL values than those of no AKI group (100ng/ml vs 50ng/ml with $p<0.001$).
Conclusions: Serum NGAL is a useful biomarker in detecting AKI in asphyxiated neonates within the first 6 hours of life.

OA104

An Outbreak of Pantoea Specie 3 In The Special Care Baby Unit University of Abuja Teaching Hospital in August 2017

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Introduction and Objectives: Pantoea specie 3, an uncommon cause of human infection, could be fatal in neonates. We report an outbreak of Pantoea specie 3 in the Special Care Baby Unit, University of Abuja Teaching Hospital in August, 2017.
Methods: All neonates admitted with a suspicion of sepsis had blood culture samples collected as part of a surveillance program for newborn sepsis between January-December 2017. Blood samples were processed using the Bactec® 9050 System. Positive samples were subjected to standard microbiological methods. Pathogen identification was done using API 20E system (Biomerieux) and antibiotics susceptibility determined by the disk diffusion method using the M100-CLSI 2017 standards.
Results: Overall, a pathogen was identified in 56/595 (9.4%) samples processed in 2017. The most frequently identified pathogens were *klebsiella pneumoniae,* 13/56 (23.2%), enterococcus specie, 8/56 (14.3%) and pantoea specie 3, 7/56 (12.5 %). All seven pantoea isolates were found in August 2017, accounting for 7/14 (50.0%) of pathogens identified that month. All pantoea isolates were sensitive to Ciprofloxacin, Gentamycin and Imipenem while 6/7 (85.7 %) were resistant to Ceftriazone, Cefuroxime, Ceftazidime and Ampicillin. Mortality in pantoea-positive cases was 4/7 (57.1%), contributing to 18/56 (35.3%) neonatal sepsis mortality in August 2017. This was significantly higher than the 2017 annual average neonatal sepsis mortality of 79/392 (20.2%) [p=0.01; 95%CI (3.12, 28.70)].
Conclusion: The high mortality and resistance to commonly-used antibiotics associated with pantoea specie 3 infections indicate a need for closer monitoring of patterns of sepsis and more effective infection control programs in these settings.

OA105

Neonatal Outcome in new-borns admitted into a Free Maternal and Under-five Health Facility in South-west Nigeria: a 5 year review

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Background and Objectives: Neonatal mortality contributes significantly to under-five mortality more so in developing countries were facilities for sick new born are scarce. A review of the outcome in our newborn unit over a 5 year period may help to highlight inferences that can be useful in the planning and implementation of successful newborn care in similar settings.
Materials and Methods: This was a retrospective study of 3427 neonate admitted into newborn unit of Mother and Child Hospital Ondo from Dec 2012 –December 2017.
Results: The entire neonate admitted during the study period were included in this review, both the inborn and outborn. A total of 3427 newborns were admitted during the period. Male to female ratio was 1.3:1. The mortality in this study was13.9%, the major causes of death was prematurity, perinatal asphyxia, and neonatal sepsis. 72.6% of the neonates were discharged, 2.8% were referred, 9.6% discharged against medical advice while 0.9% absconded from the hospital
Conclusions: Neonatal mortality still remains a great

challenge to achieving developmental goals. Adequate antenatal care to prevent the preterm delivery, supervision of delivery by health workers skilled in neonatal resuscitation, availability of resuscitative equipments and multipronged approaches to reduce occurrence and prompt treatment of neonatal sepsis will reduce neonatal morbidity and mortality

OA106

Ablepharon Macrostomia Syndrome: First Case Report in West Africa

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Background: Ablepharon Macrostomia Syndrome (AMS) is an extremely rare congenital ectodermal dysplastic disease characterized by craniofacial, skin, skeletal and genital abnormalities. Less than 20 cases have been reported worldwide since the first case report in 1977.
Case Report: We report the case of a 6-day old male neonate delivered to unrelated parents. On presentation, we found a dysmorphic term neonate with absent eyelids, eyelashes and eyebrows, ectropion of both eyes, triangular shaped head, depressed nasal bridge with small triangular nose, small and low set malformed ears, large fish shaped mouth, hyper pigmented thick anterior abdominal wall, absent prepuce amongst other features. Skull X-ray showed absence of the zygomatic bones. The patient was managed as a case of AMS in a multidisciplinary fashion.
Conclusion: AMS remains an extremely rare congenital anomaly. There is no agreement on the mode of inheritance but authors have suggested autosomal recessive, autosomal dominant, sporadic and familial occurences.[1] Absence of the prepuce and hyperpigmentation of the anterior abdominal wall as was seen in our patient have not been reported. More case reports are needed to be able to delineate the full spectrum of clinical features that can be seen in patients with AMS.

OA107

Neonatal Sepsis: Aetiological Agents And Drug Sensitivity In Dalhatu Araf Specialist Hospital (Dash), Lafia

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Introduction and Objectives: Neonatal sepsis is an important cause of neonatal morbidity and mortality in developing countries. Its successful treatment requires background knowledge of common aetiological agents and their drug sensitivity. The aim of the study was to determine the prevalence of neonatal sepsis, the pathogens responsible and their drug sensitivity in the neonatal unit of DASH, Lafia.
Material and Method: This was a descriptive cross-sectional study conducted effectively over a period of two months from January 2018. Neonates admitted into the neonatal unit for neonatal sepsis had blood taken for culture before commencement of antibiotics. Clinical features and maternal risk factors for sepsis were documented.
Results: There were 480 live deliveries in the hospital over the study period out of which 106 were admitted with various features suggestive of sepsis. Sixty-five (13.5%) had confirmed sepsis. *E.coli* accounted for 29 (45%), *Staph. spp* - 21 (32%); *Kliebsella* - 13 (20%) and *Proteus spp* - 2 (3%). All four isolates were highly sensitive to ciprofloxacin and gentamycin. *E.coli* and *kliebsella* showed significant resistance to ceftriaxone, and *Proteus spp* was completely resistant to amoxicillin and ampicillin-cloxacillin. Fever was the commonest symptom occurring in 61% of subjects.
Conclusion: The commonest cause of neonatal sepsis in the study environment was *E. coli.* Resistance to conventional drugs used in the treatment of neonatal sepsis was noted.

Infectious diseases

OB101

Ownership and Appropriate Use of Long Lasting Insecticidal Nets among Febrile Children Visiting a Tertiary Health Centre in South East Nigeria

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Introduction: Long lasting insecticidal nets (LLIN)s play crucial role in malaria control. It is however effective when used nightly, <5 years/undamaged and <20 wash times. The NMCP targeted that at least 80% of households own 2 or more ITN while 80% of under-fives sleep under ITN nightly. As such, there was a scale up of mass LLIN distribution in the recent times in Anambra State which was reported to improve the ownership and use of LLIN among children. The main objective of this study was to determine the ownership and appropriateness of LLIN use among the febrile children seen at Nnamdi Azikiwe University Teaching Hospital, Nnewi.
Materials and method: This was a cross sectional descriptive study conducted on 246 febrile children aged 6 months to 17 years. The children were consecutively recruited and data was collected using a structured interviewer administered questionnaire.
Results: Majority of the households (97.4%) who owned LLIN received it from the Government's mass LLIN distribution campaign. There was a huge gap between ownership of LLIN (84.6%) and its appropriate use (22.6%). Amongst the households who owned LLIN, 74.5% do not use it nightly,10.6% used LLIN which was

≥5 years old/damaged and 3.3% were still using LLIN which has been washed ≥20 times.
Conclusion: This study demonstrated inappropriate use of LLIN. Hence, mass LLIN campaign should also focus on the education of caregivers on its appropriate use.

OB102

Molecular characterization of extended-spectrum beta-lactamase producing Enterobacteriaceae from pediatric patients in Central and Northwestern Nigeria

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Introduction and Objectives: Little is known about types of extended-spectrum β-lactamases (ESBL) in pediatric patients in Nigeria. We evaluated the prevalence and resistance patterns among ESBL in children,n across health facilities in central and northwestern Nigeria.
Methods: Blood samples from children age <5years with suspected sepsis were processed using automated Bactec® System from Sept 2008-Dec 2016. *Enterobacteriaceae* were identified using Analytical Profile Index (API20E®) and antibiotic susceptibility profile determined by the disc diffusion method. Multidrug-resistant strains were evaluated for ESBL by the combination disc method as recommended by Clinical and Laboratory Standard Institute. Real-time PCR was used to elucidate genes responsible for ESBL production.
Results: Of 21,000 children screened, 2,625(12.5%) were culture-positive. ESBL production was detected in 160/413(38.7%) *Enterobacteriaceae* available for analysis, comprising *Klebsiella pneumoniae* 105/160(65.6%), *Enterobacter cloacae* 21/160(13.1%), *Escherichia coli* 22/160(13.8%),*Serratia species* 4/160(2.5%), *Pantoea species* 7/160(4.4%) and *Citrobacter species* 1/160 (0.6%).Most ESBL isolates were susceptible to Imipenem (94.4%), Meropenem (96.4%) and Amikacin (96.1%). Resistance rates for antibiotics tested were Ceftriaxone (58.4%), Aztreonam (56.2%), Ceftazidime (58.4%) and sulphamethoxazole-trimethoprim (63.0%). Frequently detected resistance genes were *bla*TEM 134/160(83.8%), *bla*CTX-M 133/160(83.1%) and *bla*SHV 106/160(66.3%). Co-existence of *bla*CTX-M, *bla*TEM and *bla*SHV was seen in 94/160(58.8%), *bla*CTX-M and *bla*TEM in 118/160(73.8%), *bla*TEM and *bla*SHV in 97/160(60.6%) and *bla*CTX-M and *bla*SHV in 100/160(62.5%) isolates.
Conclusion: Our findings suggest a high prevalence of ESBL resistance to commonly-used antibiotics in *Enterobacteriaceae* bacteremia in children in this study. Further studies on the transmission dynamics of resistance genes could help in the control of ESBL resistance in these settings.

OB103

Epidemiological trend of Post-Neonatal Tetanus in a Nigerian Teaching Hospital (2010-2017)

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Background: Tetanus remains an important cause of childhood deaths in sub-Saharan Africa despite being a vaccine-preventable disease. This study was aimed at determining the current epidemiological trend of Post-Neonatal Tetanus (PNT) in a Nigerian tertiary health facility.
Materials and Methods: A retrospective study of the cases of post-neonatal tetanus managed at the Olabisi Onabanjo University Teaching Hospital, Sagamu, south-west Nigeria between January 2010 and December 2017 was done.
Results: There were 67 cases of PNT out of 3,986 admissions (1.7%) over the study period. The annual prevalence rates declined from 3.3% in 2010 to 0.9% in 2017. The majority were aged 6-12 years (55.2%), males (64.2%) and belonged to the lower socio-economic classes IV and V (98.4%). The mean duration of illness was 3.1 ± 2.2 days while the mean incubation period was 10.4 ± 5.4 days. The portal of entry was identifiable among 54 (88.5%) children. Most cases were not immunized against tetanus (73.8%), had incubation period > 1 week (49.2%), period of onset >24 hours (47.5%) and had severe and very severe disease (57.4%). The overall Case Fatality Rate (CFR) was 39.3% contributing 12.6% of total childhood deaths. Death was significantly associated with duration of illness less than 24 hours ($p = 0.032$) and presence of severe and very severe disease ($p = 0.005$).
Conclusion: Although the prevalence rates of PNT declined over the eight-year period, the disease still contributed major fractions of post-neonatal childhood deaths from unmet intensive care needs among severe and very severe cases.

OB104

Complementary and Alternative Medicine Use Among HIV-Infected Children at the Paediatric HIV Programme, University College Hospital, Ibadan.

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Introduction and Objectives: The use of complementary and alternative medicine (CAM) is common among individuals with chronic conditions. There is little information about the prevalence and pattern of CAM use among HIV-infected children in Nigeria. This study evaluates the pattern of CAM use among them and some

associated factors.
Methods: This was a prospective cross-sectional study among a sub-set of a large cohort of HIV-infected children receiving care at the Paediatric HIV programme at the University College Hospital, Ibadan. Consecutive patients presenting in clinic were enrolled and data collected using a proforma. Results were summarized using descriptive statistics.
Results: A total of 80 children were enrolled in the study, most were males 43(53.1%) and ages ranged between 1 and 14 years, with a mean (SD) of 8.5(3.7.) years. About half, 38(46.9%) had ever used CAM, but only 2(2.5%) were currently using CAM. The most commonly used CAM was oral herbal preparation 31 (81.6%) and most of them 26(68.4%) were introduced by relatives. Children from low socioeconomic class and orphans were more likely to have used CAM. Although a significant proportion, 37 (97.3%) were willing to disclose to their doctors, only 11(28.9) had disclosed. All disclosed because their doctors specifically asked. Most 18(42.8%) who had not disclosed thought it was not necessary for the doctors to know.
Conclusion: CAM use is common among HIV-infected children, especially oral herbal preparations. This may potentially cause drug interactions and poor adherence to ART and outcomes. Physicians need to explore this when attending to these children.

OB105

Appropriateness of Assumed Versus Absolute White Blood Cell Counts for Estimation of Malaria Parasite Density in Children Population in Ibadan Southwest Nigeria

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Introduction and Objectives: Estimation of malaria parasite density is important in diagnosis and assessment of individuals on antimalarial drugs. The use of either patient's actual white blood cell (WBC) counts or an assumed value of 8000/mm^3 to calculate malaria parasite density is still controversially discussed in literature. This study was carried out to investigate the agreement between the two methods of calculating malaria parasite density in children.
Materials and method: Data on parasite and WBC counts were extracted from 796 case record forms of children aged 3 to 120 months who participated in four antimalarial clinical trials conducted between 1998 and 2014. Criteria for enrolment into the clinical trials included symptoms compatible with acute uncomplicated malaria, microscopically confirmed malaria parasitaemia of at least 1000/µL and absence of danger signs of severe malaria. All the studies received relevant ethical approval.
Results: Male participants constituted 54.9%. Overall mean age was 47±31 months and mean WBC was 7807±4888/mm^3. Geometric mean parasite density using assumed and actual WBC were 15,870 parasite/µL and 14,139 parasite/µL ($\rho<0.001$) respectively. Bland Altman plots showed that mean differences between parasite densities calculated from assumed and actual WBC densities were close to zero suggesting no remarkable systematic bias.
Conclusion: Using an assumed white blood cell counts for calculating parasite density appears appropriate in children aged 3 to 12months for in Southwest Nigeria.

OB106

HIV Encephalopathy (HIVE) in children at the University of Port Harcourt Teaching Hospital, Port Harcourt, Nigeria

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Introduction: HIV encephalopathy (HIVE) is associated with cognitive impairment in children. Early diagnosis and initiation of HAART may reduce its associated morbidity.
Objective: To determine the prevalence of HIVE and other comorbidities in children with HIVE at the University of Port Harcourt Teaching Hospital (UPTH).
Materials and Method: The case notes of all HIV positive children presenting to the Paediatric Department of the UPTH from January to June 2017 were studied. Children who met the diagnostic criteria for HIVE were selected. The socio-demographic characteristics, mode of HIV transmission, CD4 count and associated comorbidities of the patients were retrieved. Obtained data was analyzed using Epi Info version 7.2. Comparisms of subgroups was carried out using the chi square test while statistical significance at 95% confidence interval was p value < 0.05.
Results: A total of thirty-five out of the 196 HIV positive children had HIVE, giving a prevalence rate of 17.9%. The mean age for the males was 6.4 ± 3.2 years and 5.0 ± 2.8 years for the females. There was no statistically significant difference observed between the sexes ($t = 1.35$, $p = 0.187$). The mean age at diagnosis of HIVE was 3.4 ± 3.2 years. The route of transmission for all the subjects was mother-to-child-transmission (MTCT). Tuberculosis was the most prevalent comorbidity occurring among the patients.
Conclusion: The prevalence of HIVE in children at the UPTH is high and Tuberculosis is the commonest comorbidity. Early infant diagnosis, use of modern diagnostic tool and early initiation of HAART are advocated to reduce its associated morbidity.

OB107

Comparative Effect of Four Antimalarial Treatments on Haematocrit in Children in Southwest of Nigeria

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Introduction and Objectives: Anaemia in malaria has both central (dyserythropoiesis) and peripheral causes. The aim of this study was carried out to compare change in haematocrit following four antimalarial treatments among children of microscopically confirmed Plasmodium falciparum infection.
Materials and method: Relevant data were extracted from 313 case record forms of children aged 3-119 months enrolled in antimalarial clinical trials in Southwest Nigeria between 1998 and 2014. Symptoms compatible with acute uncomplicated malaria, parasite density of at least 1000/µL and absence of chronic illness or danger signs of severe malaria were enrolment criteria. Change in haematocrit level from base line through the treatment period and 28 days post treatment were compared among children treated with Artemether-Lumefantrine (82), Chloroquine (34), Artovaquone-Proguanil (41) and Artesunate-Amodiaquine (156).
Results: There were 169 males and 144 females and overall median age of the patients was 25 months. Mean difference (95% CI) in haematocrit among children were 4.7% (95% CI = 3.6, 5.8), 2.4% (95% CI = 0.5, 4.4), 4.4% (95% CI = 2.7, 6.0), and 3.8% (95% CI = 3.0, 4.7) for Artemether-Lumefantrine, Chloroquine, Artovaquone-Proguanil and Artesunate-Amodiaquine, respectively. Using the general lineal model, repeated measure analysis showed that there was significant difference in the mean haematocrit level over the 28 day follow up among the four treatment groups ($p = 0.020$) even after adjusting for sex and age and there were no significant interactions between covariates and haematocrit.
Conclusion: All children experienced increase in haematocrit after treatment and the changes differ among antimalarials.

OC101

Thrombospondin-1 and Vitamin D in children with sickle cell anaemia

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Introduction and Objective: Thrombospondin-1 (TSP-1) and 25-hydroxyvitamin D (25-OHD) play significant roles in the pathogenesis of sickle cell anaemia (SCA). TSP-1 enhance cellular adhesion and inflammation, hence contributing to vaso-occlusive crisis (VOC); conversely, 25-OHD retard inflammation and may lower rate of pain episodes. We determined serum levels of TSP-1 and 25-OHD in Nigerian children with SCA and matched haemoglobin AA controls; and assessed the relationship between the two biomarkers.
Methods: Ninety children (32 SCA in steady state, 30 SCA in VOC and 28 HbAA controls) were studied. Serum TSP-1 and 25-OHD levels were measured with ELISA and HPLC respectively.
Results: The mean TSP-1 of children with VOC (204.4±102.9ng/mL) was significantly higher than those in steady state (148.4 ±82.7ng/mL, $p = 0.022$) and HbAA controls (99.9 ±41.3ng/mL, $p<0.001$). Similarly, the mean TSP-1 of those in steady state was significantly higher than controls ($p = 0.007$). However, mean serum 25-OHD of the children with VOC was lower than those in steady state (28.9±8.2ng/mL versus 37.1 ±12.3ng/mL, $p = 0.004$). There was a significant inverse correlation between TSP-1 and 25-OHD among the VOC subgroup only ($r = -0.57$, $p = 0.001$). The mean TSP-1 of the 28 children with SCA who had suboptimal 25-OHD (213.5 ±118.6ng/mL) was higher than 144.2 ±58.7ng/mL of the 34 with SCA and normal serum vitamin D, $p = 0.008$.
Conclusion: Children with SCA, especially those with VOC, had high serum TSP-1 and low 25-OHD. Also, an inverse relationship exists between 25-OHD and TSP-1 in children with VOC. These findings provide basis for further studies into the regulation of TSP-1 by vitamin D.

OC102

Remission of Acute Promyelocytic Leukaemia in a Child Following the Use of Retinoic Acid Alone After Failure of Anthracycline Based Chemotherapy in a Resource Constrained Country

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Introduction and Objective: All trans-retinoic acid (ATRA) is able to induce complete remission (CR) in patients with acute promyelocytic leukemia (APL). However, it cannot eliminate the leukaemic clone and to be effective it must be used in combination with anthracycline-based chemotherapy. The objective of this report is to describe the case of a boy with APL who failed to achieve remission using chemotherapy but achieved remission using ATRA alone. The challenges of management in a developing country were also highlighted.
Methods: This is a case report based on information obtained from the patient's case record from diagnosis till present status.

Results: An 11-year-old boy presented with recurrent fever and pallor of 4 weeks' duration. Main findings on physical examination were pallor and hepatomegaly. Full blood count and peripheral blood film were in keeping with acute Leukaemia and cytologic examination of his bone marrow was in keeping with APL. His parents could not afford ATRA required to be used in combination with chemotherapy. He was placed on Doxorubicin and cytosine arabinoside. Chemotherapy was stopped after four courses without achievement of remission. His parents eventually accessed ATRA which was used as monotherapy and achieved remission. He subsequently developed cardiomyopathy which was managed. He was subsequently maintained with ATRA, Mercaptopurine and Methotrexate and has remained in remission 3 years after.
Conclusion: All effort should be made to make ATRA available to complement chemotherapy in order to increase the chances of cure in patients with APL.

OC103

Influence of Deletional Alpha Thalassemia on Clinical and Laboratory Parameters of Young Nigerians with Sickle Cell Anaemia

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Introduction and Objective: There is scarcity of information on the influence of genetic markers on the clinical and laboratory parameters among Nigerian sickle cell anemia (SCA) patients. This study determined the prevalence of deletional alpha thalassemia and its influence on the laboratory parameters and clinical manifestations in a group of young Nigerian SCA patients.
Patients and Methods: One hundred patients with SCA and 63 controls were studied. The diagnosis of SCA was confirmed by DNA studies. Alpha thalassemia (3.7 κb and 4.2 κb α-globin gene deletions), genotyping was done by multiplex gap-PCR method. Laboratory parameters including: complete blood count, hemoglobin quantitation, serum lactate dehydrogenase (LDH) and bilirubin were determined with standard techniques.
Results: Alpha thalassemia was found in 41 (41.0%) patients compared to 24 (38.1%) controls (p=0.744) and all were due to the 3.7 κb α-globin gene deletions. Alpha thalassemia was associated with more frequent bone pain crisis, higher hemoglobin concentration, red blood cell count, and HbA_2 level among the patients. On the contrary, patients with alpha thalassemia had lower mean corpuscular volume, mean corpuscular hemoglobin, and white blood cell count (WBC) ($p<0.05$). There were 6 (10.3%) patients with leg ulcers and none of them had alpha thalassemia, (p=0.0384).
Conclusion: This study confirms that coexistence of alpha thalassemia with SCA significantly influenced the clinical and laboratory indices of the patients. The coexistence of this genetic modifier was associated with increased bone pain crisis and protects against sickle leg ulcers among the patients.

OC104

Total Antioxidant Capacity, Total Oxidative Status and Oxidative Stress Index Are Related to Sickle Cell Disease Severity in Children

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Introduction and Objectives: Total anti-oxidant capacity (TAC), total oxidant status (TOS) and oxidative stress index (OSI) measure the cumulative level of oxidative stress. In this study, we evaluated serum levels of overall oxidative stress markers in children with sickle cell anaemia (SCA) and matched healthy controls, and determined the relationship with the disease severity.
Materials and method: One hundred and fifty-six children, comprising of 78 with SCA aged 1 - 15 years and 78 age- and sex-matched haemoglobin AA controls were studied. Serum TOS, OSI and TAC were determined by ELISA kits. Severity of the SCA was determined using clinical and laboratory parameters as previously described.
Results: Children with SCA had lower mean serum TAC (0.83±0.31UAE) than controls (1.19±0.24U/ml), $p<0.001$. However, the mean serum TOS and OSI of children with SCA was higher than in the control (13.33±4.64 vs. 9.70±2.72U/ml and 20.95±16.75 vs. 8.68±3.76 respectively), $p<0.001$. SCA subjects with mild disease (0.91±0.27UAE) had higher mean serum TAC than those with moderate disease (0.54±0.27UAE) ($p<0.001$). On the other hand, the mean TOS and OSI were lower in those with mild than moderate disease (12.64±4.32 vs. 15.63±5.07U/ml, p=0.016, and 16.26±10.25 vs. 36.61±23.89 $p<0.001$ respectively). Sickle cell disease severity score had negative correlation with TAC ($r= -0.60$, $p<0.001$) but positive correlation with TOS ($r = 0.3$, p=0.008) and OSI ($r= 0.6$, $p<0.001$).
Conclusion: Children with SCA had lower TAC but higher TOS and OSI than matched controls. Oxidative

stress markers had significant relationship with SCD severity.

