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ABS-OR-1001
THE EVALUATION OF LEAD EXPOSURE, BLOOD PRESSURE AND RENAL FUNCTION INDICES IN NIGERIANS WITH OCCUPATIONAL LEAD EXPOSURE

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Background: Occupational and environmental lead exposure is acknowledged to result in renal function impairment and hypertension.

Aims and objectives: The objective of this study was to evaluate the association between lead exposure, blood pressure and renal function in lead exposed workers in Port Harcourt Nigeria.

Materials and methods: A prospective cross sectional comparative study of 190 adult subjects with occupational lead exposure and 80 matched controls was performed in Port Harcourt. Blood lead was used as the biomarker of lead exposure. Renal function indices, systolic and diastolic blood pressures and other demographic and lifestyle variables were also measured.

Results: Occupationally lead exposed subjects had higher mean blood lead 50.37±24.58 ug/dl, than controls 41.40±26.85 ug/dl (p= 0.008). There was a significant difference in the mean systolic blood pressure of subjects and controls 118.49 (14.67) mmHg vs. 113.62 (11.31) mmHg (p = 0.008). No difference was observed in the mean diastolic blood pressure of subjects and controls 74.64 (10.98) mmHg vs. 73.10 (7.47) mmHg (p= .285). A higher proportion of subjects had systolic and diastolic pressure > 140mmHg and >90mmHg compared to controls 9.47% vs. 1.25% and 10.51% vs. 2.54%, with (p = .016), RR=1.38<1.21<RR<1.58> and (p = .028), RR=1.33<1.13<RR<1.55> respectively. The mean values of serum urea, serum creatinine and serum uric acid were significantly higher in study subjects compared to controls 3.06±0.81 mmol/L vs. 2.7±0.84 mmol/L (p = 0.002), 87.2±14.30 umol/L vs. 80.68±14.70 umol/L (p = 0.001) and 271.93±91.18 umol/L vs. 231.1(62.70) umol/L (p = 0.000) respectively. Creatinine clearance was significantly lower in study subjects compared to controls 98.86±21.26 ml/min/1.72m^2 vs.108.18±25.16 ml/min/1.72m^2 (p = 0.002). There was no significant difference in urine albumin excretion. Blood lead correlated positively only with blood urea [r = .031, r2 = .017, p = .031] and negatively [r = -.144, r2 = .021, p = .018] with serum phosphate. With simple linear regression analysis blood lead level was significantly and positively associated with blood urea [y=.0043x + 2.76, r2 = .017, p = .031] and significantly negatively associated with serum phosphate [y=.007x + 1.42, r2 = .021, p = .018]. The duration of occupation correlated negatively with GFR [-.126, p =.038] and positively SBP [.256, p = .000]. In linear regression modelling the duration of occupation was associated with GFR, SBP and DBP, this effect was modified only by age after adjustment.

Conclusion: The results of this study indicate a significantly higher risk of renal function impairment and elevated blood pressure among lead exposed workers in compared to controls. Longer duration of exposure was significantly associated with renal function impairment and elevated blood pressure, with age as a

predictor of this association. Serum urea was the most sensitive index of lead induced renal function impairment in this study with low serum phosphate as a significant predictor of lead induced increase in serum urea levels. It is advocated that more attention be given to the role of environmental and occupational nephrotoxins like lead in CKD prevention in Nigeria.

Keywords: LEAD EXPOSURE; BLOOD PRESSURE, RENAL FUNCTION INDICES

ABS-OR-1002
THE ASSOCIATION OF URIC ACID AND RENAL FUNCTION INDICES AMONG LEAD EXPOSED WORKERS IN PORT HARCOURT NIGERIA

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Background: The presence of hyperuriceamia and renal function impairment, especially in the absence urate stone formation is strongly suggestive of lead nephropathy.

Aims and objectives: To determine the relationship between serum uric acid and renal function indices in lead exposed workers.

Materials and methods: A cross sectional comparative study of 190 adult subjects with occupational lead exposure and 80 matched controls was performed in Port Harcourt, South-south Nigeria. Blood lead was used as the biomarker of lead exposure. Serum uric acid and other renal function indices measured.

Results: Occupationally lead exposed subjects had higher mean blood lead 50.37 ± 24.58 ug/dl, than controls 41.40 ± 26.85 ug/dl (p= 0.008). The mean values of serum urea, serum creatinine and serum uric acid were significantly higher in study subjects compared to controls 3.06 ± 0.81 mmol/L vs. 2.7 ± 0.84 mmol/L (p = 0.002), 87.2 ± 14.30 umol/L vs. 80.68 ± 14.70 umol/L (p = 0.001) and 271.93 ± 91.18 umol/L vs. $231.1(62.70)$ umol/L (p = 0.000) respectively. Creatinine clearance was significantly lower in study subjects compared to controls 98.86 ± 21.26 ml/min/$1.72m^2$ vs.108.18 ± 25.16 ml/min/$1.72m^2$ (p = 0.002). Serum uric acid correlated positively with serum creatinine [r=.134, p=028] and negatively with GFR = [r=-.151, p=.013]. In linear regression modelling uric acid was associated with reducing GFR [r= .151, r2 = 023, B= -.151, p = .013] and increasing serum creatinine [r= .134, r2 = .018, B= .134, p = .028] .Blood lead was not associated with uric acid in single model and after adjusting for other study variables.