OC105

Effects of Hydroxyurea on Renal and Hepatic Functions Among Children with Sickle Cell Disease in UATH Gwagwalada, Abuja

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Introduction: Hydroxyurea remains the only widely approved medication for the prevention of complications in sickle cell disease (SCD). It increases the production of HbF, which inhibits the polymerization of HbS and the sickling process in SCD. Patients with SCD are at increased risk for organ damage due to recurrent sickling. Hydroxyurea might therefore prevent chronic organ damage by reducing sickling process. However, whether hydroxyurea causes idiosyncratic adverse effects on organ functions, renal and hepatic as reported by a few studies is still being understudied.
Aims: To determine the effects of hydroxyurea therapy on renal and hepatic functions in a cohort of Nigerian children with SCD aged 1-18 years.
Methods: Children with SCD who were on hydroxyurea for at least 12 months were studied. The dose of Hydroxyurea ranged between 15mg/kg to 25mg/kg and renal and hepatic functions were prospectively evaluated using serum Electrolyte, Urea, Creatitine, the amino transaminases and total bilirubin levels respectively.
Result: 26 Children; 15(57.7%) males and 11(42.3%) females with M:F = 1.4:1 and mean age 11.1 years were studied. Their sodium, potassium, urea and creatinine levels were measured before commencing hydroxyurea (baseline), then 3 months and 12 months after hydroxyurea use. There was no significant difference in the baseline, 3 months and 12 months post hydroxyurea values for electrolytes, urea and creatinine levels. There was also no significant difference in the baseline, 3 months and 12 months post hydroxyurea levels of the transaminases. However, there was a steady rise in the total bilirubin levels although also not significant.
Conclusion: Use of moderate dose of hydroxyurea in children for 12 months show no significant impairments on renal and hepatic functions. Studies with larger sample size and longer duration of study are however advocated.

OC106

Iron deficiency, still a rarity in children with sickle cell anaemia in Ile-Ife, Nigeria.

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Introduction/ Objective: Iron deficiency continues to be a prevalent among children in Nigeria and sub-Saharan Africa countries. In this study, children with SCA were evaluated for iron deficiency.
Material and Methods: The study was done at the Paediatric Haematology Clinic of Obafemi Awolowo University Teaching Hospitals' Complex, Ile-Ife. Forty-eight HbSS subjects in steady state and 48 age and sex matched HbAA controls were evaluated. Serum ferritin levels, FBC, free erythrocyte protoporphyrin (FEP) were assayed in both groups. Serum ferritin less than 25 ng/dL, FEP greater than cut off for age, MCV and MCH less than cut off for age were regarded as indicating iron deficiency.
Results: The mean of serum ferritin levels was 381.2 (1.0), and it was significantly higher than the controls, with mean of 46.1 (0.9), ($p < 0.001$).FEP was lower in subjects but none was iron deficient compared with controls. The mean haemoglobin concentration subjects were S significantly lower than the controls ($p < 0.001$). Subjects had lower MCV compared with controls. However, this was not statistically significant. Iron deficiency was not detected in subjects in comparison to a prevalence of 43.75% in the controls. Iron deficiency anaemia (IDA) was found in 16.7% of the controls.
Conclusion: A high prevalence of iron deficiency was noted in the control group. Patients with SCA were not iron deficient, despite their anaemia. Iron supplementation remains
unnecessary as part of the routine management of children with SCA in our practice.

OC107

Comprehensive Sickle Cell Care: The Role of a Nurse Coordinator in UATH, Gwagwalada, Abuja

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Background: SCD is a global public health problem with Nigeria bearing the highest burden of the disease.

The role of health education in the comprehensive care of children with SCD and their families is central to care. There is inadequate emphasis on the role of preventive care and parental/patient education in the routine management offered in most centres in Nigeria.
Aim: To discuss the impact of a preventive and anticipatory approach to care, offered in the contest of a comprehensive sickle cell care, in UATH through structured health education to improve knowledge of SCD, promote access to patient-centred care and enhance well-being of patients and their families.
Method: The nurse delivers structured health education on routine health maintenance twice weekly to patients and families using the acronym "FARMIS". Counselling is also done before the commencement of hydroxyurea therapy and during monitoring. She identifies and deals with challenges with medication and clinic compliance or barriers to accessing effective care. Operates the unit 24/7 help line and organises the parent support group.
Result: A 250% increase in patient enrolment with an established trustful relationship between health care providers and children and their family members. There is improved health-seeking behaviour, self-care, compliance with clinic visits and drug use.
Conclusion: Structured and well-implemented health education with parental satisfaction is indispensable tools in the comprehensive care of children with SCD in Nigeria

OD101

Paediatric Emergency Departments in Nigeria: How Prepared Are They To Provide Emergency Care?

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Introduction and objective: Paediatric emergency care is not yet fully developed in low and middle income countries. However, the magnitude of the challenges has not been well characterised in Nigeria. The study assessed paediatric emergency care preparedness
Methods: This is a national cross sectional study of the emergency care preparedness among Paediatric Emergency Departments (PED) in Nigeria. Facilities were recruited from federating units using quota sampling. A self- administered questionnaire and check list were used to obtain information on the availability of: skilled personnel, medication, equipment and emergency trolley, Preparedness performances were assessed using a point score scale. Chi-square and correlation tests were used to determine associations between preparedness score and other characteristics at the PEDs using Stata statistical software.
Results: Of the 34 studied Tertiary PEDs, 52.9% were located in northern Nigeria. The mean preparedness performance score was 43.88%.About half (52.94 %; n=18/34) of the centres had dedicated Physician head but few (5.9%/2/34) had APLS certification. The medication, equipment (r-0.98, p=0.001) and emergency trolley (r-0.94, p=0.001) strongly correlated with preparedness score. Southern PEDs had higher score in equipment availability (p=0.029) and performance preparedness score (P-value = 0.005) than Northern PEDs and the proportion of medical officers (p=0.010) and availability of medication (P<0.05) were statistically different by region.
Conclusions: This study reports a global deficiency but remediable state of emergency care preparedness among PEDs in tertiary centres in Nigeria. This study highlights the need for: training and advanced certification of ED staff and enhanced medication and equipment procurement nationwide, to improve outcome.

OD102

Delayed Presentation among Critically Ill Children Visiting Children Emergency Room of University College Hospital Ibadan

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Introduction: Childhood morality remains a major public health problem in Nigeria and most developing countries, majority of which are due to preventable problems like pneumonia, severe malaria, prematurity and acute diarrhoeal disease. Many of these deaths are related to delayed presentation in hospital. Early recognition and prompt effective intervention of critically ill children will help in reducing childhood mortalities. This study aimed to assess the reasons behind delayed presentation among children presenting critically ill in a tertiary hospital in Nigeria.
Materials and Method: Prospective observational study of 1180 children who visited the Children's emergency room of the UCH Ibadan between June 2017 and August 2018. The patients were triaged using the World Health Organisation (WHO) Emergency Triage Assessment and Treatment guideline.
Results: The predominant age group was 12 – 59 months 41.7% (492). While majority of the children were males 723 (61.3%), and only 52 children (4.4%) were on any health insurance coverage. The mean duration of symptoms before presentation was 7 ± 12 days. After triaging 187 (15.8%) and 967 (81.9%) children had emergency and priority signs respectively. Majority (54.5%) of patients had been on self-medication prior to presentation and 26.2% had been to more than one health facilities. About 58.2% of the parents of children

with emergency signs thought the symptoms were not serious hence the delay in presentation while 30.2% presented late because of fear of cost of health care.
Conclusion: Majority of care givers underestimated the severity of symptoms as the reason for delayed presentation.

OD103

Oxygen prescription for children at the emergency facility in Unilorin Teaching Hospital, Nigeria

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Introduction and Objectives: Supplemental oxygen therapy is an intervention that can reduce hypoxaemia-related morbidity and mortality. It is a drug with its own indication, route of administration, dosage and side effects and should be prescribed as such. The study identified the prescribing pattern of supplemental oxygen for children presenting to the emergency facility at Unilorin Teaching Hospital.
Materials and Method: This is a quasi-interventional study involving children admitted through the emergency paediatric unit. A two-hour presentation was made on oxygen therapy and the prescriptions made one week pre- and post-presentation were compared. Data was collected on the oxygen saturation levels (SpO_2) before and after oxygen commencement, delivery device, flow rate, target SpO_2 and monitoring.
Results: A total of 35 oxygen prescriptions were reviewed, 17 (48.6%) were retrieved before the presentation while 18 (51.4%) were reviewed after the presentation. Post-presentation, 18 (100%) prescriptions indicated the dose of oxygen which was significantly higher than the 13 (76.5%) that indicated oxygen dosage before the presentation, p=0.045. Prescriptions stating the delivery device pre-presentation were six (35.3%) and post -presentation were 18(100.0%), p=0.001. The number of prescriptions bearing the target oxygen saturation significantly increased from three (17.6%) pre-education to 18 (100.0%) posteducation, p=0.001. There were no significant differences between prescriptions indicating SpO2 pre- and post- oxygen commencement, and monitoring of SpO_2 levels before and after the presentation.
Conclusion: Training of health personnel on oxygen therapy will ensure its appropriate prescription as a drug.

OD104

Under-Five Mortality at The Children's Emergency Room of Federal Medical Center, Umuahia

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Background: Under-five mortality rate is an important index of child mortality and an indicator of a country's level of socioeconomic development and quality of life. An audit of the common causes of childhood mortality is essential in ensuring optimum health of under-fives.
Aim and Objectives: To determine the magnitude, causes and determinants of under-five deaths at FMC Umuahia.
Methods: A retrospective review of all post-neonatal under-five deaths in the Children's Emergency Room from January 2012 to December 2016 was done and information analyzed.
Results: Of a total of 6141 under-fives, 197 died giving a mortality rate of 3.2% (32 per 1000 live births). Mortality rate was higher during infancy ($p = 0.039$). There was no gender difference ($p = 0.262$). Leading causes of death were sepsis, severe malaria, diarrheal disease, meningitis, pneumonia and severe acute malnutrition. Deaths due to malaria occurred more beyond infancy ($p = 0.032$) while those due to pneumonia were more among infants ($p=0.012$). Diarrheal disease caused more deaths during the dry weather season ($p = 0.009$). About 40% of the deaths occurred within 24 hours of admission.
Conclusions: The leading causes of under-fives deaths in our centre are preventable infectious diseases. Intensification of goal-targeted, disease specific preventive measures is recommended.

OD105

Childhood Dead before Arrival at The Wesley Guild Hospital, Ilesa Nigeria: A Call for Concern and Improvement in Health Care Delivery

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Background: Dead-before-arrival (DBA) is a term used to describe patients who are presented to the hospital with no sign of life at presentation. These cases of mortality are often overlooked and not included in mortality records of most health facilities thereby underreporting mortality cases. This study sets out to assess the prevalence, pattern and possible causes of DBA at the Wesley Guild Hospital (WGH), Ilesa.
Methods: Verbal autopsy was used to prospectively study all cases of childhood DBA at the CEW of the hospital over a four-month period (September to December, 2017). Socio-demographic history, symptoms before demise and treatment received, as well as suspected cause(s) of death were documented. The mortality was also compared with the in-hospital care mortality during the period.
Results: Twenty-five (7.3%) of the 343 admission to the CEW during the period were cases of DBA. These were significantly more than the total in-hospital mortality during the period [25(7.3%) vs. 17 (4.9%)] and 10

(40.0%) of the cases of DBA were infants with male: female of 1.8. Severe anaemia (56.0%) from possible complicated malaria and severe head injury from road traffic crash were the predominantly recognised causes of DBA. About two-thirds only used home remedies before demise.
Conclusion: In-hospital mortality may be a tip of the iceberg as cases of DBA and even those who did not present at all may take the lion share of childhood mortality. Making basic health care available and affordable to the populace may help reduce the burden of DBA.

OD106
Prevalence of Skin Diseases among Primary School Children in Port Harcourt

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Introduction and objective: Skin diseases are common among children in resource poor settings where there is low level of hygiene, overcrowding and warm humid climates. However, there are no known community based studies on its prevalence in Rivers State. This study aimed to evaluate the prevalence and types of skin diseases among primary school children in Port Harcourt, Rivers State.
Materials and methods: This cross sectional study was conducted in five primary schools in Port Harcourt over a three - month period from September to November 2017. Multistage sampling technique was used to recruit 524 pupils for the study. Interviewer administered questionnaire was used to obtain information on sociodemographics and a team of investigators examined each pupil for evidence of skin diseases.
Results: There were 263 (50.2%) males and 261 (49.8%) females, with male to female ratio of 1.01: 1. Their ages ranged between 5 to 16 years, with a mean age of 9.5±2.22. The prevalence of skin lesions among the pupils was 35.3% (185/524). The commonest skin disease found was Tinea capitis 20.5% (38/185). Skin infections and inflammatory dermatitis accounted for 39.5% and 14.1% respectively of the skin diseases found. The commonest inflammatory dermatitis found was Seborrhoeic dermatitis 53.8% (14/26). Gender and age had no significant influence on the prevalence and pattern of skin diseases found.
Conclusion: There was a high prevalence of skin diseases among primary school children in Port Harcourt. Effective preventive measures should be implemented in primary schools in Port Harcourt.

OD107
Diffuse Cutaneous Systemic Sclerosis- A Rare Skin Disorder in A Nigerian Child

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Introduction: Diffuse cutaneous systemic sclerosis (dcSSc) is rarely been reported among African children especially in Nigeria. The clinical features and outcome in children are different from the adult. It has a high morbidity and mortality. This report aims to revisit this rare paediatric skin disorder.
Methods and Results: Case report and MEDLINE (Pubmed) search of the English literature using the words 'systemic sclerosis', and diffuse scleroderma'. A 16-year-old female student presented with a three-year history of generalized skin thickening and two-year history of discoloration of the skin, and difficulty in opening the mouth. Examination revealed salt and pepper appearance of the skin, photosensitive hypertrophic plaques on both the right arm and ear, fish mouth deformity, skin thickening and pitted scars on the fingers. Skin was thick and had hypopigmented patches on the chest and back. Raynaud's phenomenon was positive. A clinical diagnosis of diffuse systemic sclerosis was made. Erythrocyte sedimentation rate, and anti-topoisomerase I (antiScl-70) were raised {30mm/hr westergren and >320U/Ml (<7 to 10U/mL) respectively}. Antinuclear antibody (ANA) was positive1:160, homogeneous pattern. Complete count, chest computed tomography, upper gastrointestinal endoscopy, electrocardiography, abdominopelvic ultrasound, liver function tests, serum electrolyte, urea and creatinine findings were essentially normal. She was commenced on oral hydroxychloroquine and penicillamine. A regular 6 monthly follow up revealed clinical improvement.
Conclusion: High index of suspicion and early comprehensive investigations are needed in management of this skin disorder.

OA201
The birth prevalence and spectrum of congenital heart disease in Jos, Nigeria

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Introduction and objectives: congenital heart defects (chd) are the most common types of birth defects. They

are also an important cause of morbidity and mortality. studying the birth prevalence of chd in important in order to provide current and accurate data to assess the epidemiologic significance of the defects. We sought to determine the birth prevalence and spectrum of chd among babies in Jos, Nigeria.
Materials and methodology : this is a cross- sectional study where babies aged less than one week of age who were born or admitted into two main hospitals in jos and an immunization center were recruited into the study. An echocardiogram was performed on all babies recruited after obtaining relevant demographic and clinical information.
Results : there were 2,350 babies recruited into the study; male to female ratio of 1.03:1. Excluding patent ductus arteriosus (pda) and patent foramen ovale (pfo), chd was present in 39 of them giving a birth prevalence of 16.6 per 1,000 live births. The commonest chd detected was isolated ventricular septal defect (vsd) in 15 babies. Ten babies had combined atrial septal defect (asd) and vsd. Isolated pulmonary valve stenosis was present in 5 babies. Other types of chd seen include atrioventricular septal defects (avsd) in two, isolated asd in two, and double outlet right ventricle (dorv), single ventricle, coarctation of the aorta (coa), truncus arteriosus and hypoplastic left heart syndrome (hlhs) in one baby each.
Conclusion: the birth prevalence of chd is higher than estimated figures.

OA202

The association of congenital heart disease with other obvious congenital malformations in Jos, Nigeria

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Introduction and objective: congenital heart disease (chd) has been found to be more common in children with other congenital malformations. Studying this association in our environment is vital for proper genetic counseling and early intervention. The aim of the study is to determine the birth prevalence of coexisting chd in babies with other obvious congenital malformations in Jos, Nigeria.
Materials and methods: we performed echocardiograms on babies with obvious congenital malformations aged less than one week delivered at or admitted into two major hospitals, or seen at the main immunization clinic in jos for the presence of congenital heart disease (chd).
Results: out of 2,024 babies clinically examined, 29 had congenital malformations; these were: – omphalocoeles (5), bilateral cleft lip and palate (4), meningocoele (4), anorectal malformations (3), duodenal atresia (2), encephalocoele (1) and prune belly syndrome (1). Eleven babies had dysmorphic features and the likely syndromes included down syndrome (7), and turner, digeorge and holt-oram syndromes in one infant each.
Associated chd was present in 12 (41.4%) babies. Three (75%) of the four babies with cleft lip and palate, one of the four with omphalocoele and four the 11 with dysmorphic facies had chd.
Conclusion: evaluation for chd is valuable in babies with obvious congenital malformations particularly those with suspected chromosomal abnormalities, omphalocoeles and cleft lip/ palate.

OA203

Prevalence and risk factors for hypertension among school children in ilorin, north-central Nigeria

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Introduction: despite the numbers of studies on childhood hypertension in nigeria, only a few have explored the risk factors, which were limited to family history of hypertension, the role of obesity/over-weight. Thus, this study determined the prevalence of hypertension and risk factors (socio-demographic, family history of hypertension, history of snoring, bmi, waist circumference and hip circumference) amongst the primary school children in ilorin.
Methods: A total of 1745 school children aged 6-12 years were recruited using a systematic random sampling method. The pupils had bp measurements using the fourth report guideline. Those with bp greater than 90^{th} percentile had repeat bp measurements on two more occasions (two and four weeks after initial measurement). Relevant history were collected using proforma while the pupils had anthropometric measurement following standard methods. Data were analysed using spss version 20.
Results: prevalence of systolic hypertension at 1^{st} visit was 6.2% (109/1745), 2^{nd} and 3^{rd} visits were 3.4% (60/1745) and 2.3% (40/1745) respectively. Prevalence of systolic hypertension (3^{rd} visit) was higher amongst the females than males (0.9% vs 1.7%, $\chi 2=8.377$, $p=0.004$. Prevalence of diastolic hypertension (3^{rd} visit) was higher in females than males, (0.7% vs 0.2%, $\chi 2=5.437$ $p=0.034$). The analysis of risk factors for hypertension showed no significant relationship with respect to socio-economic class, family history of hypertension, birth order, snoring, and anthropometrics.
Conclusion: prevalence of systolic and diastolic hypertension in the studied children were 2.3% and 0.9% socio-economic class, family history, snoring, body mass index, hip circumference, and waist-to-hip were not associated with high blood pressure

OA204

Community engagement for prevention of rheumatic fever and rheumatic heart disease in plateau state

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Background: rheumatic heart disease (rhd) continues to be an important public health problem among the poor and disadvantaged in nigeria. Prevention efforts hinged on community education show promise for the control and possible eradication of the diseases.
Objective: we sought to evaluate community knowledge, attitudes, practices, and barriers to treatment with respect to painful (streptococcal) pharyngitis, the harbinger of rheumatic fever (rf) and rhd, so as to develop culturally relevant educational materials for effective prevention initiatives.
Methods: we conducted two structured focus group discussions in the native language, one each for males (17) and females (19) not affected with rhd, drawn from a berom-speaking community on the perceived causes of painful sore throat, health seeking behavior and practices, and the health system barriers that influence the effective treatment of sore throat and thus development of rhd.
Results: most participants were female (53%) and ranged from 21–72 years with a mean age of 40 ±13.4 years. Almost all the participants admitted to ever having suffered from painful sore throat. Majority believed it is caused either by wind, hamarttan, dust, improper sleeping positioning leading to collection of saliva in the throat and/or drinking cold water. Only one participant associated it with an infectious origin. None related it to the development of heart disease. Many believed sore throat could lead to cancer. Majority used local remedies such as potash and palm oil while some brushed their throat with wood ash and salt or took strepsils and/or vitamin c purchased over the counter. key barriers to appropriate treatment of painful sore throat were lack of funds for hospital bills/drugs, local beliefs and use of local remedies, and unsolicited advice from neighbours and family members.
Conclusions: there is poor knowledge about the causes and complications of painful sore throat in our community. This contributes to poor access to its appropriate treatment and increases the risk of rf/rhd. There is urgent need to salvage this situation via appropriate community educational initiatives.

OA205

Langerhan histiocytosis: a case report

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Introduction: langerhans cell histiocytosis (lch) is a rare clonal disease characterized by the proliferation of cd1a-positive immature dendritic cells.its clinical presentation is highly variable and may range from isolated, self-healing skin and bone lesions to life-threatening multi-system disease. There is therefore a high index of suspicion needed for diagnosis.
Objective: to highlight the clinical presentation of lch in a 13-year-old girl.
Case and methods: c a, is a 13-year-old female who presented with abdominal pain and generalized body weakness of 3 months, weight loss and abdominal swelling of 2 months. Pain was generalized, intermittent and there was no change in bowel habit. Weakness was severe enough to prevent patient from carrying out normal daily activities. on examination she was chronically ill looking, moderately pale, not dehydrated, afebrile with significant generalized lymphadenopathy.there was tenderness at the right hypochondrium, epigastric, umbilical region and multiple abdominal masses. Liver and spleen were not palpable. She had ptosis of left eye with left facial nerve palsy, paraplegia, left pleural effusion. Initial diagnosis of non-hodgkin's lymphoma was made. lymph node histology was in keeping with langerhan histiocytosis. patient has been commenced on vinblastine, prednisolone and intrathecal methotrexate with good clinical improvement.
Conclusion: this report emphasizes the need for physicians to have a high index of suspicion as lch can present in both sexes and in different forms.

OA206

Reducing incidence of cervical cancer: knowledge and attitudes of caregivers in Nigerian city towards human papilloma virus vaccination

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Introduction: despite the high prevalence of human papilloma virus (hpv) infections and cervical cancer in Nigeria, utilization of the hpv vaccine as an effective preventive measure remains low. This study was to find out the knowledge and attitudes of and factors that determine acceptance of hpv vaccine for their pre-adolescent girls by caregivers.
Materials and methods: this was a cross-sectional descriptive study of 508 caregivers of female children in Enugu Nigeria. A semi-structured questionnaire was used to collect information on knowledge of hpv, cervical cancer, hpv vaccine and its acceptance. The data was analysed using descriptive statistics.
Results: five hundred and eight (508) caregivers of female children were interviewed. Less than half, 221, (43.5%) knew about hpv, among these, 163 knew how hpv is transmitted. Only 12 (2.4%) of the caregivers know that an hpv infection is a risk factor for cervical cancer. 132 (59.7%) were aware of an hpv vaccine. Only

26 (19.7%) of those aware of a vaccine agreed it can effectively prevent cervical cancer. Lack of awareness about the vaccine and accessibility were reasons given by parents on why their female children did not receive the vaccine.
Conclusion: despite high levels of education, awareness of hpv, hpv vaccine and the risks for cervical cancer remains low among caregivers in Enugu, south-east, Nigeria. Awareness and accessibility were the major determinants of hpv vaccine uptake among the caregivers. There is a need for massive and sustained awareness creation to increase hpv vaccination uptake in Nigeria.

OA207

Comprehensive care for children with SCD in Nigeria: A national challenge: the university of Abuja teaching hospital experience

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Background: the burden of sickle cell disease in our society remains a significant public health concern despite improvement in care and survival reported in the western world. Within the past decade, the fgn has taken steps to tackle the scourge of scd that afflicts numerous Nigerian children and families yet morbidity and mortality remain high because of absence of accessible quality health care services and public health interventions. In the absence of a universal cure for scd, treatment is primarily aimed at reducing impact of the disease on the patients and their families, thereby improving quality of life and survival through a comprehensive care that starts with early detection and follow-through anticipatory care and systematic follow-up. Components of a comprehensive care are simple and uncomplicated technology that should be within reach of resource-poor countries, yet most hospitals in Nigeria lack access to this care.
Aim: to review strides taken in uath to establish a comprehensive health care for scd patients and their families amidst challenges of a weak health delivery system.
Methods: the unit developed structured health education programs, provided effective and accessible preventive and clinical care, transition clinic, hydroxy urea therapy and a family support group.
Result: increased patient enrolment, improved patient wellbeing, patient and family satisfaction.
Conclusion: through dedication and commitment to change, the unit is transforming lives of patients and families. Our patient-centered model can be generalized to hospitals in Nigeria that care for scd children in the absence of paediatric haematologists.

Immunology/Infectious Diseases/ Social Paediatrics

OB201

The Many Faces of Juvenile Systemic Lupus Erythematosus: Report of Four Cases Seen Within Four Months Lagos State University Teaching Hospital, Ikeja, Lagos

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Introduction & Objectives: Juvenile systemic lupus erythematosus (JSLE)-a chronic multisystem autoimmune disorder of childhood- is potentially more fatal than adult systemic lupus erythematosus (SLE). There are scanty reports of JSLE from Black Africans partly due to missed diagnosis, because it clinically mimics common paediatric diseases like malaria, sepsis and sickle cell anaemia. To highlight its protean presentation, we reviewed cases of JSLE diagnosed at the Lagos State University Teaching Hospital, Ikeja, Lagos, within a four-month period.
Materials & Methods: Retrospective review of records of children diagnosed with JSLE at the Adult Rheumatology Clinic and Paediatric Wards of LASUTH from May-August, 2018.
Results: Four (n=4) girls, aged 8-14 years, fulfilled the American College of Rheumatology (ACR)'s diagnostic criteria for JSLE. The duration of symptoms before diagnosis ranged from 5-12 months. The presentations included recurrent severe anaemia (n=3), arthritis (n=2), arthralgia (n=2), malar rash (n=2), seizures (n=1) oral ulcers (n=1), pericarditis (n=1), photosensitivity (n=1) and renal injury (n=1). Laboratory findings included elevated ESR [ranged from 76 to 150; (n=4)], positive ANA (n=4), positive anti-dsDNA (n=4), hypocomplimentinaemia C3 & C4 (n=2), positive anti-Smith antibody (n=2) and massive proteinuria (n=2). All the patients responded dramatically to steroids and disease-modifying anti-rheumatic drugs and were discharged stable, however, one patient died from an acute flare four weeks post-discharge.
Conclusion: Diagnosis of JSLE was delayed presumably due to similarity of its presentation to common childhood diseases. JSLE may not be as rare as commonly thought, thus its prompt diagnosis and treatment requires high clinical suspicion.

OB202

Impact of Antiretroviral Therapy On Immunity and Malaria Among Febrile HIV Infected Children Seen in A Tertiary Hospital, Sokoto, Nigeria

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Introduction: Coexistence of Malaria with HIV in Sub-Saharan African and its attendant high morbidity and mortality could be a threat that can reverse the gain of ART in HIV-infected children.
Objectives: Determine impact of ART on immunity and malaria among febrile HIV-infected children seen at UDUTH, Sokoto.
Method: Cross-sectional study among HIV-infected children on ART that presented with fever and newly diagnosed ART-naïve HIV-infected children between May-October, 2016. The participants had the following investigations; blood film for MP, PCV, $CD4^+$T-cell count. Data was analyzed using SPSS 23.0. A p-value <of 0.05 was considered significant.
Result: A total of 100 febrile HIV- infected children on ART, and 40 febrile newly diagnosed HIV- infected children not on ART were recruited. The mean age of the children on ART was 4.20+3.90years, comparable with 6.00+4.10years for those not on ART (p=0.315). The mean $CD4^+$T -cell count was 403cells/ul and 194cells/ul respectively (p=0.0001). Prevalence of malaria among the febrile HIV-infected children on ART was 60% (60/100) compared to 100% (40/40) among those not on ART (χ^{2*} =25.6, p=0.0001). Among the 60 HIV-infected children on ART who had malaria, 12 (20.0%) had severe malaria compared to 34(85.0%) among the 40 controls (χ^{2*} =25.6, p=0.0001). $CD4^+$T-lymphocyte level correlates negatively with malaria parasite density among the two groups, however, not statistically significant (r= -0.082, p=0.33).
Conclusion: ART boosted immunity and reduced malaria prevalence and severity. Effort should be intensified towards early diagnosis and prompt commencement of ART in HIV-infected children and inclusion of malaria control programs.

OB203

Rate of Viral suppression in Adolescents Attending ART clinic NHA Abuja

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Introduction: Human immunodeficiency virus infection is a major public health crisis in Nigeria. Antiretroviral therapy is required for all individuals with HIV infection. Adolescents living with HIV need to be willing to accept antiretroviral therapy in order to improve adherence and achieve sustained viral suppression.
Aim/ Objectives: To determine the rate of viral suppression among adolescents on antiretroviral therapy in NHA Abuja, and the factors associated with viral suppression (age, adherence, ART line).
Materials and methods: Data was collected from the adolescent patient clinic proforma/ registry drawn up from January 2018 to October 2018. Data was entered into Excel spreadsheet and analysed with SPSS version 23. Level of significance was set at ≤ 0.05.
Results: There were a total of 194 adolescents aged 10 to 18 years seen during the period of study with 56.2% being males and 43.8% females. Forty- one (21.1) % of our patients have WHO clinical stage 1 disease, 58 (29.9) % were stage 2,46 (23.7%)were in stage 3 , 30 (15.5%)were in stage 4 while 19 (9.8 %) were not staged. Good viral suppression of <1000 copies/ml were achieved in 86% of patients. Age significantly affected rates of viral suppression with the young adolescents having the best suppression (p value= 0.049). Adherence, gender and ART line did not significantly affect rates of viral suppression as p value was > 0.05 in these settings.
Conclusion: There is a significant relationship between age and viral suppression emphasizing the need for involvement of adolescents in their care plan.

OB204

Disclosure of Paediatric HIV status in Nigeria to family members and significant others: psychosocial outcomes and impact

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Introduction and Objectives: Disclosure of HIV status is fraught with potential psychosocial complications. There is paucity of studies on disclosure of HIV status of children to family members. The objectives of this study were to describe family members and significant others to whom HIV status is disclosed, their response to the disclosure and the psychosocial impact of disclosure to them.
Materials and method: This was a cross-sectional study of school age HIV infected children attending the Paediatric HIV clinic of the University College Hospital Ibadan. Primary caregivers of children aged 6 years -17 years were interviewed after informed consent and institutional ethical approval using a questionnaire that explored the objectives of the study.
Results: Two hundred children were studied, 198 had HIV positive mothers out of whom disclosure to the fathers had been done in 180 (90.9%). Disclosure of HIV status had been done to extended family members in 64% of cases, to the family spiritual leaders in 14% of cases and to the children's teachers in 1.5% of cases. Response to disclosure was supportive in all cases except in family members in whom only 84.4% were supportive. Some family members kept their children from

playing with the HIV infected children. Disclosure resulted in parental separation and abandonment of the children with the mothers in 23 (11.5%) of the study participants.
Conclusion: Disclosure of children's HIV status to family members may result in undesirable psychosocial outcomes. Affected parents need to be supported in the process.

OB205

Respiratory Diphtheria in 2 Children Presenting to A Tertiary Hospital in Nnewi, South – East Nigeria: A Case Series

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Background: Respiratory diphtheria is an acute and infectious disease that can progress to cardiac and neurological complications ultimately resulting in increased morbidity and mortality in affected individuals. Diagnosis was made in line with the WHO clinical case definition for Diphtheria. This case series reports 2 probable cases of complicated respiratory diphtheria presenting within 3 weeks of each other to the Paediatrics Department of NAUTH, Nnewi.
Case I: This was a 5-year-old female who presented on referral with a history of fever, throat pain, noisy breathing and facial fullness, in whom bull neck and membrane in the throat had been observed. She presented tachycardic, in respiratory distress, with elevated JVP and soft tender liver and still had a greyish membrane in the throat. She was managed as a case of Diphtheric Carditis and discharged after 24 days on admission in stable condition.
Case II: This was also a 5-year-old, male, who presented with a history of fever, difficulty in swallowing, change of voice (progressing from hoarseness to whispers), cough and staggering gait. Onset of the illness was associated with membrane in the throat, bull neck and stridor. Examination revealed cranial nerve deficits, aphonia, hypotonia and staggering gait. CSF analysis was within normal. He was managed as a case of Diphtheric Neuropathy and was discharged home in stable condition after 16 days on admission. *C. diphtheria* IGG done 2 weeks post discharge was 0.19 IU/ml.
Conclusion: Respiratory diphtheria still occurs in children in our environment especially in view of our low practice of booster vaccination. A high index of suspicion is needed to diagnose and properly nurse these children back to health.

OB206

Occupational Exposure to Blood and Body Fluids among Interns in a Tertiary Hospital in Port Harcourt, Nigeria.

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Introduction: Health care workers especially interns may be at increased health risk due to exposure to blood and body fluids.
Objective: To determine the prevalence of occupational exposure to blood and body fluids (EBBF) among interns at the University of Port Harcourt Teaching hospital (UPTH).
Materials and Method: This cross-sectional study was carried out among interns at the UPTH. Informed written consent was obtained. The obtained data from a self-administered questionnaire and Infection Control Team records were analysed using SPSS version 21.
Results: Eighty-four interns were studied giving a response rate of 93.3%: 40 (47.6%) were males while 44 (52.4%) were females giving a male: female ratio of 1:1.1. Thirty-two (38.1%) were aware of the availability of sharp bins, 55 (65.5%) recapped and discarded into waste bins while 4 (4.8%) discarded into sharp bins without re-capping. Prevalence of EBBF was 89.3%. Thirty-one (41.4%) had Blood and Body Fluid Splash (BBFS), 22 (29.3%) had Needle Stick Injury (NSI) while 22 (29.3%) had combined NSI and BBFS. Thirteen (29.5%) of the NSI occurred during rotation in Paediatrics. Seventeen (32.1%) and 16 (30.2%) of BBFS occurred during Obstetrics and Gynaecology and Paediatrics rotation respectively. Eleven (25%) reported the NSI to the Infection control team (ICT) and 3 (27.3%) completed 28 days of Highly Active Anti-Retroviral Therapy (HAART). Common reason for not reporting was not been aware of the Infection Control Team (ICT) in 10 (30.3%).
Conclusion: There is a need for improved training and close supervision of interns.

OB207

Sexual assault among paediatric patients in a tertiary hospital in south-east Nigeria: a 2-year retrospective study

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Introduction and Objectives: Sexual assault is any sexual contact or behaviour that occurs without explicit consent of the victim. Children are increasingly becoming victims with most cases not reported due to the fear of stigmatization. The study was carried out to describe the pattern of sexual assault among children attending the Children Out-Patient Department of Federal

Teaching Hospital, Abakaliki.
Materials and methods: This was a retrospective study of cases of sexual assault that presented at the Children Out-Patient Department of FETHA between 1st September, 2016 and 31st August, 2018. Cases of sexual assault were identified from the medical records of affected children. Relevant information was extracted from the records and entered into a profoma. Data analysis was done using SPSS version 22.
Results: A total of 10,400 children attended the Children Out-Patient Department during the period of study out of which 78 were found to have been sexually assaulted, giving a prevalence of 0.8%. There were 74 (94.9%) females and 4 (5.1%) males. The mean age of cases was 8.95 + 4.78 (1-16) years while that of the perpetrator was averagely 18.00 + 8.56 (6-50) years. The perpetrator was known to the victim in 58 (73.0%) of cases. Fifty-seven (73.1%) cases presented to the hospital within six days of the assault.
Conclusions: Although the prevalence of sexual assault in this study appeared to be low, there is need for increased vigilance on the part of parents/care givers as the perpetrators were usually known to the victims.

Gastroenterology

OC201

Awareness and knowledge about the preparation and usage of salt sugar solution among caregivers of children at the Wesley Guild Hospital, Ilesa, Nigeria

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Background: Salt sugar solution (SSS) is home-made readily available fluid that can be successfully used to replace fluid loss during diarrhoeal episodes in children. This study sets out to determine the awareness and knowledge about the preparation and usage of SSS among caregivers of children at the Wesley Guild Hospital (WGH), Ilesa.
Method: Pre-tested data proforma was used to obtain information from study participants about their level and source of knowledge and usage of SSS for their children with diarrhoea. Those who gave correct amount of sugar and salt in the right quantity of water were classified as having good knowledge. Factors associated with good knowledge and usages were determined.
Result: Two hundred and seventy-one (55.8%) of the 486 recruited caregivers were aware of SSS and 44.0% claimed their source of information was from health workers while 34 (7.0%) got their information from family and friends. Although 158(32.5%) caregivers claimed to have given their children SSS during past diarrhoeal episodes, only 2.9% of them have correct knowledge of the preparation and usage of SSS. Caregivers with post-secondary education, those whose sources of information were health workers and previous usage were associated with good knowledge about SSS ($p<0.05$).
Conclusion: One-half of the caregivers were aware of SSS but majority (97.1%) had poor knowledge of the preparation and usage. There is need for awareness creation, community sensitization and periodic training and re-training about the preparation and usage of SSS to further reduce the burden of diarrhoea-related death.

OC202

Diarrhoeal Home Management; Knowledge And Utilization Of Ort Among Mothers Of Under-Five In Ibadan, Nigeria

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Introduction and Objectives: Diarrhoea remains one of the leading causes of childhood mortality in many developing countries, despite the popular cost-effective recommended strategies. Oral Rehydration Therapy (ORT) has been advocated as the single most potent strategy for reducing both morbidity and mortality associated with the disease, yet many childhood deaths are being recorded on account of diarrhoea. The study examined mother's awareness, knowledge and utilization of ORS in the management of under-five diarrhoea.
Materials and Methods: A descriptive cross sectional community-based study involving 418 mothers of under-five in Ibadan was employed. Multistage sampling was used to select the study participants from six LGAs and a structured questionnaire was used to elicit information. Data were analysed using SPSS. Level of significance was determined at $P<0.005$.
Results: The study recorded high prevalence of under-five diarrhoea (77.0%), high awareness level of ORS (92.1%), good access to diarrhoeal control information (71%), but deficient knowledge of ORS/SSS preparation (83.6/93.1%). Similarly, only one-third of the caregivers would adopt ORT as the first line treatment in diarrhoeal management, majority (61.8%) instead would visit the chemist and other alternatives. In this study, knowledge of preparation of ORT is significantly associated with respondents' age, location (rural/urban) and parity status.
Conclusion: Despite high level of ORT awareness and good access to diarrhoeal control information, respondents showed poor knowledge of diarrhoeal management and sub optimal utilization of ORS. There is need to reinforce maternal education regarding home management of under-five diarrhoea, and to also check the quality of information being given to them.

OC203

Spectrum of Upper Gastrointestinal Endoscopic Findings in Children in Kaduna, North-western Nigeria.

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Introduction and Objectives: Endoscopy is an important diagnostic and interventional procedure for children presenting with recurrent abdominal pain, vomiting, and haematemesis. The procedure is not readily available in most hospital because of unavailability of appropriately sized endoscope. We report the upper Gastrointestinal (GI) endoscopic findings in children aged 16 days-17 years referred to ABUTH Zaria for upper GI endoscopy.
Materials and Method: This was a retrospective study of all children referred for upper GI endoscopy within a period of 2 years, February 2014 to January, 2017.
Results: Eighty-six children were referred for upper GI endoscopy. There were 32 males (37.2%), and 54 females (62.8%). The mean age was 13 years. Recurrent abdominal pain, dyspepsia and upper GI bleeding were the major indications for referral. Findings in the oesophagus were 39(41.9%) Normal oesophageal mucosa, Hiatus hernia 24(27.9%) and esophagitis 15(17.4%) being the commonest abnormalities seen in the oesophagus while 6(7.0%) cases of oesophageal varices, and one case (1.2%) of oesophageal foreign body (coin) and 1 (1.2%) of oesophageal atresia were also seen. The gastric mucosa was normal in 15(17.4%) cases while 36 (41.9%) had Gastritis and 23(26.7%) had gastric erosions. Three (3.9%) patients had portal hypertensive gastropathy, while 6 had bile reflux and 1(1.2%) patient each had foreign body (metal zipper), Gastric antral diverticular, and Gastric ulcer respectively. In the duodenum 3 (3.5%) patients had duodenal ulcer, while 1 (1.2%) patient had worms and another 1(1.2%) had foreign body (metal peg pin). Normal duodenal mucosa and duodenitis were seen in 71 (82.6%) and 10 (11.6%) cases respectively with only 3 (3.5%) cases of duodenal ulcer. We also found 1 case each of duodenal foreign body (metal peg pin) and duodenal worms. Overall, there were 7 (8.2%) patients with normal upper GI endoscopic findings.
Conclusion: Hiatus hernia, and gastritis were the commonest abnormalities in children undergoing upper GI endoscopy

OC204

Demographics and outcome of children admitted with Severe Acute Malnutrition in a State Specialist Hospital, Gusau, North-West Nigeria.

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Introduction and Objectives: Severe acute malnutrition (SAM) is still a major public health problem in developing world with attendant morbidities and mortality. Children with complicated SAM are managed in hospital facility to improve their survival rate. The objective was to determine the pattern and outcome of management of SAM among children admitted in the study area.
Materials and Methods: A retrospective observational study carried out between 1st June, 2016 and 31st May, 2017 in Paediatric wards of Ahmad Sani Yarima Bakura Specialist Hospital, Gusau. The hospital records of children admitted with SAM were retrieved and relevant information were retrieved. Data were analyzed using the SPSS 22.0.
Results: One hundred and forty-one (11.6%) had SAM among 1,212 admissions into Paediatric unit over the study period. M: F ratio was 1.9:1. One hundred and seven (75.9%) were aged 12.1 – 24.0 months with the mean age of 20.8(±6.5) months. One hundred and thirty-eight(97.9%) of the mothers had no formal education, 102(72.3%) large family size and 130(92.2%) were of lower socio-economic background. One hundred and thirty-three (94.3%) were not exclusively breastfed with suboptimal complementary feeding practices in 117 (82.7%). One hundred and six (75.2%) were non-oedematous and 35(24.8%) oedematous forms; dehydration was seen in 83(58.9%) cases. One-hundred (70.9%) had ready to use therapeutic milk formula (F75/F100) with 125(88.7%) discharges and 12(8.5%) mortalities.
Conclusion: SAM is still persistent in our community with striking demographics and attend antmoderate case fatality rate in this facility. There is need for more efforts on improving the demographics towards prevention and reduction of mortality rate associated with SAM in our community.

OC205

Point-of-Admission Serum Electrolyte Profile of Children with Acute Diarrhoea as seen in a Tertiary facility in Sokoto

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Introduction and objectives: Fluid, electrolytes and acid base disturbances are responsible for most deaths due to acute diarrhoea. This study aimed at describing the point -of-admission serum electrolyte profile of children with acute diarrhoea.
Materials and Methods: In this study, the serum electrolyte at admission, bio data, clinical features and outcome of children with acute diarrhoea, aged 29 days to 10 years, seen between 1st January to 31st December 2016

in the department of Paediatrics, UDUTH, Sokoto were retrospectively analysed.
Results: Of the total of 154 subjects, 101(65.6%) were males (M: F ratio of 1.9:1). Majority 140(91.0%) were ≤ 36 months. Twenty-four (15.6%), 105(68.2%), and 14 (9.1%) were mildly, moderately and severely dehydrated, while 11(7.1%) were not dehydrated. Hyponatraemia, hypokalaemia and metabolic acidosis occurred in 100 (64.9%), 67(43.5%) and 21(13.6%) subjects respectively. There were 10(6.5%) deaths. Only potassium level was significantly affected by degree of dehydration (p = 0.018). Duration of diarrhoea greater than or equal to 7 days was significantly associated with hypokalaemia while greater than or equal to 3 days, with metabolic Acidosis (p=0.001, and 0.03 respectively). Diarrhoea duration more than 3 days and under nutrition were significantly associated with death.
Conclusion: The degree of dehydration appears to be a good predictor of the occurrence of hypokalaemia. Diarrheal duration is a risk factor for hypokalaemia, metabolic acidosis and death. There is need for intensified community health education on early and appropriate home treatment and hospital presentation once diarrhoea duration is more than 3 days, to prevent deleterious diarrhoea consequences.

OC206

Effect of Age at Initiation of Supplementary Feeding On Physical Growth of Underfives with Moderate Acute Malnutrition

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Introduction and Objective: Moderate acute malnutrition (MAM) is a leading cause of under five morbidity and mortality globally. Timely initiation of supplementary feeding would reverse the disorder. This study was aimed at determining the most appropriate age for initiating supplementary feeding in under fives with MAM.
Materials and Method: A comparative clinical trial was conducted between May 2016 and April 2016 in Akwa Ibom State. The eligible children with MAM received supplementary rations of nutritional formulations daily for four months while still on their regular family diet. Their anthropometric indices (weight, height and mid upper arm circumference) were assessed periodically. The difference between the changes in their anthropometric indices based on age group at the end of the study was the outcome measure. It was considered statistically significant if p-value was < 0.05.
Results: There were 141 evaluable children of whom 51 were 6 – 12 months, 58 were 13 – 24 months, 19 were 25 – 42 months and 13 were 43 – 59 months. Supplementary feeding resulted in a significant increase in all the anthropometric indices of those 6 – 12 months and 13 – 23 months of age (p < 0.004). The 25 – 42 months and 43 – 59 months age categories had a significant increase in the MUAC (p < 0.008) only. The change in anthropometric indices was significantly greater in children aged 6 -23 months than those aged 24-59 months (p = 0.0003). It was also greater in children aged 6 – 12 months than those aged 13-23months (p = 0.0051).
Conclusion: Supplementary feeding had a better effect on the anthropometric indices of under fives with MAM when initiated within the first two years than beyond. It was most effective in those aged 6 – 12 months.

OC207

Prevalence and Pattern of Adolescent Malnutrition in a Semi-Urban Community in Sokoto, Northwestern
Nigeria

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Introduction and Objective: Adolescence is accompanied by increase in nutritional requirements due to the rapid growth and development associated with it. Adolescent nutritional status extends to adulthood and a predisposing factor to childhood malnutrition and non-communicable diseases in adulthood. The objective was to determine the prevalence and pattern of malnutrition among adolescent in a semi-urban community in Sokoto.
Materials and Methods: An observational study carried out between January and March, 2018 at Gwiwa community, Wamakko LGA, Sokoto State. The demographics, weight and height and BMI were documented. Nutritional status was determined using the WHO BMI tables for appropriate age and gender. The socio-economic class of the participants was determined the Oyedeji's classification. Data were analyzed using the SPSS 22.0. A p-value of <0.05 was considered significant.
Results: One hundred and ninety-eight adolescents participated in the study. One hundred and thirty-two (66.7%) were aged 10.0 – 13.9 years with the mean age of 12.6(±2.3) years. There were 84(42.4%) males with M:F ratio of 1:1.4. One hundred and eight (54.6%), 63 (31.8%) and 27(13.6%) were from lower, middle and upper socio-economic classes respectively. Sixty (30.3%) were stunted, 33(16.7%) wasted, 24(12.1%) were severely wasted and 3(1.5%) were overweight. Age (p=0.008) and socio-economic status (p= 0.04) significantly influenced the degree of wasting and overweight.
Conclusion: Double burden of under nutrition and overweight exists among adolescents in the study area with under nutrition being more prevalent. There is need for efforts at prevention to reduce its impact on non-communicable diseases and the nutritional status of future generations of our community.

Endocrinology/Adolescent Health

OD201

Prevalence and Associated factors of Insulin Resistance among Obese and overweight Nigerian Adolescents in Secondary Schools

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Background: Insulin resistance has been implicated as an underlying cause of most non communicable diseases and complications associated with obesity. The aim of this study is to determine the prevalence of insulin resistance and correlated factors amongst overweight and obese adolescents and a comparative group of normal weight adolescents.
Methodology: A descriptive cross sectional study of 235 overweight and obese adolescents aged 10 to 19 year and 119 comparative groups. Insulin Resistance (IR) was determined using the Homeostatic Model Assessment of IR determined from fasting insulin and glucose level.
Results: Insulin resistance was reported in 90(25.4%) of all subjects studied. Prevalence in overweight and obese adolescents was 88(37.4%) significantly higher than 2 (1.7%) of normal weight subjects (p=0.001). The mean HOMA IR values peaked at age of 17-19 years in both sexes and also in overweight and obese subjects. Overweight and Obese subjects are 35 times more likely to have IR compared to normal weight subjects (CI 8.44-145.24) p=0.001. Subjects in high social class were 2.49 times more likely to have IR compared to middle and lower class(CI 1.06-5.86) p=0.04. There was no statistically significant association observed between respondents' school type, sex, age, family history of diabetes, hypertension and obesity with Insulin resistance (p>0.05).
Conclusion: Study shows that Insulin Resistance is significantly prevalent in Overweight and obese compared to normal weight subjects. Prevalence was independent of age, sex and family history of diabetes or obesity.

OD202

Paediatric Endocrine Disorders at a Tertiary Centre in Lagos: An 18-Month Review

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Introduction& Objectives: Childhood endocrine disorders were previously thought to be rare and perhaps less important than the more commonly reported disorders in the paediatric age group. The establishment of paediatric endocrine units have shown that these cases are not unusual. Moreover, reports on the pattern of Paediatric endocrine disorders in Nigeria suggest regional differences across centres. We thus reviewed the pattern of endocrine disorders seen at the paediatric endocrine unit of the Lagos State University Teaching Hospital, Lagos, Nigeria.
Materials &Method: Data was extracted from clinical records of the Paediatric Endocrine Unit from March 2017 to September 2018 and diagnoses categorised as *diabetes, disorders of puberty, thyroid disorders, disorders of sexual differentiation (DSD), growth disorders, obesity*, and *others.*
Results: Eighty-three (83) patients with endocrine disorders were evaluated over the 18- month period. Diabetes (26.5%), disorders of puberty (18.0%) and thyroid disorders (13.3%) were the most prevalent diagnoses. Almost all (91.7%) of the patients with pubertal disorders were girls and most (83%) of those with obesity were boys.
Conclusion: The most common paediatric endocrine disorders at our centre were diabetes, disorders of puberty and thyroid disorders.

OD203

Dyslipidaemia in Nigerian Children and Adolescents living with Diabetes Mellitus: Prevalence, pattern and Associated factors

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Background: Dyslipidaemia in children and adolescents with Diabetes can precipitate and worsen the presentation of chronic complications. The aim of this study is to determine the frequency and pattern of dyslipidaemia in children living with diabetes followed up at a paediatric endocrine clinic
Methodology: The study was a cross sectional descriptive study of 22 children living with diabetes followed up in a tertiary health care facility. Demographic data was retrieved from case files and fasting lipid profile and HbA1c was done for all subjects at no cost. Lipid abnormalities were defined based on the Expert Panel on Integrated guidelines for cardiovascular health risk reduction in children and adolescents.
Result: Twenty-two subjects aged 7 to 18 years were studied, with mean age of 14.94±3.59. There were 12 (54.5%) females. The mean age of females (14.99±3.70) was not significantly different from mean age of 14.88±3.64 for males (p =0.95). Mean duration of diabetes was 3.37±2.38 years. Prevalence of lipid abnormalities includes hypertriglyceridaemia (86.4%), hypercholesterolemia (22.7%), abnormal HDL-C (36.4%), LDL-C (13.6%) and Non-HDL-C (22.7%). Hypercholesterolemia was significantly higher in females (p-0.02) and prevalence of hypertriglyceridaemia was higher in subjects 12 years and above (p=0.019). There was no statistically significant difference in mean levels of various lipids between males and females. Nine (40.9%) of subjects had more than one lipid abnormalities. There was no statistically significant association between lipid abnormality with age, sex, weight category and HbA1c.

Conclusion: Lipid abnormalities are prevalent in children with Diabetes. Programmes should therefore be targeted at improved lipid levels to delay and prevent chronic complications.

OD204

Socio-Demographic Determinant of Glycaemic Control Among Children with Type 1 Diabetes in South Eastern Nigeria

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Introduction: Diabetic complications have been identified as the major cause of morbidity and mortality in persons with type 1 diabetes mellitus. Lack of appropriate glycaemic control is a significant risk factor for the onset and progression of long term complications of diabetes. Identifying the determinants of glycaemic control is therefore imperative.
Aim: To identify the socio-demographic determinants of glycaemic control among children with type 1 diabetes mellitus in south eastern Nigeria
Method: It was a cross-sectional hospital based study of children aged 3-18 years with T1DM. Fifty-eight children with type 1 diabetes mellitus were consecutively enrolled after obtaining consent. A questionnaire was completed recording their demographic variables and their HbA1c was estimated.
Result: There were 71 subjects with type 1 diabetes mellitus enrolled. 38(52.5%) of them were males. Mean age (years) was 13.7±0.3. Mean age at onset of diabetes was 11.6years (range 3-16), mean duration of diabetes was 2..3years (range 0.4 – 8years), mean HbA1c value was 10.5% (range 6.4-14%), Age, age at onset of diabetes, duration of diabetes and caregivers involvement in diabetes management were strong determinants of glycaemic control ($p<0.05$).
Conclusion: Younger age, young age at onset of diabetes, and short duration of diabetes and caregivers' involvement in diabetes management were strong indicators for better glycaemic control.

OD205

Feasibility of Reaching Very Young Adolescents in Ibadan, Nigeria with Electronic-Media-Based Interventions

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Introduction and Objectives: The increasing access to electronic-media technologies has resulted in an upsurge in their use for health interventions. There is however inadequate information on the use of electronic-media technologies among Very Young Adolescents (VYA) aged 10 – 14 years in many developing countries. The study objectives were to describe access of VYAs to electronic-media technologies and feasibility of reaching them with electronic-media interventions.
Materials and Methods: The adolescents were selected by multi-stage sampling. Information on socio-demographic characteristics, access to electronic-media technologies and willingness to participate in electronic-media-based interventions was obtained. Descriptive and inferential statistics were conducted; level of significance was $p<0.05$.
Results: The mean age of the 976 VYAs was 11.9±1.2 years; 50.3% were males, 81.7% lived with both parents and 34.0% owned a mobile-phone. Significantly more VYAs who described their families as financially better off; owned mobile phones (37.6%) compared to those who felt their families were financially same (30.4%) and worse off (20.0%) than others. Approximately 56% said their family owned a desktop, laptop or tablet. Approximately 73% of VYAs were willing to participate in mobile-phone or internet-based interventions and studies. Preferred communication channels were phone-calls (39.5%), text-message (25.9%), social network sites (14.5%) and social media applications (10.6%).
Conclusion: About a third of the very young adolescents owned a mobile phone and many were willing to participate in electronic-media-based interventions. Interventions targeting VYAs need to incorporate additional avenues (face-to-face sessions in schools, health facilities and other adolescent-friendly sites) in order to reach the majority of this age-group.

OD206

Effect of Peer Education On Knowledge of Human Papilloma Virus and Cervical Cancer Among Female Adolescent Students in Benin City, Nigeria

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Introduction: Cervical cancer, a major cause of morbidity and mortality especially in low and middle income countries is caused by Human Papilloma Virus (HPV). In developed countries, lack of information among the target population (adolescents) is a major contributor to suboptimal uptake of HPV vaccines. The aim of this study was to assess the knowledge of female secondary school students about cervical cancer, its treatment and prevention, and to determine if their knowledge could be improved using peer-to-peer transfer of knowledge.
Methods: This was an intervention study. The knowledge and awareness of female adolescent students of

four secondary schools were assessed using a pre-tested self-administered questionnaire prior to the training of some of the students (peers). The trained students delivered messages on cervical cancer and HPV using fliers containing key information (peer training) to their school mates in formal delivery in a class setting. The knowledge and awareness of students' post-peer training was then assessed.
Results: There were 1337 and 1201 students who responded to the pre- and post-peer training evaluation respectively. Awareness of cervical cancer, knowledge of risk factors and cause of cervical cancer was low (2.4-46%) prior to the peer training and these improved significantly to 51.3-99.3% following peer training. Mean knowledge score prior to training was 12.94±9.23 and this increased significantly to 53.74±10.69 following peer training $p<0.0001$.
Conclusion: Peer training is effective in improving knowledge and awareness of female adolescents about HPV and cervical cancer.

OD207
Acceptance and Utilisation of Modern contraception among Adolescent mothers in Bodija Market, Ibadan, Nigeria

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Introduction and Objective: Almost all child birth among adolescents aged 15 to 19 years occur in developing countries including Nigeria. They have an enormous unmet need for contraceptives and these results in repeat pregnancies. Bodija Market is known for its strong socio-political and commercial networks and it is a repository for adolescent mothers who are engaged in various capacities. This study set to access contraceptive use among adolescent mothers in Bodija market.
Methods: The study, as part of an ongoing doctoral research, was conducted at the infant welfare clinic in the primary health centre in Bodija Market. Twelve In-depth interviews and a Key informant interview were conducted with all consenting adolescent mothers and health worker present at the clinic. Interviews were recorded, transcribed verbatim; and coded inductively using Atlas. Ti and emerging themes were drawn and synthesised.
Results: All the adolescent mothers were currently not using any modern contraception and had no intention to use. They indicated preference for traditional family planning methods which include the use of herbs and traditional contraceptive rings. The adolescent mothers believed that modern forms of contraception are dangerous and the major concern was possible infertility as a side effect. Their major source of information about contraception were older mothers n (aunts and mothers, area sisters) around them
Conclusion: There is a low acceptance of modern contraception among adolescent mothers perpetuated through intergenerational miss-information on family planning. Advocacy targeted at market populations and further research on mechanism of action for traditional methods especially the herbs is needed.

Pulmonology/General Paediatrics

OA301
Clinical Characteristics of Childhood Asthma In Lagos, Nigeria

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Introduction: Globally, asthma is the commonest chronic disorder of childhood with increasing prevalence especially in developing countries. Knowledge of the demographic and clinical profile of asthmatic children identifies gaps in care and provides data for prudent allocation of resources for optimal care. We evaluated baseline demographic and clinical profile of asthmatic children assessing routine care at the Paediatric Allergy, Dermatology and Pulmonary Medicine Unit of Lagos State University Teaching Hospital, Ikeja.
Methodology: Children with asthma were prospectively recruited consecutively (ongoing). With a structured questionnaire and clinical evaluation, we obtained demographic and clinical data, including presence of comorbidities: allergic rhinitis (AR), allergic conjunctivitis (AC), atopic dermatitis (AD) and food allergy (FA). Asthma severity was evaluated using GINA guidelines.
Results: Fifty-seven children aged 7.7±3.4 years (range: 6 months to 15 years) were recruited. Two-thirds (64%) were aged 5-10yrs, predominantly boys (67%). Half (52%) had mild persistent asthma while intermittent and moderate persistent constituted 33% and 15%, respectively. More than three-quarters (77%) had allergic co-morbidities. Prevalence of specific co-morbidities were AR (63%), AC (27%), AD (8%) and FA (2%). Although most were referred with clinical diagnosis of asthma, none of them were diagnosed with the comorbidities until presentation in our unit. Presence of co-morbidities was not associated with asthma severity (OR=0.176; 95% CI: 0.02-1.15, p=0.138).
Conclusion: Majority of the subjects had mild persistent asthma and more than three quarters (77%) had previously-undiagnosed atopic co-morbidities. There is need to empower health-care practitioners and asthma care units to optimally diagnose and treat comorbid allergic conditions.

OA302

Serum inflammatory cytokines and antioxidant micronutrients in children with Community Acquired Pneumonia at the Wesley Guild Hospital, Ilesa

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Background: Pneumonia is an infectious agents-induced acute inflammatory disease of the lung which is a major cause of childhood morbidity and mortality in developing countries. The role of inflammatory mediators and modulators in childhood pneumonia is poorly explored.
Methods: Children aged one month to 14 years with WHO-defined community acquired pneumonia (CAP) and their age and sex-matched apparently healthy counterparts were consecutively recruited over a seven-month period. Relevant history and examination findings were documented and their serum cytokines and micronutrients assayed and compared using standardised High Performance Liquid Chromatography (HPLC) methods.
Results: Eighty children (40 each for CAP and controls) M: F=1.4:1 were recruited. Fifteen (37.5%) were infants and eight (20.0%) were school age children. The complications of pneumonia at presentation included heart failure 6.0 (15.0%), pleural effusion 7 (17.5%) and convulsions 2 (5.0%). Serum pro-inflammatory cytokines (IL-1β, 2, 8 and 12) were higher, while anti-inflammatory cytokines (IL-11 and 13) were lower in children with pneumonia than the controls. ($p<0.05$) Levels of serum Cytokines and micronutrients were not associated with pneumonia complications and severity. Serum Zinc, Selenium, Vitamin C and E were lower in children with pneumonia than controls, but only Zn and Vitamin C attained statistical significance. The micronutrients correlated negatively with pro-inflammatory cytokines and positively (though weakly) with anti-inflammatory cytokines.
Conclusion: CAP is associated with elevated serum pro-inflammatory cytokines and possible resultant higher need for anti-inflammatory mediators and anti-oxidants. Micronutrient (antioxidant) supplementations may help to prevent, reduce and ameliorate the inflammatory processes in these children

OA303

Relationship Between Serum Vitamin D Level And Acute Pneumonia In Children Aged 1 – 59 Months At Ahmadu Bello University Teaching Hospital (Abuth), Zaria

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Introduction and objectives: Acute pneumonia is a leading infectious cause of death among children under five globally and in Nigeria. Optimal vitamin D status may facilitate the ability of immune cells to fight against infection like pneumonia. We assessed the relationship between serum vitamin D [25(OH)D] level and acute pneumonia in children aged 1-59 months at ABUTH, Zaria.
Materials and Methods: This cross-sectional study involved 135 children with pneumonia and 135 apparently healthy controls. Acute pneumonia was diagnosed using the revised World Health Organization criteria and chest radiological signs. Serum 25(OH)D concentrations were determined using a vitamin D ELISA kit. We compared the mean serum 25(OH)D levels in both groups and also determined odds ratio (OR) of pneumonia.
Results: The mean serum 25(OH)D level of children with pneumonia (52.14±21.87 nmol/l) was significantly lower than that of controls (60.91±32.65 nmol/l), $p = 0.010$. Most of the children (n =220, 81.4%) had serum 25(OH)D levels of ≤75.0 nmol/l (low serum vitamin D). The proportion of children with low serum vitamin D levels was significantly higher in the pneumonia group (n = 123, 91.1%) than the control group (n = 97, 71.9%), $p < 0.001$. In a multiple logistic regression model, serum 25(OH)D level >75 nmol/l was associated with decreased odds of acute pneumonia, (adjusted OR = 0.33, $p = 0.007$).
Conclusion: Low vitamin D level was associated with decreased risk of acute pneumonia. Improving vitamin D status in these children may reduce their pneumonia risk.

OA304

Pattern and Outcome of Respiratory Diseases among Children Admitted In the Emergency Facility of University Of Ilorin Teaching Hospital, Nigeria

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Introduction and Objectives: Globally respiratory diseases, comprising a broad range of disease conditions due to infectious and non-infectious causes, is a cause of childhood morbidity and mortality and thus, identification of the burden of respiratory illness will ensure appropriate interventions towards reducing its attendant morbidity. The study was conducted to identify the presentation and outcome of respiratory illness in hospital-

ized children at University of Ilorin Teaching Hospital, North-Central Nigeria.
Materials and Method: This is a retrospective cross-sectional study involving children admitted through the emergency paediatric unit over five years (January 2013 -December 2017). Data on demography, diagnosis, co-morbidities and complications, duration of admission, and outcome were collected and analyzed using SPSS 20.
Results: Of the total 7012 children admitted, 1939 (27.7%) were due to respiratory diseases with a median age of 16 (interquartile range {IQR} 7-36) months. Males were 994(51.3%) and 945(48.7%) females. Infectious diseases were the most common cause of admission. The highest admissions due to infective and non-infective respiratory diseases were pneumonia (50.1%) and aspiration pneumonitis (5.1%) respectively. The median duration of hospital stay was four days [IQR- 2 to 6 days]. Overall, respiratory diseases accounted for 20.7% (119/574) mortality among all admissions while the all-respiratory disease mortality was 6.1% (119/1939). The major contributors to mortality were pneumonia, aspiration pneumonitis and tuberculosis accounting for 81(68.1%), 12(10.1%) and nine (7.6%) deaths respectively.
Conclusion: Pneumonia and aspiration pneumonitis are major contributors to morbidity and mortality due to respiratory diseases for which interventions towards improving childhood health indices should be prioritized.

OA305
Child car restraint: What parents in Ibadan know and what they do

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Introduction and objectives: Road traffic crashes (RTC) is the leading cause of paediatric trauma in Nigeria. However, there are proven safety measures which can protect children when transporting them in vehicles should RTC occur. This study described the knowledge, practice and attitude regarding safe paediatric vehicular transport among parents of children attending private elementary schools in Ibadan, Nigeria.
Materials and methods: This was a cross sectional study in three randomly selected elementary schools. Self-administered questionnaire was used collect data among 191 parents on sociodemographic characteristics, knowledge and practice of safe paediatric vehicular transport and attitude towards it. Data was analysed using descriptive statistics and Chi square test with α=0.05.
Results: Mean age of respondents was 40.12±7.6 years and 64(33.5%) were males. Almost all (92.1%) knew about child car restraint (CCR) and the best known CCR were the car seat (67.0%) and seat belt (68.1%). Overall, 118(61.8%) had good knowledge about the use of CCR but only 20(10.5%) knew the appropriate age for the use of booster seat. 130(68.1%) of parents reported that they use CCR with 116(60.7%) using it regularly. The parents with good attitude towards the use of CCR were 107(56.0%) but only 11(5.7%) agreed that the use of CCR should be enforced. Female parents and those who knew about CCR significantly had good attitude towards its use.
Conclusion: A fair number of parents studied had good knowledge and attitude towards the use of CCR but there is a need to increase their knowledge and the use of CCR for their children.

OA306
Evaluation of health-related quality of life among children with and without nephrotic syndrome in Enugu, Southeast Nigeria

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Introduction and Objectives: Quality of Life (QOL) is a multidimensional concept that includes subjective evaluations of both positive and negative aspects of life. Evaluation of health-related quality of life (HRQoL) using specific tools conveys essential information about a patient that is not be obtained through the routine clinical or conventional laboratory or radiological assessment. This study aimed to evaluate the HRQoL of children with nephritic syndrome and compare it with children without nephrotic syndrome in Enugu, Nigeria
Materials and methods: This was a comparative cross sectional study to assess the health-related quality of life of children with nephrotic syndrome as subjects and age and gender matched apparently healthy children as controls using PedsQL^{TM} 4.0 Scale Score and data obtained were analyzed with Statistical Package for Social Sciences (SPSS) version 19.
Results: The HRQoL scores of children with NS were significantly lower than those of healthy controls ($p < 0.001$). All the domains on the PedsQL scale were negatively affected, with the worst scores in the school functioning domain. The mean PedsQL scores in the school domain were 59.70 ± 18.56 in children with NS compared with 89.40 ± 8.12 seen in healthy control ($p < 0.001$). Emotional functioning was negatively affected by increasing age.
Conclusions: HRQoL of children with nephrotic syndrome is significantly lower than that of apparently healthy children, and this affects all assessment domains. Therefore, it is recommended that the assessment of HRQoL of children with nephrotic syndrome and appropriate intervention should become a component of clinical care.

Nephrology

OB301

Paediatric Haemodialysis at the University College Hospital Ibadan Nigeria: An Update

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Introduction and Objective: Haemodialysis is potentially lifesaving in the management of children with acute kidney injury (AKI) or end-stage renal disease (ESRD). However, in many parts of sub-Saharan Africa paediatric renal replacement therapy (RRT) is not readily accessible. Haemodialysis may however have a role in paediatric RRT in low resource settings. We reviewed haemodialysis in our centre to provide an update on the role of paediatric haemodialysis
Methods: We reviewed the haemodialysis register and the paediatric nephrology unit database for persons who were aged 19 years and below who received haemodialysis from January 2011 – December 2017 in terms of demography, diagnosis and in-hospital mortality.
Results: A total of 144 children were recruited, aged 2-19 (10.6± 4.4) years, and 62.5% males. 100 participants (69.4%) had AKI, while the others had ESRD. The patients with AKI and ESRD were aged 9.7 ± 4.5 years (58 %, males); 12.4 ± 3.6 years (72.7%, males) respectively. The main causes of AKI were sepsis (16%), malaria (16%), intravascular haemolysis of unknown cause (14%) and nephrotic syndrome (10%), while the main causes of ESRD were chronic glomerulonephritis in 34 (77.3%) and posterior urethral valves in 5 (11.4%). In-hospital mortality data was available in 117 patients and mortality occurred in 8 of 84 patients (9.5%) with AKI and 3 of 33 patients (9.1%) with ESRD.
Conclusions: Haemodialysis is remains useful in the management of children with AKI or ESRD in low resource settings.

OB302

Congenital abnormalities of the kidney and genital tract in LASUTH

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Background: Congenital abnormalities of the kidney and genital tract (CAKUT) are well recognized as causes of chronic kidney disease in children. Antenatal diagnosis plays an important role in early detection to forestall progression of the disease. This study aimed to determine the prevalence, types of CAKUT, intervention and outcome of the patients.
Method: A cross-sectional study involving consecutive patients presenting with various types of CAKUT at the nephrology clinic and emergency room from December 2015 to September 2018.
Results: A total of seventy-one patients presented with CAKUT during the thirty-four months period. The prevalence of CAKUT was 1.8 per 1000 patients over the 34 month period. The patients were between ages of 1 day to 144 months. The median age was 48 months. 42.2% of the patients presented at age greater than or equal to 5 years, 22.5% under fives, 15.5% infants, 19.7% neonates. Male to female ratio was 3.7: 1. Only 12.7% of the patients had antenatal ultrasound diagnosis of CAKUT. The spectrum of CAKUT include posterior urethral valve (32.4%), pelviureteric junction obstruction (26.7%), polycystic kidney disease (9.9%), ectopic kidneys (8.4%), renal dysplasia (8.4%), renal agenesis (5.6%), multicystic dysplastic kidneys (5.6%), ureteric duplication (2.8%), ureterocele (2.8%), meatal stenosis (1.4%), ureterovesical junction obstruction (1.4%), cystocele (1.4%), extravesical cyst (1.4%) and crossed fused ectopia (1.4%). Majority presented with features of bladder outlet obstruction (31%), 22.5% with abdominal mass and incidental findings in 18.3%. Features of urinary tract infection were found in 50.7% of the patients and more than half of them (52.1%) had positive urine culture for a particular organism. Acute kidney injury was diagnosed in 12.7% of the patients out of which 4.3% progressed to chronic renal failure. Surgical interventions include valvotomy, nephrectomy, pyeloplasty depending on the type of CAKUT.
Conclusion: Early detection and diagnosis of CAKUT is essential to plan treatment modality. Also, follow up is very vital to ensure proper management of complications that could occur.

OB303

Bartter Syndrome in a Four-Year-Old Nigerian Boy with recurrent vomiting

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Background: Bartter syndrome is a rare renal tubular disease characterized by hypokalemic metabolic alkalosis with hypercalciuria and renal salt wasting. It is a very rare metabolic disease with reported prevalence of 1 in 1,000,000. There is paucity of reports of the condition in Africa.
Case report: We report the case of AM, a four-year-old Nigerian boy who presented with growth failure (stunting and wasting), recurrent episodes of persistent vomiting warranting in-hospital care on three occasions

over a period of 16 months, no fever and no diarrhoea. Examination findings revealed features of severe dehydration, carpopedal spasm and generalized body weakness. Laboratory investigations revealed hyponatremia (serum sodium = 103 mmol/L), hypokalemia (serum potassium = 2.0mmol/L), severe hypocalcaemia and hypercalciuria (Urinary calcium creatinine = 0.37) and increased urinary loss of sodium, chloride and potassium. Serum renin was also elevated (8.1ng/ml/hr). These are the essential diagnostic features of Bartter syndrome. In addition to correction of severe dehydration, the patient was commenced on calcium, magnesium and potassium supplements and nutritional rehabilitation. He is presently being followed up in the clinic.
Conclusion: This case report illustrates the need to have high index of suspicion of metabolic diseases and or renal tubular disorders in children with growth failure and recurrent vomiting particularly in the absence of infectious causes.

OB304
Epidemiology of Childhood Renal Disorders at University of Abuja Teaching Hospital, Abuja

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Introduction and Objectives: In recent times, epidemiological data are demonstrating a significant contribution of renal disorders to childhood morbidity and mortality in developing countries. The knowledge of the burden childhood renal disease in developing countries is required for preventive and management purposes.
Objective: The aim is to review the prevalence and spectrum of renal disease seen at the University of Abuja Teaching Hospital (UATH), Gwagwalada, Abuja, Nigeria.
Methods: A retrospective review of data of children aged 1 month to 17 years, admitted to the Paediatric Unit of the UATH over a period of 4 years between January 2013 and December 2016.
Results: Four thousand, three hundred and twenty-seven children were admitted during the study period, with 163 having renal disorders, giving a prevalence of 3.7%. There was a progressive increase in the proportion of paediatric renal diagnoses during the study period, from 3.1% in 2013 to 5.4% in 2016. Urinary tract infection (30.7%) and acute kidney injury (30.7%) were the most common disorders. Most of the renal disorders were seen in the preschool children, less than 5 years of age.
Conclusion: There is a need for stakeholders and policymakers to take cognizance of the continuous contribution of renal disorders to childhood morbidity and mortality in Nigeria.

OB305
Lupus Nephritis in Nigerian Children: a single centre experience

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Introduction: Systemic lupus erythematosus (SLE) is a severe chronic autoimmune disease affecting all organ systems including the kidneys, the term juvenile SLE is used when it occurs in children less than 16years. Lupus nephritis (LN) is one of the most fatal complications of JSLE.
Objectives: To increase awareness of Lupus nephritis as one of the major complications of JSL and to determine predictors of poor outcome in children with LN
Materials & Methods: This is a retrospective study of 6 cases of lupus nephritis out of 8 cases of JSLE managed on the paediatric ward in LASUTH within a period of 2 years
Results: Seven females and 1 male were diagnosed with SLE after fulfilling the ACR criteria with a mean age of 10.6(±5.7). 6(75%) out of the 8 had renal symptoms,1 male and 5 females, hypertension in 50% (4 out of 8), oliguria in 25% (2 out of 8), nephritis in 25% (2 out of 8), nephrotic syndrome in 62.5% (5 out of 8) and 25% (2 out of 8) had renal failure. All had renal biopsy ranging from class II to VI. All were managed with corticosteroid, 3 with mycophenolate mofetil, 3 with cyclophosphamide and 2 with azathioprine. Overall survival was 66.7%, 2 patients died, one due to associated central nervous system comorbidity and the other died at home from an unknown cause.
Conclusion: Lupus nephritis is a common presentation of JSLE and a major predictor of poor prognosis. It occurs in Nigerian children and a high index of suspicion Is needed to make a diagnosis.

OB306
Asymptomatic Bacteriuria in Healthy Primary School Children in Enugu, Nigeria

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Introduction and Objective: Asymptomatic bacteriuria (ASB) is common although the prevalence varies widely with age, gender and the presence or absence of genitourinary abnormalities. ASB has been reported to be associated with an increased risk of symptomatic UTI especially in the presence of risk factors and may actually represent the beginning of symptomatic UTI. This study therefore sought to determine the burden of ASB and

sensitivity pattern of isolates in primary school children in Enugu.
Materials and Methods: This was a cross-sectional descriptive survey involving apparently healthy primary school children aged 6 to 12 years. A pre-tested, caregiver administered questionnaire was used to obtain information about the participants including age, sex, history of fever and antibiotic usage in the two weeks preceding the study. Following a clinical examination, a sample of spot mid-stream urine was collected from each participant for dipstick urinalysis and urine microscopy and culture.
Results: Out of the 400 children, 175 (43.75%) were males and 225 (56.25%) were females. The mean age of the children was 10.13 ± 1.81 years.14.25% (57/400) of children had ASB, with gender specific prevalence of 13.7% (24/175) and 14.7% (33/225) for males and females respectively. The prevalence of ASB was higher among the early adolescents (14.4%) and lower in the pre-adolescents (13.6%). *Escherichia coli* (43.8%) and *Staphylococcus aureus* (22.8%) were the most common organisms isolated.
Conclusion: The prevalence of ASB is high in primary school children in Enugu, higher in females with *Escherichia coli* as the commonest bacterial isolate. Routine evaluation of these children for bacteriuria is recommended.

Medical Education and Clinical Skills

OC301
Reasons for difficulties encountered by students and interns while using Clinical Reasoning as a diagnostic and management tool in medicine at University of Port Harcourt Teaching Hospital

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Introduction and Objectives: A systematic clinical decision-making skill is crucial to avoid diagnostic errors. The Clinical reasoning tool based on Blooms' taxonomy has been in use by the Department of Paediatrics, University of Port Harcourt Teaching Hospital (UPTH) and proposed to be a useful adjunct to aid this process of reflective thinking. However, little is known about the effectiveness of this tool in daily clinical use, as well as the difficulties encountered during its use.
Materials and Methods: This was a cross-sectional study using pre-piloted structured questionnaires administered to 131 prospective house officers and 67 final year medical students at UPTH. Information on basic terms, knowledge and application of the Clinical reasoning domains was sought. The Likert scale was used to assess attitudes towards use of the tool. P values <0.05 was considered significant.
Results: A total of 166 respondent results were analysed. Specific areas of difficulties identified were with making a diagnosis in 50(30.1%) respondents and identifying functional and structural abnormalities in 29 (17.5%). Ninety-nine(59.6%) acknowledged that it was time consuming, and 42(25.3%) stated that it was difficult to practice in a busy clinic.
Conclusion: The Clinical reasoning tool promises to be invaluable in patient management. However, broader development of critical thinking skills is crucial, and teachers should aid students appreciate the complexity of patient care building on basic sciences to make the tool more effective.

OC302
Simulation-based Education in Nigeria: A Survey of Paediatric Care Providers and Trainees

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Introduction: Simulation-based Education (SBE) using manikin-based and virtual reality (VR) simulation modalities is increasing in high-resource settings. This study aims to explore the access to and perceived utility of various SBE modalities by healthcare providers and learners in Nigeria.
Methods: A paper-based 35-item survey on SBE was administered to 350 healthcare providers and learners during simulation workshops at the 2018 PANCONF Abuja and at LUTH, Lagos.
Results: 279 surveys were completed (RR 82%).
Respondents were mostly 21-30 years (121, 43%) and female (187, 67%), with physicians (97, 36%) and nurses (62, 23%) in both general (109, 65%) and subspecialty (22, 13%) practice with 5-10 years of experience (62, 37%) in a tertiary care setting (169, 64%). Manikin-based training was more common in practicing providers, particularly in Basic Life Support ($p<0.05$). Although the majority of physicians and medical students (181, 96%) owned smart phones, more students (33, 35%) were aware of VR training than practicing physicians (27, 28%) and nurses (11, 19%), $p<0.05$. Only 9% (n=25) of respondents had experienced an online or VR simulation. Perceived challenges to using VR simulation for training were lack of awareness (129, 46%), VR equipment (64, 23%) and standardized modules (56, 20%). Nearly all respondents felt SBE should be expanded for continuing education, teaching and/or research. If facilities were available, 97% would recommend the use of online simulation.
Conclusions: Many healthcare workers in LMICs lack access to manikins but the majority own smart phones. There is a crucial need to expand SBE online simulations for teaching, continuing education and research.

OC303

eHBB/mHBS-DHIS2: Mobile Virtual Reality Newborn Provider Training in Helping Babies Breathe Component of Essential Newborn Care

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Background: Around 10 million babies a year are born who do not breathe or cry. Helping Babies Breathe is an evidence-based global neonatal resuscitation training program. However, there are challenges to maintaining training fidelity and encouraging continuous training and improvement that include lack of mechanisms and tools for objective feedback, delays in data collection and analysis, and high staff turnover rates. To address these challenges, computer-based simulations are increasingly used for self-directed learning before, or after attending an in-person course.
Methods: eHBB is a mobile virtual reality training app developed on the Unreal™ engine platform to augment healthcare worker neonatal resuscitation training in low and middle income countries. Healthcare workers use mobile phones with low-cost VR devices such as Google cardboard™ to practice their skills through three mobile virtual reality simulations based on Helping Babies Breathe 2nd edition curriculum, a component of the Essential Newborn Care training program. The integrated application: eHBB/mHBS powered by DHIS2, is currently available for android phones and requires no internet access for use.
Results: Healthcare workers and students who participated in formal eHBB usability testing and focus group discussions at the National Hospital, Abuja reported that the simulations were appealing, clear, easy-to-use, high-quality and engaging. On a scale of 1-5, testers gave an average response of 4.3 (0.7) to the question "How likely are you to use this activity for practicing HBB skills?"
Conclusions: eHBB/mHBS-DHIS2 is integrated mobile virtual reality training and data collection apps to augment healthcare worker neonatal resuscitation training in low and middle income countries.

OC304

eHBB: Preliminary Testing and Evaluation of a Virtual Reality Simulation on Neonatal Resuscitation

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Background: Simulation-based education (SBE) modalities including mobile virtual reality (VR) are increasingly utilized in healthcare training. However, little is known of the perceptions of healthcare workers towards this training modality. The objective of this study was to engage healthcare workers in usability testing of eHBB, a mobile VR simulation on neonatal resuscitation.
Methods: Twenty-four healthcare workers in paediatrics and labour & delivery wards at National Hospital, Abuja accessed eHBB through mobile phones and basic VR headsets. Data was collected through surveys, direct observation, and open-ended questions in recorded 30-minute sessions. Responses were analyzed using descriptive statistics.
Results: Participants were female (23, 96%), 31-40 years (15, 63%). Four registrars (16%), 15 nurses (63%) and 5 midwives (21%) participated in the study. Most had 5-10 years of experience (12, 50%). While 17(71%) had previous exposure to manikin-based training, and 9 (38%) were aware of VR, none had used VR. The average time to task completion such as drying, stimulation and positive pressure ventilation was tracked. Suggestions for improvement were integrated. Successful task completion on first click for first time users increased from 60% to 100%. All testers were willing to test new versions of eHBB and recommended online simulation for training.
Conclusions: There is both need and opportunity to expand simulation-based education beyond the current scope using mobile VR simulations. Rigorous testing of eHBB by end-users resulted in significant improvements to usability and fidelity. This approach to co-design of mobile VR simulations should be used to increase access to standardized SBE in Nigeria.

OC305

A targeted systematic review of cost analyses for implementation of simulation-based healthcare training methodologies

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Background: In recent decades, there has been a steady increase in the use of simulation-based education (SBE) for training healthcare providers in technical and non-technical skills. Despite reliable evidence of the effectiveness of this approach, there is a paucity of cost-benefit assessments of SBE. To inform an ongoing SBE study in neonatal resuscitation in LMICs, we sought to assess the published cost-related literature pertaining to SBE in neonatal resuscitation.
Methods: We conducted a literature search using the PubMed database (March 21, 2018). Two targeted queries were developed: one more narrowly targeted cost analyses of neonatal resuscitation training and another

more broadly searched for cost analyses of medical simulation-based training in general.
Results: The more targeted query on neonatal resuscitation training identified 16 articles, three of which involved cost analyses of training program implementations (1-3). The broader query on simulation-based training in medicine in general identified 109 articles, from which 95 abstracts were reviewed. Nearly half (49%) of studies were from the United States, 15% in continental Europe, 11% in Canada, and 9% in the United Kingdom.
Conclusions: Despite the potential benefits associated with simulation-based education programs, relatively few articles report cost analyses for the implementation of simulation-based training programs in LMICs. Healthcare stakeholders and decision makers would benefit from assessments of program expansion costs associated with transitioning from smaller-scale to larger -scale regional or national implementations across multiple centres.

OC306
What Happens After Helping Babies Breathe Training Is Completed?

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Background: Neonatal mortality rate remains disturbingly high in Nigeria despite significant decline in parts of the developing world. Helping Babies Breathe (HBB) program is an evidence-based educational program designed to teach neonatal resuscitation techniques in resource-limited areas.
Objective: To determine the mobility of HBB trainers and providers, if trained providers are utilizing the HBB skills and to know the degree of on-going peer training and mentoring occurring after completion of training.
Methods: Health care workers (HCW) from rural South East, Nigeria received one day training on HBB by trained facilitators. All HCW received pre and post OSCEs evaluating baseline knowledge and performance prior to and after the workshop. Participants were surveyed 1 year after completion of their training using a 10 item questionnaire.
Results: Of the 72 HCW trained, only nine received prior neonatal resuscitation training. Most (99%) reported use of HBB skills; drying and positioning were the most used method (86%) followed by suctioning (76%) while BMV use reported 0%. The reasons for this included lack of equipment and attrition of skills. One year after the training 100% of the facilitators remained in the original place of work while 53% of those trained had moved to other facilities where HBB skills and knowledge were not utilized.
Conclusion: There was significant trained health worker mobility within a year of training. Due to lack of HBB training equipment, trained staff had limited impact in their new places of work as ongoing training and mentoring of new hires was not being done.

Neurology

OD301
Sleep Habits and Sleep Problems Of School-Aged Children In Ile-Ife, South Western Nigeria

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Introduction: Sleep is an important physiologic function required for an optimal cognitive, social, and emotional development of children. Early school start times has been established to have adverse effect on sleep in children while interventions involving delaying school start times have improved sleep outcomes in children. However, there is a dearth of studies on the impact of school start times on sleep in African children. Thus, this study sought to determine the sleep pattern and problems of elementary school pupils in South-western Nigeria and their relationship with school start times.
Methods: This descriptive cross-sectional study involved primary schools in Ile-Ife, South-western Nigeria. The children were recruited from selected schools using multistage sampling technique. The Children's Sleep Habits Questionnaire (CSHQ) was used to assess the sleep habits and problems of the children while the school start times was obtained from the School principals and the arrival time in school was obtained from the children and their parents.
Results: 148 children attending four schools were studied. The mean±SD time in bed (TIB), bed time, rise time and school arrival time of the respondents were 8.8±1.2hours, 9.1±0.9pm, 5.9±0.9am and 7.6±0.5am respectively. About half (41.2%) of the respondents had total score > 41 on CSHQ which suggests the presence of sleep disturbance in them with a higher percentage in the bedtime resistance subscale. There was no significant association between the total score on CHSQ and the school start time as well as the TIB. However, total score on CSHQ suggesting presence of sleep problems was significantly higher in respondents attending private schools (p = 0.015) and those who had perceived trouble sleeping (p = <0.017).
Conclusion: Sleep disturbances are present in Nigerian children. Further studies using polysomnography is recommended to confirm the presence of sleep disorders. Education of parents on healthy sleep hygiene may help to improve sleep in the children.

OD302

First anti-epileptic drug medication and outcomes after the first 6 months of treatment in a paediatric neurology service in Nigeria

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Background: Children in the developing world are disproportionately affected by epilepsy and access to appropriate anti-epileptic drugs (AED) is limited. There have been increasing efforts in reducing the epilepsy treatment gap in Africa.
Objectives: To evaluate the AED prescription pattern and the seizure outcomes in the first 6 months of therapy.
Methods: All new cases of epilepsy seen in the Paediatric Neurology clinic, University College Hospital, Ibadan, Nigeria were prospectively followed for a minimum period of 6 months. Detailed seizure history, EEG, with/without neuroimaging were obtained to diagnose and classify epilepsy.
Results: 386 children with epilepsy were enrolled. Age at first epileptic seizure ranged from 1 month to 15 years, median 3 years. Epilepsy was generalised in 241 (62.4%) and focal in 145 (37.6%). Sixty-eight (17.6%) and 53 (13.7%) children had a history of neonatal seizures and previous episodes of status epilepticus respectively. The leading AEDs prescribed as first treatment were carbamazepine 215 (55.7%) and sodium valproate 131 (33.9%), with use of phenobarbitone in 22 (5.7%). By the end of the first 6 months of treatment, 85 (22.0%) children had a change in AED and 207 (53.6%) remained on monotherapy. Children with associated neurological co-morbidities were more likely to have a change from the first AED prescribed by 6 months of treatment ($p<0.001$).
Conclusion: Carbamazepine and sodium valproate are the leading AEDs used as first line treatment in our service. One in five children in our cohort would require a change of AED within the first 6 months of therapy.

OD303

Primary Stroke Prevention In Nigerian Children With Sickle Cell Disease: A Decade Of Routine Transcranial Doppler Screening In A Resource-Poor Country

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Background: Sickle cell disease (SCD) is the leading cause of stroke in Nigerian children. Routine transcranial Doppler ultrasonography provides a window of opportunity for primary stroke prevention.
Aims: To evaluate the effectiveness of our TCD programme and the incidence of stroke in children with SCD following the introduction of routine TCD screening as part of the comprehensive care of children with SCD in our centre.
Methods: A prospective longitudinal study. All children with SCD offered routine TCD screening since July 2009 were carefully followed and outcomes documented.
Results: Five hundred and seventy-four children had TCD examinations over the 9-year period and a total of 2,345 TCD examinations were performed. Duration of follow up ranged from 3 months to 9 years. Stroke risk was classified as standard, conditional and abnormal risk in 354 (61.7%), 156 (27.2%) and 64 (11.1%) respectively. None of the caregivers consented to chronic transfusions. One hundred and seventy-eight children with elevated TCD velocities were compliant on hydroxyurea (HU), with adverse drug reaction in one (0.2%) child. There was one stroke event in the cohort, giving an incidence of 1.7/1,000. All the children on HU had sustained reduction in their TCD velocities.
Conclusion: Routine TCD for primary stroke prevention in SCD represents a cost-effective intervention even in resource-constrained settings. Routine TCD screening with the administration of HU in children with elevated TCD velocities has resulted in a drastic reduction in the burden of childhood stroke due to SCD in Ibadan, Nigeria in the last decade

OD304

Intelligence Quotient of Neurologically impaired children Attending Neurology Clinic in a Nigerian Tertiary Institution

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Background: The need to identify the intellectual capability of Neurologically impaired children which dictates their educability can be estimated through their intelligence quotient (IQ). Draw a man test for IQ estimation is available, easy and has been validated in Nigeria.
Method: Through a prospective, cross-sectional study that lasted 12 months (January-December, 2011), children aged 4 years and above without severe motor/ sensory deficit attending Neurology clinic were recruited. Routine clinic care was given after which they were requested to draw a person. The parents or care givers were instructed not to make any suggestion or hint, and no time limit was given. Their drawings were assessed using the 52 parameters of Ziler and interpreted accordingly. Ethical procedures were adhered to. Analysis was done using SPSS version 16 and an interactive calculation tool for chi-square tests of goodness of fit and independence.
Results: Seventy-five (45 male, 30 female) children met the inclusion criteria. Their clinical conditions were

Epilepsy 48 (64%), Cerebral Palsy 6 (8%), ADHD 5 (6.7%), Down Syndrome 4 (5.3%), Speech/Hearing impairment 3 (4.0%), Hypothyroidism 2 (2.7%) and 7 (9.3%) others. Their ages ranged from 4 years to 16 years (mean±SD = 9.7± 3.8years). Their IQ distribution were Normal 4 (5.3%), Borderline 12 (16.0%), Mild Mental Retardation 16 (21.3%), Moderate Mental Retardation 19 (25.3%), Severe and Profound Mental Retardation 24 (32.0%).
Conclusions: Ninety-six percent of the study population had IQ below normal. Epilepsy was the commonest condition seen in the Paediatric Neurology clinic and all categories of IQ are seen among children with epilepsy.

OD305
Paediatric Neuromuscular Disorders in Ile-Ife: A Three-Year Review

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Background: Neuromuscular disorders are disorders affecting the motor unit. Therefore, these disorders comprise of diseases affecting the anterior horn cells, peripheral nerves, neuromuscular junction as well as the muscles.
Objectives: To describe the pattern of presentation, clinical presentation and challenges with the management of children with neuromuscular disorders in Ile-Ife.
Methods: We recruited children presenting to the Paediatric Neurology Clinic of the Ife Hospital Unit of OAUTHC with clinical features suggestive of neuromuscular disorders consecutively. Data obtained included biodata, duration of symptoms, predisposing factors, investigation results and diagnosis.
Results: Twenty patients were recruited during the three-year period of the study with their ages ranging between fourteen days to fifteen years. Peripheral neuropathy was the most common type of neuromuscular disorder as it was seen in 13 (65 %) of the patients out of which 92% had mononeuropathy. The forms of mononeuropathy seen included sciatic nerve palsy {9 (45 %)} and Erb's palsy 3(15 %). The only patient with polyneuropathy had Gullain-Barre syndrome. Myopathies were seen in four patients comprising of two cases of Duchenne Muscular dystrophy and two cases of congenital myopathy while one patient had Myasthenia gravis. Investigations done included muscle biopsy and serum creatinine kinase assay as appropriate. However, electromyography and nerve conduction velocities were not done in any of the patients due to its non-availability.
Conclusion: Neuromuscular disorders are seen in children though the spectrum and risk factors often differ from adults. There is a need to improve awareness and provide resources needed for prompt diagnosis.

OD306
Severe Juvenile dermatomyositis with normal muscle -derived enzymes in a Nigerian girl

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Background: Juvenile dermatomyositis (JDM) is a rare autoimmune myopathies occurring in children less than 16 years old with. It is distinguished by proximal muscle weakness and a characteristic rash. Very few cases have been reported in the Black Africans from JDM registry report. Although not all enzyme rise with inflammation in an individual, alanine aminotransferase is most commonly elevated. Finding of lymphoid structures in muscle biopsy portends severe disease. A 14-year-old Nigerian girl with clinical and histopathologic features of severe JDM is presented here.
Objective: To heighten the index of suspicion of JDM in Black Africans
Case Report: A 14-year-old girl with 3 years history of body rashes, rash on the eyelids, swelling around the eyes, and 1 year history of proximal muscles weakness with inability to walk and difficulty raising the arms. There were joint pains, swelling, stiffness, and hair loss. Examination revealed a chronically ill child with heliotrope rash around eyelids and alopecia. Generalized scaly skin, areas of desquamation and ulceration, thickened palms with Gottron papules on the knuckle, elbow and knee joint contractures. Power was 3 in the proximal upper limbs but normal in distal muscles. Alanine aminotransferase 33IU (10-46), aspartate aminotransferase 44 IU (10-46), ESR 108mm/hr (0-20), muscle biopsy showed foci of perivascular lymphocytic infiltration with plasma cells. Diagnosis of JDM was made using Bohan and peter criteria. High-dose pulse intravenous methylprednisolone, daily oral prednisolone, weekly methotrexate, calcium and vitamin D supplements, folic acid and physiotherapy were commenced.

P001
Infantile Fibrosarcoma: A Rare Childhood Malignancy In A Nigerian Child

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Background: Infantile Fibrosarcoma is a rare malignant tumour of infancy that is seen in children below the age

of one year. It occurs most frequently in the extremeties. Surgical resection is usually curative and chemotherapy is active against gross residual disease.
Case Presentation: We report the case of a three-month old female who presented with swelling of the right calf noticed at two weeks of life. Swelling progressively increased in size with no associated history of trauma, fever or weight loss. Pregnancy and delivery history were uneventful. Examination showed right calf with a mass measuring 25cm in diameter and the normal left calf measuring 17cm in diameter (measurements taken from a point 7cm from the lateral malleolus). The mass was firm, non-tender and attached to the underlying structure. Other examination findings were essentially normal. Doppler ultrasound showed increased vascularisation of the mass as well as encased blood vessels (arteries and veins) of the right calf. Tissue histology showed malignant mesenchymal proliferation and numerous mitotic figures in keeping with infantile fibrosarcoma. Immunohistochemistry done also confirmed the diagnosis. She had surgical excision of the tumour and was subsequently commenced on chemotherapy for the residual tumour masses with blood vessels.
Conclusion: Although rare, it is important to consider infantile fibrosarcoma as a differential diagnosis of soft tissue mass in infants and even in children. Surgical excision of tumour mass remains the mainstay of treatment. However, chemotherapy is necessary for inoperable or residual tumours.

P002

Nutritional Status of Children and Adolescents with Sickle Cell Anaemia In Gwagwalada, Abuja

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Background: Sickle cell anaemia is known to be associated with growth failure. It's multi-systemic manifestations potentially affects growth leading to wasting and stunting. Individuals with SCA have been found to weigh significantly less when compared with those with HbAA genotype. Frequent vaso-occlusive crises lead to decrease appetite and consequently growth retardation. Also, increased haemolysis in SCA results in increased metabolic requirements for erythropoiesis and consequently consumption of nutrients and thus increase risk for poor growth.
Aims: To determine the nutritional status of children and adolescents with SCA in Gwagwalada, Abuja using their anthropometric parameters.
Methods: A cross-sectional descriptive study of 165 children and adolescents aged 2 to 17 years with SCA. Their weight were read to the nearest 0.5kg, also, height were taken to the nearest 0.1 centimetre. Their height for Age Z-score and Body Mass Index for Age Z-score were determined. They were categorised as having normal height, very tall or stunted and, normal weight for height, overweight or wasted respectively.
Results: The majority of the subjects 134(81.2%) had normal weight for height, while 3(1.8%) were overweight, 23(13.9%) were wasted and another 5(3.0%) were severely wasted. One hundred and forty-four (87.3%) were of normal height, only 1(0.6%) was very tall, 15(9.1%) were stunted while another 4(2.4%) were severely stunted.
Conclusion: Stunting was documented in 11.5% of children and adolescents with SCA while wasting and overweight were seen in 16.9% and 1.8% respectively. There is need to improve the nutritional status in this cohort of children and adolescents with increased potential risk for nutritional deficits.

P003

Knowledge and Awareness of Sickle Cell Genotype Among Adolescents in Enugu, Nigeria

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Introduction: Adolescence appears to be the best time to improve the knowledge and awareness of personal genotype. It is necessary to first assess their baseline knowledge and awareness in order to identify the existence or otherwise of gap to be filled.
Objective: To assesses the knowledge and awareness of sickle cell genotype among adolescents.
Methods: In four hundred and nine senior students of Federal Government College, Enugu who gave assent, a pretested, structured questionnaire was administered on socio-demography, awareness of genotype and genotype in those aware, perception of Sickle cell trait and Sickle Cell Anaemia (SCA). Thereafter, the school's admission records were used to extract each student's actual genotype to compare with the stated genotype. The knowledge scores were summed on a binary basis with 1 point assigned for a correct answer while zero was given for an incorrect response.
Results: Majority (94%) of the respondents reported being aware of their genotype and two-thirds had the awareness during school admission. In specific knowledge of sickle cell, 89.7% of the participants miscalculated the probability of having a child with SCA in married carrier couple and 71.9% misidentified the proportion of Nigerians with sickle cell trait. Only few of the adolescents (7.3%) had high sickle cell knowledge scores. Age, gender, class and socio-economic class have neither significant association nor correlation with knowledge of sickle cell.

Conclusion: There is limited knowledge of sickle cell among adolescents in the secondary school. There is need to identify effective approach to increase their knowledge.

P004

Impacts of Sociobiologic Factors on The Neuro-Cognitive Functions of School Children with Sickle Cell Anaemia

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Background: Sickle cell anaemia (SCA) may impair attention, memory, intelligence and academic performance. This study assessed the cognitive function (intelligent quotients, IQ and academic performance) of children with SCA and determine the influence of socio-biologic factors on this neurocognitive functioning.
*Methods:*Academic performance, average sessional academic and IQ scores were determined in children with SCA and matched controls. Influence of social, clinical, nutritional and haematological data was assessed using bivariate and multivariate analyses.
Results: More controls than subjects obtained high scores in the Academic Performance Questionnaire, p=0.003. The mean sessional score was also higher in the controls (73.9±20.2%) than SCA (63.4±26.1%), p=0.028. However, there was no difference in their mean IQ scores (64.8±14.6% vs. 64.6±19.6%, p=0.733). Among children with SCA, age, class and disease severity scores had negative correlation with average sessional scores (p=0.004, 0.031 and 0.038 respectively). Duration of school absenteeism and IQ scores however positively correlated with average sessional scores, p=0.009 and 0.007 respectively. The type of school also influenced academic performance (p=0.008). Gender, social class, nutritional status and haematological data did not influence academic performance or IQ of the subjects. Long school absenteeism (OR=4.1, 95%CI =2.2–8.4, p=0.003) and low IQ (OR=2.9, 95%CI =1.3–7.7, p=0.024) independently predicted poor academic performance. However, none independently predicted low IQ.
Conclusion: Children with SCA performed less academically, though their IQ was comparable to controls. Age, type of school, class of participants, disease severity and duration of school absenteeism influences cognition of children with SCA.

P005

Hepatitis B virus infection among children with Sickle Cell Disease at the Ekiti State University Teaching Hospital, Ado-Ekiti

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Background: Sickle cell disease (SCD) is characterized by acute clinical symptoms which may include severe anaemic episodes requiring blood transfusion. The frequent use of blood products for patients with sickle cell diseases may put them at risk of contracting Hepatitis B virus (HBV) infection especially if such blood products are not properly screened. HBV infection may result in cirrhosis of the liver and liver cell cancer. This study determined the prevalence of HBV infection among children with sickle cell disease in comparison with age-matched controls at the Ekiti State University Teaching Hospitals (EKSUTH), Ado-Ekiti.
Methods: The study was descriptive cross sectional that involved 116 SCD patients and aged matched controls attending paediatric clinics at EKSUTH. HBV screening was by Enzyme Linked Immunosorbent Assay method (Hepatitis surface antigen WB (Multi) kits by Standard Diagnostic INC. Republic of Korea.
Results: The mean ages of the SCD patients and controls were 8.35± 4.50 years and 8.92± 3.25 years respectively. The seroprevalence of Hepatitis B infection among the children with sickle cell disease and control was 0.86% each (p =1.00). There was a statistically significant difference in the transfusion rate among SCD patients (31.0%) when compared with controls (12.9%) (p=0.001). Most (98.3%) of the SCD patients and controls were fully vaccinated against Hepatitis B infection.
Conclusion: The seroprevalence of Hepatitis B infection among SCD patients and controls is low. This may be due to the protective effect of high Hepatitis B vaccination rate and high quality of care among our study population.

P006

Dipstick urinalysis as a predictor of acute kidney injury (AKI) and mortality among children with Lassa fever (LF)

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Background: Many facilities in the resource-poor settings where LF is endemic lack resources for the investigation of renal function or abstain for fear of nosocomial transmission of infection. Dipstick urinalysis (DUA) could be a readily available diagnostic and prognostic tool in this regard but there is a lack of reports on its utility. The study investigated the correlation between the prevalence of AKI, case fatality and DUA results.
Methods: Retrospective observational study of a cohort of 58 children with confirmed LF. DUA was done using standard commercial strips while AKI was assessed using KIDGO criteria. Groups were compared using $\chi 2$ or Fisher's exact tests.
Results: Overall, 27/58 (47%) had full data on both DUA and AKI status; 12 had hematuria plus proteinuria (H/P), 11 had hematuria (H, n = 5) or proteinuria (P, n = 6) and 4 neither. Nine of the 12 with H/P versus 4/15 with H, P or neither [OR (95% CI) = 8.25 (1.45, 46.85), p = 0.013] and 2/11 with H or P [OR (95% CI) = 13.5 91.8, 101.1), p = 0.006]had AKI. Six of 12 with H/P versus 2/15 with H, P or neither [OR (95% CI) = 6.5 (1.00, 42.17), p = 0.099 and 8/13 with versus 0/14 without AKI died (p = 0.001).
Conclusion: Hematuria with proteinuria correlates with both the risk of AKI and death in LF and could be a useful guide on the need for referral for specialized care.

P007

Ectopic Elimination of Schistosoma Haematobium Ova: A Case Report

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Background: Ectopic elimination of ova of *Schistosoma haematobium* via stool is rare but does occurs either due to 'Spill over' effect or the expression of interspecific interactions and heterospecific mating between different species of schistosomes. This report is to highlight the possibility of excreting ova of Schistosoma haematobium via unusual route.
Methods: A Case Report of a 9-year primary school boy is presented
Results: A 9-year old boy presented with fever, abdominal pain, vomiting and terminal haematuria. He had history of waddling in streams. Other children living in the same area as the patient also had history of passage of blood in urine. Urine microscopy and stool microscopy both showed ova of *Schistosoma haematobium*, and urine culture yielded Klebsiella spp. He was managed for Schistosoma haematobium infection with superimposed Urinary Tract Infection. He was treated with praziquantel and antibiotics. The presence of S. haematobium ova in the stool is an ectopic elimination.
Conclusion: The occurrence of ectopic elimination of Schistosoma ova should guide teachers, clinicians and laboratory scientist in the management of this interesting phenomenon.

P008

Link Between Maternal Body Mass Index And Child Nutritional Status In Ekom Iman, Nigeria: Implications For Child Health Care

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Background: Maternal BMI could be a proximate determinant of child nutritional status. The link between mothers and their children's nutritional status has not been fully explored more so in Ekom Iman , Etinan, Local Government Area (EIE,LGA). This study was conducted to examine the relationship between maternal and child nutritional status in EIE, LGA, Akwa Ibom State, Nigeria.
Methods: A three-stage sampling technique to select 297 mother-child pairs, an interviewer-administered semi-structured questionnaire to collect information on socio-demographic characteristics and calibrated weighing scale and measuring bar to take anthropometric measurements were utilised. Mothers' BMI and children's z-scores of Weight-for-Age (WA) and Height-for-Age (HA) were determined using WHO 2006 standards. Data were analysed using descriptive statistics, Chi-square and logistic regression tests at 5% level of significance.
Results: Mothers' age was 26.1±5.5 years, 14.1% were underweight while 11.8% were obese. Age of children was 40.3±13.6 months and prevalence of wasting, underweight and stunting were significantly higher among children of underweight than normal weight mothers (23.8% versus 9.1%, 35.7% versus 15.3% and 31% versus 19.3% respectively). The likelihood of having normal WA was higher in children whose mothers had normal weight (OR: 2.66; 95% CI: 1.02-6.94).Children of overweight mothers were six times more likely to have a higher HA than those of underweight mothers (OR: 6.12; 95% CI: 1.19-31.45).
Conclusion: Mothers' Body Mass Index is an important determinant of children's nutritional status. Programmes to improve children's nutritional status should also address maternal nutrition.

P009

Simultaneous Occurrence of Papulonecrotic Tuberculid and Erythema Induratum in A Child: Case Report and Review of the Literature

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Background: Tuberculosis (TB) is a global public health concern, especially in developing countries. Hypersensitivity reactions to TB, (tuberculids) occur rarely and their coexistence is even rarer in children. Tuberculids can be papular (papulonecrotictuberculid), nodular [erythema induratum (EI)], micropapular (lichen scrofulosorum).
Methods: Case report and MEDLINE (Pubmed) search of the English literature using the words 'papulonecrotic tuberculid', 'simultaneous occurrence' and erythema induratum'.
Results: A 4-year-old boy presented with a skin eruption on the arm, abdomen and ears, of two weeks' duration. Reddish bumps later appeared on the legs. In addition, the patient had cough, loss of appetite, nausea and malaise. Examination revealed two types of skin lesions. The first consisted of few erythematous papules, with central necrosis, on the lateral aspect of the left upper arm, ear helices and trunk. There were also several symmetrically distributed non-tender erythematous nodules, some with necrosis, on the shins and calves. Histology of the papules revealed an intense wedge-shaped necrosis with perivascular inflammation in the dermis. Biopsy of a leg nodule showed extensive dermal and fat necrosis with granulomatous lymphocytic infiltration. These findings are compatible with the clinical diagnosis. Hilar and paratracheal adenopathy was found on Xray and sputum was positive, by polymerase chain reaction (PCR), for *Mycobacterium tuberculosis* DNA. The patient was commenced on anti-tuberculosis medications and subsequently, the lesions have improved.
Conclusion: We report the concomitant occurrence of PNT and EI, with confirmed TB, with unusual clinical features in a young child.

P010

Proteinuria and Hematuria in Apparently Healthy Primary School Children in Sabon Gari Local Government Area of Kaduna State, Nigeria

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Background: Proteinuria and /or haematuria may be a transient finding in children but when persistent may indicate underlying renal disease. Asymptomatic children with urinary abnormalities may progress to End Stage Renal Disease (ESRD). Early detection of renal diseases through screening could help reduce morbidity, mortality and associated health costs. This study aimed to determine the prevalence of proteinuria and haematuria in apparently healthy children in Sabon Gari Local Government Area of Kaduna State.
Methods: One thousand, four hundred and thirty-five (1435) apparently healthy primary school children were enrolled in the study using systematic stratified sampling method. Urinalysis using early morning urine specimen was done and those with positive results had repeat urinalysis.
Results: Urinary abnormalities were found at first screening in 134 (9.3%) subjects with 87 (6.1%) having isolated proteinuria (IP), 36 (2.5%) isolated haematuria (IH) and 11 (0.8%) combined proteinuria and haematuria (CPH). Isolated haematuria was significantly associated with age, gender and family socioeconomic class. Haematuria increased with increasing age of subjects. (χ^2=23.09, p=<0.0001), more in males (4.0%) than females (1.1%) (χ^2=12.42, p=0.0004), and more in children from lower socioeconomic class (3.6%) (χ^2=8.06, p=0.018).
Conclusion: Significant urinary abnormalities occur sufficiently in apparently healthy school children. Routine urine screening may be justified as this would help in early identification of those with possible renal abnormalities.

P011

Posterior Urethal Valve at A Paediatric Nephrology Unit in South Western Nigeria

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Background: Posterior urethral valve (PUV) is the most severe form of obstructive uropathy in the paediatric population occurring exclusively in boys. Management of posterior urethral valves is challenging in many parts of sub-Saharan Africa. To provide data on Posterior urethral valves in sub-Saharan Africa, we reviewed the cases of PUVs seen over a 21-month period.
Methods: Information was obtained from the paediatric nephrology unit data base of children admitted with a diagnosis of posterior urethral valve between March 2016 and December 2017.
Results: Twenty-five cases were seen during the study period. Their ages ranged from 3days to 13 years (median age24 months). Eight (32%) presented during the first year of life and of this number, one (12.5%) presented in neonatal period. The commonest cause of hospital admission was urosepsis, 37.5% of the urine cultures however yielded no growth, and half of the cases were due to *Pseudomonas aeroginosa*. 9(32.1%) had surgical intervention (Mohan's valve ablation or Endoscopic Valve ablation). Thirteen (%) had renal failure. Three of the subjects received dialysis and of this number, two had haemodialysis. The in-hospital mortality rate was 12.0%
Conclusion: PUVs are not uncommon and remain an important cause of urosepsis and renal failure in the paediatric population in sub-Saharan Africa. Efforts to further improve outcomes are needed.

P012

Successful management of two extremely low birth weight babies using simple techniques at LAUTECH Teaching Hospital, Ogbomoso – A Case

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Background: Extremely low birth weight (ELBW) infants are babies born with birth weight less than 1000g and are usually extremely preterm babies born earlier than the gestational age of 28 weeks.
Statement of problems: The burden of prematurity is high globally; this is worse off in the developing countries with poor resources to take care of these babies. Prematurity accounts for as high as 28% of neonatal mortality globally with 90% of these occurring in the developing countries with poor resources. Survival of the preterm babies particularly the ELBW babies has improved in the developed countries with the advent of improved technology in the neonatal intensive care unit and the introduction of antenatal steroids and surfactants. This is, however, not the same in developing countries where mortality of ELBW babies is still very high.
Cases: We report two cases of ELBW babies weighing 650g and 700g delivered at the gestational ages of 26 weeks and 30 weeks respectively which were successfully managed at LAUTECH Teaching Hospital, Ogbomoso. Simple techniques like minimal handling, buccal colostrums, intensive phototherapy and improvised technologies, like the bubble CPAP were employed with monofilament bulb to provide warmth as part of incubator care. They were discharged at 14weeks and 10 weeks chronologic age respectively at weight of 2kg and 1.6kg respectively with no obvious neuro-developmental abnormalities.
Conclusion: We conclude that, though there are enormous challenges in the management of ELBW babies with resultant high morbidity and mortality, when particular attention is paid to simple techniques like minimal handling, buccal colostrum, intensive phototherapy and with improvised technologies, like the bubble CPAP and monofilament bulb to provide warmth as part of incubator care, we can reduce the morbidity and mortality of ELBW babies in resource poor settings.

P013

Retention in Care of HIV-infected Children at the Paediatric HIV Treatment Programme, UCH Ibadan: A 7 Year Cohort

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Introduction and Objectives: Retention in care is a common challenge in paediatric HIV treatment programmes. This is often aggravated by the high orphan rate among them. This study described the retention in care status in a large cohort of HIV-infected children and the effect of orphan status.
Methods: This was a retrospective cross-sectional study of a large cohort of HIV-infected children receiving care at the Paediatric HIV programme at the University College Hospital, Ibadan. An electronic data base was interrogated to ascertain retention status of HIV-infected children enrolled at the clinic and their orphan status. Results were summarized using descriptive statistics.
Results: A total of 892 HIV-infected children were enrolled at the study site over the 7-year period studied. Most were males 476(53.3%) and the mean (SD) age of enrolled children was 90.8(58.8) months. Of the enrollees, 365(40.9%) were still in care, 356(39.9%) were on antiretroviral therapy (ART) and 9(1.0%) were yet to commence ART. 71(8.0%) had died, 2(0.2%) were defaulting their due clinic appointment, 85(9.5%) had been transferred, 43(50.6%) of these to adult ART service and 42(49.4%) to other HIV treatment programmes. 369 (41.4%) were lost-to-follow-up, of these 140(37.9%) were yet to commence ART and 229(62.1%) were already on ART. Among 460 children with documented orphan status, 53(11.5%) orphans were lost-to-follow-up, compared to 46(10.0%) non-orphans.
Conclusion: Retention in care at the paediatric HIV programme was low. A significant proportion were lost to follow-up, among those on ART and those yet to commence ART. Orphan status might be a contributing factor.

P014

Neonatal Hypoglycaemia: Prevalence and Outcome in Dalhatu Araf Specialist Hospital (DASH), Lafia

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Background: Hypoglycaemia is one of the recognized medical emergencies in a neonatal unit. The diagnosis of neonatal hypoglycaemia requires a high index of suspicion due to the fact that it presentation is protean. Early diagnosis and treatment could prevent long term complications, and death. The aim of the study was to determine the prevalence of hypoglycaemia and the associated risk factors among neonates admitted into the neonatal unit of DASH, Lafia.
Methods: This was a descriptive cross-sectional study conducted between January 2018 and June 2018. Neonates admitted into the unit with various medical conditions had their random blood sugar (RBS) done at presentation using rapid glucose test strip mounted on ACCU-CHEK (Active) glucometer device. Neonatal clinical parameters, maternal clinical parameters and maternal socio-demographics were recorded based on a predesigned proforma.

Results: A total of 220 neonates were studied out of which 67 neonates had hypoglycaemia (≤2.6 mmol/l), giving a prevalence of 30.5%. Hypoglycaemia was significantly associated with preterm neonates, neonates who were not on oral feeds at presentation and survival outcome ($p<0.05$).
Conclusion: Hypoglycaemia is a common emergency in the neonatal unit. Preterm neonates and neonates who were not on oral feeds at presentation were particularly at risk. Mortality was strongly associated with hypoglycaemia.

P015

Sickle Cell Hepatopathy: Prevalence and Presentation in Children with Sickle Cell Anemia seen in Enugu State University Teaching Hospital, Parklane, Enugu

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Background: Sickle cell hepatopathy (SCH) refers to the range of hepatic pathologies from a variety of hepatic insults in Sickle Cell Disease (SCD) patients related to sickling, multiple transfusions, chronic haemolysis and less commonly hepatic infarcts, abscesses, etc. There is paucity of published literature on the clinical conditions which constitute this entity.
This study aims to evaluate the clinical and laboratory evidence of SCH in paediatric SCA patients seen in this tertiary health institution in South-East Nigeria.
Methods: The study was a prospective review of 100 patients on regular follow-up; presenting with icteric and anicteric hepatomegaly or right hypo-chondrial pain. History of multiple blood transfusions and frequent haemolytic crises were obtained. Complete blood count and blood film, liver function test (LFT), abdomino-pelvic ultrasound scan (USS), hepatitis virus serology and serum ferritin were requested.
Results: Thirty (30%) patients had clinical features mimicking SCH. Male-to- female ratio was 1:1. Only 10/30 (33.3%) patients had complete laboratory results. One (10%) had positive history of frequent blood transfusions. Vaso-occlusive crisis (VOC) was the most common crisis. All had hepatomegaly with varying degrees of jaundice, while 2/10 (20%) also had right upper quadrant (RUQ) pain. Nine of them (90%) had evidence of haemolysis on blood film with no significant haemoglobin (Hb) drop from steady state levels. Mean Hb concentration was 6.7g/dl. One patient (10%) had evidence of acute hepatic sequestration syndrome (AHSS). A patient (10%) had LFT suggestive of acute intra-hepatic cholestasis (AIHC) and increased echogenicity on USS. Eighty percent (8/10) had mild-to-moderate derangement of LFT. Only one had evidence of acute hepatic sickle cell crisis (AHSCC) on USS. There were no evidence of hepatitis B and C infections, iron overload, gallstones and biliary obstruction.
Conclusion: Abnormal liver function is common in SCA even in the absence of liver disease. Sickle cell hepatopathy is rare in children but may present as AHSCC, AHSS and AIHC.

P016

Prevalence, Causes andOutcome of Heart Failure in Children Seen in Irrua Specialist Teaching Hospital (Isth), Edo State

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Background: Heart failure is an important cause of morbidity and mortality in children in Nigeria. Over the years, there has been little or no change in the pattern and outcome of heart failure among these children despite advances in diagnoses and treatment of causes of heart failure. Most causes of heart failure in Nigerian children are preventable and treatable, especially at the early stages.
A study of the cases of heart failure presenting in the Emergency Paediatric unit of ISTH over a 36-month period (January 1st 2011 to December 31st 2013)was undertaken. The aim is to document the prevalence, causes and outcome of heart failure in these children, and create a baseline for future studies.
Methods: The study was a retrospective study of all cases of heart failure in children, aged 1 – 180 months, diagnosed at the children emergency room (CHER) of ISTH from January 1 2011 to December 31 2013, inclusive. Their biodata, presenting features and outcome were collected and analyzed by simple statistical methods.
Results: A total of 2604 children aged one month to 15 years were seen over this period in the CHER of Irrua Specialist Teaching Hospital (ISTH). Two hundred and thirty seven (9.1%) of them had heart failure. This number was made up of 144 males and 93 females, giving a male-to-female ratio of 1.5:1. The ages of the children ranged from1 month to 180 months(15 years) and the mean age was 32.85±37.03months Causes of heart failure were anaemia(127,53.57%), acute respiratory infection (ARI)(77,32.49%), congenital cardiac diseases (15,6.33%), acquired heart diseases(9,3.8%), sepsis (8,3.38%) and acute glomerulonephritis (1.0,0.42%).Most cases of anaemic heart failure were due to malarial anaemia(109,45.99%) Twenty four (10.1%)mortalities were recorded among these patients during the period under review. Twelve children were discharged against medical advice and 3 were referred on request. The rest made complete recovery.
Conclusion: Heart failure still constitutes a huge disease burden in children in Nigeria. Most of the causes of heart failure are preventable. A lot need s to be done by physicians in terms of prevention, urgent diagnosis, prompt treatment and follow up if any positive change is expected in terms of morbidity and mortality in children with heart failure in Nigeria.

P017

Early Onset Hypocalcaemia Amongst Neonates In The University Of Port Harcourt Teaching Hospital

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Background: Hypocalcaemia in newborns is a potentially life threatening metabolic disturbance. The aim of this study was to determine prevalence of early onset neonatal hypocalcaemia (EONH) in neonates in the University of Port Harcourt Teaching Hospital (UPTH) and some predisposing Perinatal factors.
Methodology: This cross-sectional study was done in neonates seen in UPTH. Single serum ionized calcium levels in neonates aged 0 to 72 hours was determined by ion selective electrode potentiometer. Information on mother and baby were obtained using a structured proforma.
Results: Three hundred and eighty-four neonates were studied over six months. Two hundred and one (52.3%) were males. Mean age of 24 ± 19 hours and a median age of 18 hours. Two hundred and eighty-one (73.2%) were delivered at term with a mean gestational age of 37.99 ± 2.36 weeks. Mean birth weight was 3.15 ± 0.69 Kg.
The mean serum ionized calcium level was 1.24 ± 0.24mmol/l and lowest in neonates aged 25 – 48 hours (p=0.0001). Sixty-two neonates (16.1%) had hypocalcaemia with 12(11.7%) preterm and 50(17.8%) term babies. Seven (43.8%) severely asphyxiated babies had hypocalcaemia (p value=0.002). There was no statistically significant association between gestational age at birth, sex, birth weight and associated maternal morbidities with occurrence of EONH (p=0.61), (p=0.69, p =0.2, p=0.345 respectively). Fifteen (24.2%) neonates with EONH were symptomatic.
Conclusion: The prevalence of EONH in this study was 16.1%. Mean serum calcium level was lowest in babies aged 25-48hours. EONH was significantly commoner in neonates with severe birth asphyxia. Presentation was largely asymptomatic. Screening for early detection is advocated.

P018

Electrolyte Abnormalities in Hospitalized Under-Five Children with Acute Diarrhoeal Disease in Enugu, Nigeria

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Background: Dehydration and electrolyte imbalance are the major causes of morbidity and mortality in children presenting with acute watery diarrhoea. The aim of the study was to determine the electrolyte abnormalities in under-5 children hospitalized for acute watery diarrhoea in Enugu, Nigeria.
Methods: This was a cross sectional study in which under five children admitted for acute watery diarrhoea at the Enugu State University Teaching hospital were consecutively recruited. Relevant history and physical examination to determine their various hydration statuses were obtained. Electrolyte values were determined using standard protocols at the hospital laboratory and compared with standard reference. Data was analyzed using SPSS version 20.0, while the level of significance was set at $P < 0.05$.
Results: A total of 108 children aged 3-59 months were studied, with a male to female ratio of 1:1. Majority (101, 93.5%) were under 24 months of age. Metabolic acidosis was the most common electrolyte abnormality followed by hyponatraemia, hypokalaemia, hyperchloraeamia, hypochloraemia and hypernatraemia either isolated or in combination. Acidosis, was significantly associated with age less than 12months ($p = 0.014$), while hyponataemia was significantly associated with diarrhoea duration more than 7 days ($p = 0.044$). There were 13 deaths giving a case fatality rate was 12.04%. Hypernataemia ($p = 0.037$) and hypokalaemia ($p = 0.004$) were significantly associated with mortality.
Conclusion: Electrolyte abnormalities are common in children with acute diarrhoea. There is need for mandatory testing of electrolyte status in children presenting with diarrhoea

P019

Systemic Lupus Erythematosus in A Nigerian Child: Challenges of Diagnosis

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Background: Systemic lupus erythematosus (SLE) is a chronic autoimmune disease characterized by multisystem inflammation. It is uncommon in children and diagnosis may be challenging as highlighted in this report.
Case Report: An 11year old female adolescent presented with 3-week history of high grade fever, non-specific limb pain and widespread skin rash on the face, trunk and limbs. At presentation, she was pale with significant mandibular and axillary lymphadenopathy and presence of oral ulcers.
She was managed for sepsis with a possible drug eruption to keep in view SLE and was commenced on intravenous antibiotics. While on admission she did not respond to antibiotics as the symptoms persisted. She also convulsed and blood pressure was elevated on 5th day of

admission. Subsequent clinical findings and cardiovascular evaluation suggested a pericarditis and infective endocarditis. Serial blood cultures revealed no growth. Antinuclear antibody tests and other immunologic tests ordered could not be done because of financial constraints. Full blood count and X-ray of the joints were normal but ESR was elevated. As a last resort to make a definitive diagnosis of SLE, funds were raised for a lupus band test which showed lupus erythematosus cells on blood film and a skin biopsy revealed leukocytoclastic vasculitis, consistent with SLE. She was subsequently managed with high dose steroids with resolution of symptoms.
Conclusion: This report highlights the myriad features of SLE which can mimic other diagnostic entities. Necessary immunologic tests needed in diagnosis were not affordable. Making a definitive diagnosis helped in the successful management of this child.

P020

Knowledge, Attitude and Reporting Practices On Adverse Events Following Immunization Amongst Routine Immunization Service Providers in Primary Health Care Facilities of Sokoto State

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Background: Health workers at primary health care facilities (PHCs) are primarily involved with routine immunization activities including detection, reporting and management of Adverse Event Following Immunization (AEFI). To undertake such responsibilities effectively, they need to have good knowledge on AEFI and its management.
Methods: This descriptive cross sectional study was conducted among routine immunization health service providers (RISP) in PHCs of Sokoto State. A multistage sampling technique was used to recruit participants from all the PHCs in one selected local government from each of the three health zones of the State. A semi-structured self-administered questionnaire was used to collect relevant information from eligible participants. Data were entered into SPSS version 20.0 and analyzed.
Results: Of the 285 distributed questionnaires, 258 (90.5%) were duly completed and returned. There were 150 (58.9%) males and 108 (49.1%) females, giving M: F ratio of 1.4:1. Mean age of the respondents was 34.24 $\pm$ 8.06 years (Range =19-58years). The proportion of respondents with good knowledge (score $\geq$50%) on AEFI was 164 (63.6%) while those with fair (score 41-49%) and poor (score $\leq$40%) knowledge were 37 (14.3%) and 57(22.1%) respectively. Reporting practices were appropriate in 224 (86.8%) respondents. The most common method for reporting was by manual filing of AEFI forms. Some patients would however, not report an AEFI to avoid being blamed, feeling guilty or creating unnecessary anxiety to the patient. Duration of service (< 5years) was the only independent predictor of good knowledge on AEFI.
Conclusion: Majority of the RISP in the study area had good knowledge and reporting practices on AEFI. However, knowledge gap still exists; highlighting the need for continuous on-the-job training and retraining of these personnel.

P021

Socio-Demographic characteristics of Neonates with Severe Birth Asphyxia in Awka, Nigeria

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Background: Birth asphyxia is a common neonatal disorder, and is responsible for significant morbidity and mortality. Low socioeconomic status has been associated with increased risk of developing severe birth asphyxia. The objective of this study was to establish the relationship, between severe birth asphyxia and some socio- demographic variables of the affected neonates.
Methods: This is a retrospective study of 112neonates with severe birth asphyxia treated at Prime Specialist Children Hospital, Awka, from 1st Jan 2014 to 31st December, 2015.
Results: Out of 112 neonates with severe birth asphyxia used for the study, 60 were males, while 51 were females: giving a male: female ratio of 1.2:1. The age at admission ranged from 1hour to 1week, with a mean of 2days±1.3 days. 371 neonates with birth asphyxia were seen during the study period, (1st January, 2014 to 31st December, 2015). One hundred and twelve (30.2%), were categorized as severe; 60 were males, while 51 were females; giving a male: female ratio of 1.2:1. Majority of the neonates (67.7%) were delivered in hospitals. Maternity homes, and health centres accounted for 28% of the deliveries; but accounted for [61.9%] of the mortalities (P =0.028). Severe birth asphyxia increased with decreasing social class. (P = 0.028) Decreasing maternal age is associated severe birth asphyxia (P = 0.026).
Conclusion: Low socioeconomic status, decreasing maternal age and deliveries outside the hospital were significantly associated with severe birth asphyxia in Awka.

P022

An Audit of Some Prescriptions Written at the Lagos State University Teaching Hospital

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Background: A prescription is a legal document that should be carefully prepared. One of the duties of care which a doctor owes a patient is to write a drug prescription clearly, and failure to do so is negligence.
Methods: The study was prospective and correlational cross-sectional. Prescriptions which were presented over a period of three months at the fee-paying pharmacy of the Lagos State University Teaching Hospital were audited by comparing it with the World Health Organisation standard for good prescription. The data were analysed using the statistical package for social sciences (SPSS) version 21.0.
Results: A total of 611 prescriptions were audited. Only 70% indicated the age of the patients. The strength of drug was written in only 66.1%. The prescriber's name was written in 54%. Information for package label was documented in 4.3%, less than 20% had the initials or signature of the prescriber. In all, only 0.8% complied excellently, 65.8% were good, 29.8% were average while 3.6% rated poorly. The overall mean score of all the prescription was good (7-9) with no significant difference between the departments.
Conclusion: There is a need to develop a standard prescription policy at the Lagos State University Teaching Hospital that will help in reducing medication errors.

P023

Pattern and Outcome of Severe Malaria Among Children Managed at The Emergency Paediatrics Unit of a Tertiary Health Institution in North Central Nigeria

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Background: Severe malaria is a life threatening manifestation of malaria caused by protozoan parasite with asexual plasmodium falciparum being the culprit most times. It has remained a disease of public health importance in view of its contribution to morbidity and mortalities especially among children. The World Health Organization (WHO) affirms that more than 60% of malaria and its severe forms occurred in Africa and about 80% of its mortalities seen in the same region. This study set out to determine the prevalence of severe malaria, forms of severity as well as its outcome among children admitted at the Emergency Paediatrics Unit (EPU) of the Dalhatu Araf Specialist Hospital (DASH) Lafia North – Central Nigeria.
Methods: A retrospective descriptive hospital based study was done from 1st September 2017 to the 31st August 2018. Patients register and folders were used to retrieve some relevant information that included Demographic data, clinical signs and outcome.
Results: A total of 1040 children aged 18 years and below were admitted and managed. Males were 661 (63.6%) while females were 379 (36.4%) with M:F ratio of 1.7:1. Two hundred and six (19.8%) children were managed for various forms of severe malaria within the period, out of the overall admissions of 1040 within the same period. There were 84 mortalities within the period with severe malaria accounting for fifteen (17.9%). Cerebral malaria, Severe anaemia, Multiple convulsions without coma and Hypoglycemia accounted for 46.7%, 33.3%, 13.3% and 6.7% respectively.
Conclusions: Severe malaria still constitutes a major cause of morbidity and mortality in children. Delays at presentation due to ignorance and poverty are a key hindrance as well as delays at the health facility due to insufficient space, qualified personnel and facilities were contributory factors.

P024

Experiences of fathers of babies admitted into a neonatal unit (SCBU) in Port Harcourt, Nigeria

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Background: In time past mothers were regarded as sole caregivers of NICU babies, however the fathers' role is now increasingly being recognized. Mothers are involved in providing care such as feeding, hygiene, and kangaroo mother care. Fathers are usually called on for medical bills and usually enter the neonatal unit for observational visits. We explored experiences of father's whose infants were managed in, and had been discharged from the SCBU of UPTH, Port Harcourt, Nigeria.
Methods: This was a cross sectional study carried out in the neonatal clinic of UPTH over a period of 10 weeks. Participants were fathers who had brought their babies for follow up. Information obtained using interviewer administered questionnaires included biodata, occupation and experiences during their babies' stay in SCBU.
Results: There were forty participants. Eighteen (45.9%) babies spent 8-21 days in hospital. 33 (82.5%) fathers had family support. 25 (62.5%) found the experience stressful, 5 (12%) confusing, 4 (10%) frightening. Fourteen (35.1%) reported disruption to family life. Twenty-two (55%) reported disruptions in social activities like clubs and visitations. Eight (18.9) and 10 (27%) had problems at work and lost money respectively. In 27 (73%), the experience brought them closer to their partners, while 16 (43.2%), reported that less attention was given to other children. 33 (82.5%) received enough information about their babies, mostly from doctors (70%). Staffs were reported as friendly by 29 (78.4%)
Conclusion: Fathers found the SCBU experience stressful and need to be given more support in and outside the hospital.

P025

Comparative study of locally fabricated phototherapy machines in the management of significant neonatal hyperbilirubinaemia

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Background: One of the challenges of managing significant neonatal hyperbilirubinaemia in resource-poor settings is limited access to effective imported phototherapy machines hence the need to embark on a trial of appropriate technology.
Methods: A cohort of babies with significant hyperbilirubinaemia managed with locally fabricated phototherapy machines (2014-2016) were compared with historical controls managed with conventional phototherapy machines (2007-2010) for severity of hyperbilirubinaemia and requirements for Exchange Blood Transfusion.
Results: A total of 96 babies in the subject group and 202 babies in the control group were studied. The babies in both groups were comparable in age, sex and gestational age. The proportion of babies with peak TSB >30mg/dl was significantly higher among the controls compared to the subjects ($p < 0.001$). The interval between the commencement of phototherapy and the peak TSB was greater than 1 day among 30.2% (29/96) subjects compared to 74.3% (150/202) babies in the control group ($p < 0.001$). The mean duration of phototherapy was significantly shorter for the subjects compared to the controls; 5.4 ±2.6 days Vs 8.5 ± 2.7 days ($p <0.001$). EBT was performed for 38.5% of the subjects and 51.5% of the controls. Single sessions of EBT were required for 78.4% of the subjects compared to 45.2% of the controls ($p = 0.001$). All the 20 subjects with ABE arrived at the hospital with the complication while 0.9% of the controls developed ABE after hospitalization.
Conclusion: The locally fabricated phototherapy machines were effective in the management of significant hyperbilirubinaemia.

P026

Pattern of Admissions and Outcome in The Special Care Baby Unit Of University Of Abuja Teaching Hospital, Gwagwalada: A Two Year Retrospective Study

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Background: Sepsis, Asphyxia and Prematurity remains the commonest causes of morbidity and deaths in the neonatal period in developing countries. Understanding why this pattern persists should drive policies to improve neonatal morbidity and mortality statistics.
This paper aims to delineate the patterns of admission and outcomes in a level three neonatal care unit in Nigeria, and consider priority tasks for improvement of care in our facility.
Methodology: This is a retrospective review of the admission and discharge statistics of the special care baby unit (SCBU), University of Abuja Teaching Hospital, which was carried out over a period of two years, spanning from September 2016 to August 2018. Data were acquired from the unit records book for admissions and discharge, and were analyzed using SPSS version 21.
Results: A total of 1430 neonates were admitted over the period under review of which 812 were males and 618 were females with a M: F ratio of 1.3:1. Six hundred and two neonates of the total admissions were preterms (42.1%) while 828 (57.9%) were term. Common reasons for admission were neonatal infections (sepsis, meningitis, and congenital pneumonia), perinatal asphyxia, neonatal jaundice, congenital malformations, surgical conditions and other illnesses. Of these cases, the commonest were sepsis (50.2%) for preterms; jaundice (28.4%) and asphyxia (24.8%) for term neonates. The mortality rate was 21.8%, with prematurity accounting for 67% of the total mortality, and severe perinatal asphyxia accounted for 49% of the mortalities among term neonates.
Conclusions: The morbidity and mortality indices remain similar to neonatal morbidity /mortality statistics within our sub region. However, improvement in neonatal care with emphasis on infection prevention (scrupulous hand washing), health education on improved health seeking behavior- utilization of antenatal facilities as well as hospital deliveries will significantly improve the morbidity and mortality statistics.

P027

Plagiarism: A Cross-Sectional Survey Of Awareness And Knowledge Of Child Health Workers And Trainees

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Background: Plagiarism is intentional, or unintentional, reproduction of an author's works without appropriate acknowledgement. It includes, but is not limited to, 'verbatim copying without quotation marks and appropriate referencing' or 'verbatim copying, changing few words but maintaining sentence structure.' Inadequate knowledge and practice of aspects of plagiarism has resulted in embarrassing punishments of researchers, including in Nigeria. However, the knowledge of plagiarism among health-workers in Nigeria is unknown.
Methods: Researcher-designed, self-administered questionnaire was filled by conveniently-sampled attendees

at the 46th Annual Conference of Paediatric Association of Nigeria (PANConf), Abuja, Nigeria in January, 2018. The questionnaire had eight questions on various forms of plagiarism. The number of correct answers scored (Knowledge Score, KS) was graded as '*poor*' (<4), '*intermediate*' (4-6) and '*good*' (>6).
Results: Respondents (n=103) included consultants (56.3%) and residents (24.3%). Most (95%) were aware of plagiarism for a median (IQR) duration of 10.0 (9.0) years. Mean KS was 5.3 ± 1.6. KS was '*intermediate*' and '*poor*' in 65.6% and 14.6% of respondents, respectively. Only six respondents (6.2%) correctly answered all eight questions. KS was not associated with age (p=0.629), sex (p=0.394), residency training (p=0.325), number of publications (p=0.642), awareness of plagiarism (p=0.912) or prior training on plagiarism (p=0.811).
Conclusion: Despite high awareness of plagiarism, majority of paediatrics residents and consultants had intermediate knowledge of plagiarism which put them at risk of committing it. Training units need to conduct robust formal training in ethical writing, formulate written anti-plagiarism policy and deploy plagiarism software as deterrence.

P028

Perception About Adolescent-Friendly Characteristics of Healthcare Services Received By In-School Adolescents In Ibadan, Nigeria

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Background: Adolescents are predisposed to risky health behaviours which expose them to health problems. The adolescent-friendly model helps to create adolescent-responsive health systems; Nigeria currently has no country-specific report on the adolescent-friendly characteristics of the health services rendered to her adolescents. This study identified various health problems for which in-school adolescents in Ibadan North-East Local Government Area sought healthcare, determined their perception of received healthcare services with regards to its "adolescent-friendliness" and explored their expected characteristics of healthcare services.
Methods: This was a school-based cross-sectional study that utilized mixed method design using concurrent triangulation. Three-staged sampling technique was employed to select 500 students for school survey while purposively selected students participated in four FGDs. Questionnaires was used to collect quantitative data, while the FGDs were digitally recorded. Descriptive statistics and Chi-square test at α=0.05 were used for quantitative data analysis. Thematic analysis was used to analyse qualitative data.
Results: Perceived malaria (52.4%), acne (36.2%) and menstrual pain (17.0%) were the common health problems adolescents sought health care for. Adolescents who sought healthcare from a health facility for mental health problems least perceived the received health services as adolescent-friendly. Expected characteristics of health services by the adolescents were adolescent-specific health clinics, friendly health care providers and affordable cost of treatment.
Conclusion: Adolescents in Ibadan currently view received health services as adolescent-friendly. However, the management of mental health problems in adolescents should incorporate adolescent friendly elements entrenched at every level of the health system.

P029

Skin Disorders in A Referral Paediatric Dermatology Clinic in Nigeria

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Background: Skin disorders are common problems in children that can be easily managed. Some disorders however may not be easily diagnosed or managed, hence referrral to specialists for management. A review of skin disorders seen at a tertiary paediatric dermatology was carried out.
Methods: A retrospective audit of children less than 19 years of age referred to the paediatric dermatology clinic of the University of Ilorin Teaching Hospital between March 2010 and April 2018. Relevant demographic information and clinical history pertaining to the skin disorder were recorded and data was analysed with SPSS version 20.0.
Results: A total of 511 patients were reviewed and 605 dermatologic diagnoses were made Dermatitis, 186 (36.4%)was the most common category of skin disorder seen, followed by infections/infestations, 144 (28.2%) and urticaria 60 (11.7%). Atopic dermatitis (19.6%), seborrheic dermatitis (10.8%) and viral warts (10.4%) were the leading specific diagnoses. Infections/ infestations occurred more frequently among preschoolers ($p<0.05$) while adolescents had more disorders of the skin appendage ($p=0.004$).
Conclusion: This study highlights the frequent skin disorders seen in a paediatric dermatology clinic in Nigeria. Some of the disorders were chronic while some of them were uncommon dermatoses that needed specialist care.

P030

Outcome of multiple gestations in a Special Care Baby Unit in Port Harcourt,Nigeria

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Background: The incidence of twin and higher-order multiple-gestation births is on the increase because of new treatments for infertility. Such births, worldwide are known to be associated with a substantially higher risk of morbidity and mortality compared to singletons. The study aimed at determining morbidities and outcomes of twins and higher multiples admitted into a Special Care Baby Unit (SCBU) in Port Harcourt, Nigeria.
Methods: This was a retrospective review of data of twins and higher order multiples admitted into the SCBU of a tertiary hospital in Port Harcourt. Records spanning over a 36-month period were retrieved. Information obtained included biodata, morbidities, duration of admission and outcomes.
Results: There were 49 sets of twins and 6 sets of triplets resulting in 115 babies and constituting 7.9% of unit admissions. There were 59 males and 56 females (M: F = 1: 1.1). Eighty-one (70.4%) were preterms. Sixty-one (53%) were admitted within one hour of birth. Prematurity was the commonest reason for admission. Associated morbidities were low birth weight, neonatal sepsis and neonatal jaundice. Eighteen (15.6%) died while 16 (13.9%) discharged against medical advice, for financial reasons. Preterms had significantly longer hospital stay ($p = 0.005$). Mortality was higher in babies born outside the hospital and in extreme low birth weight babies.
Conclusion: Prematurity and its sequelae are common in multiple gestations. Education of mothers on the need for antenatal care and birth in specialized centers and subsidizing healthcare services for preterms is important to improve outcomes.

P031

Perception of Teething and Interventions by Mothers In Ekiti

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Background: Teething is a physiologic process that begins during infancy. However, some mothers often attribute some symptoms to teething. In this study, we assessed the opinions and practices of mothers on teething.
Method: This was a cross-sectional questionnaire based study conducted among caregivers who brought their children to the out-patients' department of the EKSUTH.
Results: In all, 516 mothers with a median age of 32 (range 19–63) years were studied. The leading symptoms attributed to teething were fever (81.4%), reduced appetite (62.0%), diarrhoea (60.9%) and vomiting (57.0%). However, some believe that teething is associated with convulsion (19.8%), mouth ulcers (13.4%), ear discharge (13.2%), cough (8.5%), gum bleeding (8.3%), and no symptoms (7.9%). Majority of the mothers (72.5%) believe that teething requires treatment.204 (39.5%) of the mothers had given their children oral analgesics for teething while 128 (24.8%) administered oral antibiotics; these medications were more likely to be prescribed at the hospital or purchased over the counter ($p<0.01$). Treatment given at home for teething include antitussives 131(25.4%), tepid sponging 82 (15.9%), anti-diarrhoeal drugs 76(14.7%), herbal concoction 46(8.9%), soothing paste 26(5.0%), enema 17 (3.3%), ice packs 15(2.9%), scarification of the body 14 (2.7%), gum fomentation 14(2.7%) and gum incision 12 (2.3%). Responders who attributed convulsion to teething were more likely to have incised their children's gums ($p<0.01$).
Conclusion: This study revealed that sundry symptoms were attributed to teething and harmful home interventions were done for teething. There is a need to educate the society on teething and discourage harmful practices for teething by caregivers.

P032

Risky Healthcare Practices Associated With Blood Borne Viruses Among Care Givers Of School Children In Nnewi, South – East Nigeria

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Background: Risky healthcare practices are those activities that caregivers engage in while attempting to provide healthcare for their children/wards which increase the chances of acquiring various blood borne viruses by these children. This study was carried out to determine the risky healthcare practices among care givers of school children in Nnewi, South-East Nigeria.
Methods: This was a cross-sectional study involving caregivers of school children from public and private nursery, primary and secondary schools across the four autonomous communities in Nnewi. A pretested self-administered questionnaire was used for data collection.
Results: Caregivers to 618 school children were studied. Forty – six (7.4%) of the caregivers acknowledged that their children had been transfused but a 3rd of the time, the blood was either unscreened or of unknown screening status respectively. Sixty - one (9.9%) of the caregivers had given their children/wards scarification marks for various illnesses. Sixty percent of the time, the marks were given with a razor and 30.9%, it was made with a needle. Most of the children had received injections (608, 98.4%) for various reasons but up to 26

(4.2%) of these were in a patent medicine store and the needles used were got from a solution/container and not fresh from the packet in as much as 3.6% of the time. Socio – economic class and maternal educational level had a significant association with where these injections were given (p = 0.014 and 0.011 respectively).
Conclusion: Maternal educational level and socio–economic class play key roles in risky healthcare practices. There is the need to intensify awareness measures against these practices as well as increase advocacy for subsidized child health services.

P033
Attitude and Perceptions of Child healthcare Practitioners in Nigeria to Autopsy Practice

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Introduction and objectives: There has been a gradual decline in interest in postmortem audit worldwide despite the enormous potential values of the autopsies. In many paediatric centres across Nigeria, there is no policy providing the use of autopsy statistics in the main business of paediatric practice or as a means of assessing a centres' performance. Even where such policy exists, there is no compelling law for the incorporation of the statistics into daily paediatric practice. This study set out to survey the attitude and perception of child healthcare practitioners in Nigeria towards post-mortem examination in improving patients care.
Materials and Method: A cross-sectional descriptive study was done on participants attending a paediatric conference in Abuja, Nigeria. There were 250 respondents, who cut across the six geopolitical zones of Nigeria, consisting of paediatric consultants, residents and nurses. The study was done using self-administered questionnaires and data analysed using SPSS version 20.
Results: All (100%) participants believed autopsy practice was valuable and had a positive effect on medical practice. Sixteen (6.4%) respondents never request for autopsies, 120 (48.0%) respondents request for it rarely, 34 (13.6%) make a request often while 10 (4%) request for autopsies very often. Eighty-four (33.6%) respondents have never attended an autopsy session. The interval between autopsies and issuance of reports ranges from 0-3 weeks (48.0%) to > 6 weeks (8.8%). The usual indications for requesting for autopsies include knowing the cause of death (85%), inability to arrive at a clinical diagnosis antemortem (71.2%) and improving clinical diagnosis skill and patient care (60.0%).
Conclusion: Autopsy practice is useful in paediatric practice but it is rarely requested for and infrequently attended by the child healthcare practitioner. There is a need to change the attitude and perception of all healthcare workers in paediatric practice through proper orientation and education.

P034
Trend, Prevalence and Challenge Associated with Preterm Newborns in Resource Constraints Setting, Maiduguri, North-Eastern Nigeria

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Background: Prematurity or preterm births (PTB) are babies born before 37 completed weeks after the last day last menstrual period (LMP). Worldwide more especially Africa, the prevalence of preterm births has increased to 56.7% over the last decade. With improvement of neonatal care, preterm babies are now single most important causes of under-five death and long-term disability worldwide.
Study Objective: The aim of the study was to determine the trend, prevalence and challenges of preterm babies at University of Maiduguri Teaching hospital, Maiduguri, North-eastern Nigeria.
Patients and Methods: A retrospective study done at Special Care Baby Unit (SCBU) of the Paediatrics Department of the University of Maiduguri Teaching Hospital, Maiduguri over an eight-year duration from 1st January 2008 to 31st December 2015.
Results: There were 3435 admissions during the study period, out of these 1129/3435 (32.86%) were preterm babies giving a prevalence of 32.9%. Males were 372 (52.1%), while females were 342 (47.9%); he male to female ratio of 1:1.08. Regression analysis with p – value < 0.1, factors including GA (P = 0.033), birth weight (p = 0.024), duration of incubator care (p = 0.001), place of delivery (p = 0.034) and APGAR score at 5 minutes (p = 0.018) showed independent prediction of PTBs outcomes.
Conclusion: The babies who had incubator care were about 3.5 times and 6.2 times respectively more likely to survive. PTBs born without asphyxia (Apgar score at 5 minute >7) were about 2.3 times more likely to survive the first six weeks of life.

P035
Sedation Practice during Paediatric Electroencephalography (EEG) in Nigeria

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Background: Electroencephalography (EEG) is a neurologic procedure which requires patient co-operation especially in Paediatrics. This is usually obtained

through induced sleep either by prior sleep deprivation or with the use of sedatives. Studies are lacking on the sedation practices when conducting Pediatric EEGs in Nigeria.
Objectives: To determine the knowledge and practices of Neuroscientists in Nigeria concerning sedation during EEG.
Methods: This questionnaire based survey was conducted among Neuroscientists practicing in practice in Nigeria who attended the Annual Conference of the Nigerian Society of Neurological Sciences in 2017 and the Paediatric Association of Nigeria Conference held in 2018.
Result: There were 70 respondents comprising of 30 (42.8 %) Consultants; 14 each in Adult neurology and Paediatric neurology units respectively. In addition,30 (42.8) Resident doctors and 10 (14.3) EEG Technologists were recruited. More than three-quarter (81.4 %) of the respondents practice in a public, tertiary hospital and EEG is available at the centre of practice of 57 (81.40%) of the respondents while only 49 (70.0) do paediatric EEG. About 81.4% had a prior knowledge on sedation during EEG though only 42(60.0) use sedation before EEG. Chloral hydrate is the most commonly (42.8 %) used medication among those who use sedation. Only 5 respondents involve Anaesthesiologists in Pre-EEG sedation while availability of equipment for resuscitation in the procedure room was reported in only 38.6 % of respondents.
Conclusions: There is a need to pay attention to the type of sedative use and patient safety during EEG. Non-pharmacologic measures to achieve patient co-operation may be more effective.

P036

Prevalence of Eye Problems among Children in Eye Ward in University College Hospital, Ibadan Oyo State Nigeria

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Introduction: Eye problems affect the whole spectrum of the population regardless of age, gender, race and ethnic group. Uncorrected eye problems among children have severe consequences for the child, family and society.
Objective: To determine the prevalence of eye problems among children in eye ward, in University College Hospital. Ibadan.
Methods: In this retrospective study, total case study records of 792 children admitted in the ward between years 2013 to 2017 were reviewed for analysis. Data were analyzed using SPSS, version 20 software program
Results: This consisted of 446 males and 346 females (56.3% and 43.7% respectively). Majority 489(61.7%) of the respondents had congenital eye problems (congenital cataract, retinoblastoma etc.) while the remaining 303(38.3%) had acquired eye problems (due to trauma, infections etc) Out of the 792 children with eye problems, 634 (80.1%) had surgical procedures and 158 (19.9%) had conservative management.
The mean age of the respondents was 7.06±4.89 with (minimum and maximum age of 1 and 17) years respectively. The mean ages of males and females were 7.52±4.59 years and 6.47±4.29 (with minimum and maximum age of 1 and 17) years respectively. This difference was significant (p = 0.000). The mean number of days spent on admission by the respondents was 7.0±4.0 (with minimum and maximum of 1 and 22) days respectively.
Conclusions: A sizable portion of children with eye problems in University College Hospital were of congenital origin. Since the prevalence of eye problems among children is high, it calls for public health concern in other to salvage the sight of our future generation

P037

Effect of adherence to follow up on outcome of Paediatric nutrition clinical trial

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Introduction: Paediatric nutrition clinical trial is the empirical evaluation of the effect of nutritional formulations in children. Adherence to follow up is crucial to outcome. This study was aimed at determining the effect of adherence to follow up on outcome of paediatric nutrition trial.
Materials and Methods: A cluster randomized clinical trial was conducted between May 2016 and April 2017 in Akwa Ibom State. Eligible children aged 6 – 59 months with moderate acute malnutrition (MAM) received supplementary ration of standardized milk-based formulation (SMBF), standardized non-milk based formulation (SNMBF) or hospital-based formulation (HBF) at 50% of their daily caloric requirement for four months. A two weekly follow up with clinical and anthropometric assessment was performed. Adherence to follow up was considered good if a patient kept all 16 weeks' appointments or poor if there was a default of ≥ 2 weeks. Comparison of recovery from MAM based on adherence status at week 16 was the outcome measure. It was deemed statistically significant if p-value was < 0.05.
Results: Of the 141 evaluable children, 50 received SMBF, 54 received SNMBF and 37 received HBF. Good adherence to follow up occurred in 36 (72.0%) children treated with SMBF, 30 (55.6%) treated with SNMBF and 17 (45.9%) treated with HBF. Adherence to follow up was significantly higher with the SMBF than the HBF ($\chi^2 = 5.998$; p = 0.014). In all, 83 (58.9%) had good adherence to follow up. Recovery from MAM was 70/83 (84.3%) and 44/58 (75.9%) in those with good and poor adherence respectively (P = 0.208).

Conclusion: Good adherence to follow up was associated with a higher proportion of recovery from MAM than poor adherence though the difference was not significant.

P038

Predictors of Neonatal Mortality in A Tertiary Hospital in North-Central Nigeria

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Introduction and Objectives: The neonatal period is the most vulnerable time of a child's life contributing to almost 50% of under-five mortality. Neonatal mortality rate in most developing countries is unacceptably high, and is a reflection of under-development. Therefore, the chances of survival of a newborn can be predicted from the level of care the mother received during pregnancy, and how readily she can assess health care for her newborn. The study was aimed at determining the predictors of neonatal mortality in Dalhatu Araf Specialist Hospital, Lafia.
Materials and Method: The study was a retrospective descriptive hospital based study carried out from January 2018 to September 2018. The neonatal unit admission register and patients folders between the said periods were reviewed, and relevant clinical data, obstetric data and maternal socio-demographic data were documented.
Results: A total of 528 neonates were seen in the period under review out of which 50 (9.5%) died on admission. Causes of mortality were prematurity - 17 (34%); perinatal asphyxia - 16 (32%), neonatal sepsis - 10 (20%) and others (14%). Mortality was strongly associated with low socioeconomic class, prematurity, neonatal sepsis ($p< 0.05$).
Conclusion: Improving the living standard and providing for prevention and effective treatment of preterm labour and neonatal sepsis will reduce neonatal mortality.

P039

National Health Insurance for Children in Nigeria: Impacts On Paediatric Oncology Practice in Nigeria

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Introduction: Pediatric malignancies are becoming more prominent in developing countries including Nigeria. Early diagnosis and treatment, though capital intensive is essential in the management. A good financial support system is important for a good treatment outcome as witnessed in developed countries.
Aim: To determine how National Health Insurance Scheme (NHIS) in Nigeria impacts care for children with malignancies.
Methods: Semi-structured interviewer administered questionnaire was administered to caregivers of children diagnosed with malignancies.
Result: fifty-four percent of the caregivers were females while 46% were males. Mean age of patients was 7 years. Leading malignancies in children studied were Nephroblastoma (20%), Burkitt lymphoma(17.1%), Acute lymphoblastic leukemia(17.1%), Non Hodgkins lymphoma (11.4%), Rhabdomyosarcoma (11.4%), Retinoblastoma (8%), Primitive neuro ectodermal tumour (5.7%), others (12%). At diagnosis, 20% of the patients were enrolled in the NHIS, while 80% were not. Sixty-eight percent of caregivers did not know about the scheme, 7.1% had made unsuccessful attempts to register their children, 10.7% felt the scheme did not make a difference in their child's care and 14.3% were not enrolled for other reasons including lack of money to register. Average duration of symptoms before presentation to hospital was 11 weeks. There was a positive correlation between enrolment of children and the average duration of symptoms before presentation to hospital ($r = 0.3$).
Conclusion: Advocacy is still needed for the NHIS scheme to cover for complete paediatric oncology care.

P040

Spontaneous perforation of cystic duct in a 3-month-old Nigerian boy: A case report

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Introduction: Biliary ascites due to spontaneous perforation of the extrahepatic bile duct is a rare condition in infancy. The cystic duct is the part of extrahepatic biliary tract most rarely affected. Very few cases have been described in the literature, this is likely to be the first case of biliary ascites secondary to spontaneous cystic duct perforation occurring in infancy reported from our centre.
Methods: Consent was obtained from the parents of the child. Ethical approval was also obtained from the Research and Ethics Committee of Ahmadu Bello University Teaching Hospital, Shika, Zaria. The case notes of the child were summarized and the relevant literature was reviewed to give the report a context.
Results: A three-month-old-boy presented with ten days history of jaundice and acholic stool, a week history of progressive abdominal distention and a day's history of fever. There was associated bilateral inguinal hernia, excessive cry, refusal to feed and weight loss. Pregnancy

history was normal. He was acutely ill-looking, irritable, febrile with an axillary temperature of 37.7^{0}C, mildly pale, jaundiced with a greenish tinge, had a weight of 4.7kg. He had gross ascites and bilateral reducible inguinal hernia. Had predominantly conjugated hyperbilirubinaemia, and deranged clotting profile. Abdominal ultrasound scan revealed gross ascites.
Initially, he was managed for sepsis with obstructive jaundice. Five days into the admission, there was no significant improvement, bedside abdominal paracentesis reveals thick yellow and foamy fluid and the diagnosis of ruptured choledochal cyst was considered and had exploratory laparotomy. Intra-operatively, the cystic duct was perforated just few millimetre from the common bile duct (CBD), no distal obstruction seen during CBD exploration. Cholecystectomy and repair of the CBD was performed and the child did well postoperatively.
Conclusion: Perforated cystic duct though rare, should be suspected in infants presenting with jaundice, progressive abdominal distension, acholic stools with or without fever, and inguinal hernias, with a positive paracentensis. Early diagnosis and prompt surgical intervention greatly reduce morbidity and mortality from the disease.

P041

Suspected Cases of Duchenne Muscular Dystrophy in three consecutive male siblings

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Background: Muscular dystrophy is a rare degenerative muscle disorder inherited by x-linked recessive pattern. It is due to deficiency of dystrophin protein that maintains normal skeletal muscle structure and function.
Objective: To report an unfortunate occurrence of suspected Duchenne muscular dystrophy in 3 consecutive male siblings in a family.
Case presentation: Three consecutive male siblings aged 17, 14 and 10years were presented at their early childhood, to our Neurology clinic with similar histories of abnormal gait, difficulty rising up from lying position and frequent falls while walking. Their symptoms were first noticed between the ages of 4 and 6years. No similar history in the two female siblings aged 19 and 7years. Parents are consanguineously married couple.
On examination, all the patients had calf muscle hypertrophy, positive Gower sign and waddling gaits. Muscle creatinine kinase was 7-10 fold elevated. Muscle biopsy and Genetic testing could not be done. The two elder siblings had echocardiographic features of dilated cardiomyopathy and worsening gait abnormality. Despite treatment with inotropes and other anti heart failure medications, their ventricular functions worsened progressively on follow up. They were said to have died suddenly, at home presumably from cardiac related complications. The youngest sibling aged 10years is presently ambulant with no echocardiographic evidence of cardiomyopathy.
Conclusion: Muscular dystrophy is a rare genetic disorder associated with high physical and economic burden. Mortality commonly results from cardio-respiratory complications.

P042

A One Year Situational Analysis of the Care of Preterm Babies Managed in The Special Care Baby Unit (SCBU) of The Federal Medical Centre, Yenagoa, Bayelsa State, Nigeria

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Background: Prematurity remains a significant cause of early neonatal deaths in Nigeria so this study determined the characteristics of preterm babies, and the clinical care that influenced the outcome of preterm admissions in Federal Medical centre (FMC), Yenagoa.
Methods: Using a structured proforma, data relating to preterms and the outcome of care was collected in this descriptive longitudinal study. Frequencies, means, standard deviations and chi square test were used calculated. Level of significance was set at p value < 0.05
Results: Preterm babies made up 24.2% of admissions. Preterm survival and mortality rates were 62.4% and 17.1% respectively. Most were late preterms (36.8%), had low birth weights (51.3%), no perinatal asphyxia (67.0%), and were delivered via caesarean section (57.3%). Mean gestational age, birth weight and length of babies were 32 weeks, 1.67 kg and 40.87cm respectively. Most mortalities occurred in the first 10 days of admission (14.0%). Leading maternal risk factors for prematurity were premature rupture of membranes and pre-eclampsia. Gestational age ($p< 0.001$), birth weight ($p< 0.001$), 5th minute Apgar score ($p = 0.047$), place of delivery ($p = 0.047$), mode of delivery ($p = 0.036$) and length of incubator care ($p = 0.034$) were significantly associated with outcome of care.
Conclusion: More effort needs to be put in to improve the outcomes for preterm admissions.

P043

Typical Presentation of Organophospate Poisoning in Bisha, Saudi Arabia: Illustrative Case Series

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Introduction: Organophosphates were first discovered more than 150 years ago; however, their widespread use

began in Germany in the 1920s, when these compounds were first synthesized as insecticides and chemical warfare agents. Organophosphates and carbamates are the most frequently used insecticides worldwide. Their other use in Bisha include hair treatment which makes its poisoning a common finding.
Methods: Case series involving three cases of organophosphate poisoning were studied and compared. The parameters assessed were age, gender, source of patient, premorbid sub-mentality, source of poisoning and outcome among others.
Results: All the three cases were females aged 5 years and below. There were lots of similarities in the findings based on the above parameters. Two children were conscious while the third was drowsy at presentation. They were all successfully managed and discharged.
Discussion: Many cases of organophosphate poisoning were successfully treated as they presented early. Families freely kept the compound at home or farm, not only for domestic or farm work but also as hair treatment thus exposing the children to the toxic effects of the compound. The parents were counselled against the use especially for hair treatment. It is hoped that the counselling would be utilised.

P044

The epidemiology and economic consequences of diarrhoea in children

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Background: Diarrhea is a major public health problem among children with huge health, and economic burden. In this study, the epidemiology, prevalence, and economic burden of diarrhea in children were described.
*Methods:*The medical records of children treated for diarrhea from October 2017 to September 2018 were reviewed. Information on their age, medical history, and treatment received were abstracted. The direct medical costs of the management of diarrhea were estimated.
Results: Out of 2199 children admitted in the emergency room, 289 (13.1%) had diarrhea. The peak period of diarrhea were January (73/274: 27.6%) and February (87/308: 28.2%) and the lowest incident was in September (2/149: 1.3%). Diarrhea was highest (70%) among children under 12 months of age. Males (66.6%) were more affected than females (33.4%). The socioeconomic class 2, 3, and 4 had prevalence of 50%, 37.5% and 12.5% respectively. The duration before presentation was 4.1 days (2.3) and 30% had received treatment before presenting. Antibiotics was among the medications given in all (100%) the children studied before attending hospital, while those that had ORS was 22.2%. The average cost of treating diarrhea as in-patient was N22878.4. The mean duration on admission was 2.9 days, based on which an estimated cost of homecare for children with diarrhea is taken to be N500.
Conclusion: The burden of diarrhea in children is high especially among infants, and this can be reduced through promotion of home-based management. This will be both cost saving and an effective way to institute antibiotic stewardship among households.

P045

Knowledge of Primary Health Care Workers on zinc and low osmolarity ORS for under-five children with diarrhoea in Ibadan

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Introduction and Objectives: Zinc plus low osmolarity oral rehydration salt solution (Zn+LoORS) is the current recommendation for management of childhood diarrhoea because it gives improved health outcomes compared with the normal ORS. This is because Zn+LoORS reduce the duration and severity of diarrhoeal incidence apart from its rehydration and electrolyte replacement functions. Nigeria has adopted the current recommended diarrhoeal management policies, but its knowledge by the primary health care workers (PHCWs) who are the first line of contact is not known. The aim of this study is to determine levels of knowledge of Zn+LoORS among PHCWs in Ibadan.
Materials and Methods: Cross-sectional study was conducted in five local government areas of Ibadan metropolis. 200 non-medical PHCWs were recruited via three-staged sampling technique and information was obtained with self-administered questionnaire. Key Informant Interview (KII) of 10 matrons was done. Data was analyzed using descriptive statistics and Chi-square test at $p<0.05$.
Results: The PHCWs were 7 cadres, mean age 40.59±9.90 years, 95.5% females. Correct knowledge of Zn+LoORS for child with diarrhoea increased as age increases. Significantly, more of respondents older than 35 years (74.5%) correctly identified Zn+LoORS for child with diarrhoea compared to younger PHCWs. Correct knowledge of Zn+LoORS was higher among senior community health extension workers compared to other cadres. KII revealed that many matrons could not differentiate between LoORS and ORS.
Conclusion: The PHCWs level of knowledge zinc and LoORS for childhood diarrhoea was low. There is need to improve their knowledge to ensure their optimal management of childhood diarrhoea.

P046

Benefits and Challenges of Renal Replacement Therapy in Severe Lassa Fever in Resource-Limited Settings: Case Illustrations and Literature Review

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Background: Renal replacement therapy (RRT) could be life saving in children with severe Lassa fever (LF) in endemic areas but it is attended by several challenges and there are very few reports of the experience. We therefore present illustrative cases of the benefits of RRT in the treatment of severe LF and discuss the challenges involved.
Patients and Methods: Descriptive case illustrations plus literature review.
Results: Case 1 was a 7 years old boy with LF complicated by stage III acute kidney (AKI) which failed to respond to conservative management, but instead developed acute pulmonary oedema, worsening anaemia, hypertension and worsening of fluid retention. Following 3 sessions of haemodialysis on the 9th, 11th and 14th days of admission, with intra dialysis blood transfusion given during the first session, he did well and was discharged for follow up after a 15-days course of ribavirin. Case 2 was a 12-year-old girl with who also had stage III AKI and was unresponsive to conservative management. She developed encephalopathy, hypertension, and worsening fluid retention but did well with only 1 session of haemodialysis with intra-dialysis blood transfusion on the 4th day on admission. She was discharged for follow up after 17 days.
Conclusion: The provision of RRT, a challenge in the settings of LF outbreaks, could improve survival in children with severe LF.
Keywords: renal replacement therapy, Lassa fever

P047

The Prevalence and Antibiotic Susceptibility Patterns of Methicillin Resistant *Staphylococcus aureus* in Postpartum Women and their Newborns in Abuja, Nigeria

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Introduction and Objectives: Methicillin-resistant *Staphylococcus aureus* (MRSA) are a serious public health challenge. We evaluated the prevalence and antibiotic susceptibility patterns of MRSA in postpartum women and their newborns in Abuja, Nigeria
Methods: Vaginal swabs from postpartum women and throat swabs from their newborns were collected between April 2016-March, 2017 in a tertiary hospital in Abuja. *Staphylococcus aureus* isolated were identified and antibiotic susceptibility testing (AST) done using standard techniques.
Results: Overall, 49/1114(4.4 %) mothers and 12/1134 (1.1 %) newborns were colonized by *Staphylococcus aureus*, of which 31 (2.8 %) in mothers and 5 (0.4 %) in newborns were MRSA.
Susceptibility to antibiotics tested were: Clindamycin (87.8%; 83.3%), Gentamycin (71.4%; 83.0%), Cefoxitin (36.7%; 58.8%), Tetracycline (48.9%; 75.0%), Ciprofloxacin (57.1%; 83.3%) and Penicillin (6.1%; 0.0%) for maternal and newbornisolates, respectively. All five newborn MRSA isolates were sensitive to vancomycin. *Staphylococcus aureus* co-colonization was detected in four maternal-newborn pairs, two of which were MRSA. In three (75.0%) maternal-newborn dyads with *Staphylococcus aureus* co-colonization, there was 100% concordance in the antibiotic susceptibility profiles of maternal and newborn *S. aureus* isolates.
Conclusions: We report a notable carriage prevalence of MRSA in mothers and newborns in this study. Similar AST profiles in maternal and newborn isolates provide some evidence of vertical transmission of MRSA in this population. Efforts towards the control and prevention of MRSA colonization could potentially help in reductions in newborn MRSA infection in these settings.