Conclusion: The results imply that subjects with occupational lead exposure comprise a susceptible population for hyperuricaemia and renal impairment. The association of increased uric acid with renal function impairment in this study supports the role of hyperuriceamia as a consequence and pathogenetic mechanism of renal impairment in lead exposed subjects.

Keywords: OCCUPATIONAL LEAD EXPOSURE; HYPERURICAEMIA; RENAL FUNCTION IMPAIRMENT.

ABS-OR -1003

PREVALENCE OF TOXIC NEPHROPATHY IN AN OIL PRODUCING COMMUNITY IN DELTA STATE, NIGERIA

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Introduction: Toxic nephropathy is a common cause of end stage renal disease that arises as a result of exposure to nephrotoxic chemicals, drugs, heavy metals and hydrocarbons.
Objective: To document the prevalence of Toxic Nephropathy particularly due to hydrocarbon from crude oil and natural gas.

Methods: 64 subjects from a rural community with about 10 oil wells and natural gas plant were recruited for the study. Following a general physical examination, blood and urine were collected for fasting blood sugar, urea, creatinine, serum electrolytes and urinalysis.
Results: 6 (9.4%) of the subjects had elevated serum urea and creatinine while 23 (36%) had significant proteinuria. 5 (3%) had elevated fasting blood and only 2 of the 5(40%) of these subjects had glycosuria. 7 (11%) had elevated blood pressure. None of the hypertensive or Diabetic subjects had proteinuria or elevated serum urea and creatinine.

Discussion: Long-term hydrocarbon exposure may predispose individuals to the development of several different types of renal diseases. The community where this study was done has many oil wells and a gas plant with previous oil spillages and gas explosion hence the population has over time been exposed to hydrocarbon. From our study, none of the hypertensive or diabetic group had proteinuria or elevated serum urea and creatinine. This may suggest that there may be other causes other than the common medical cause of chronic renal failure. Also a significant proportion of the population though had normal serum creatinine, had proteinuria. This corroborates other studies which reported increased proteinuria but normal serum creatinine in subjects exposed to petroleum based mineral oil.

Conclusion: In conclusion, toxic nephropathy is associated with long-term hydrocarbon exposure and may be prevalent in oil producing communities. However further studies is required to elucidate this.

ABS-OR-1004

AKI IN ADULT NIGERIANS: A SINGLE CENTRE EXPERIENCE

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Background: Acute Kidney Injury (AKI) is an abrupt and sustained decrease in Glomerular Filtration Rate (GFR), urine output or both. It is associated with significant morbidity and mortality among hospitalised patients. Despite the enormity of the problem, data is lacking regarding the epidemiology of AKI in developing countries.

Aims and objectives: To determine the incidence of AKI in UBTH and to study the aetiological pattern, clinical presentation, complications and outcome of the disease; and to determine the predictor of poor outcome among cases studied.

Materials and Method: The case records of all case ok AKI admitted into the medical wards from August 2007- September 2009 were reviewed. Information on the sociodemographic data, clinical features, laboratory findings and management modalities were obtained.

Results: There were 2431 Medical admissions during the study period and of this there were 33 cases of AKI with an incidence rate of 1.36%. 25 case records were reviewed in detail.Patients were aged 18-95 years with a mean age of 37.4±18.6 years and were made up of 12(48%) males.
The commonest presenting features were fever (72%), leg swelling (56%), vomiting (52%), oliguria (52%) and facial swelling (48%). 45% were hypertensive , 20% confused , 12% unconscious and 8% had a pericardial rub. Twenty (80%) patients had proteinuria and 22 (88%) were anaemic. The commonest cause of AKI was Sepsis (40%). Twelve 12 (48%) patients had haemodialysis. Mortality rate was 36%. Lack of dialysis was associated with poor outcome.

Conclusion: AKI is a treatable cause of mortality. Late presentation and lack of access to dialysis due to financial constraints are major difficulties encountered.

ABS-OR-1005
PATTERNS OF LEFT VENTRICULAR HYPERTROPHY AND GEOMETRY IN NEWLY DIAGNOSED HYPERTENSIVE ADULTS IN NORTHERN NIGERIANS

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Background: In hypertensives, left ventricular hypertrophy predicts increased cardiovascular morbidity and mortality. Adding to this burden is abnormality of left ventricular (LV) geometry. Knowledge of the left ventricular geometric patterns in our newly diagnosed hypertensives may have some prognostic significance.

Methods: One hundred (100) newly diagnosed hypertensives (61males and 39 females) and 78 normotensives (46 males and 32 females) were recruited for the study. All were clinically evaluated and an echocardiographic examination performed.

Results: Mean ages for the study subjects and controls were 51.40 ±11.60 and 51.50 ±11.50 years respectively (P = 0.47). Only 24% of the hypertensives had normal geometry with 76% being abnormal. Normal geometry was found in 63% of the controls with 37% being abnormal. Statistical significance was noticed when the geometric patterns of the hypertensive and controls were compared (p value < 0.001).

Conclusion: This study showed that only 24% of our hypertensives had normal LV geometric pattern at diagnosis while over 35 percent of the controls had abnormal geometry. Early diagnosis and aggressive treatment to control hypertension should be taken with all seriousness.

Keywords: HYPERTENSION, LEFT VENTRICULAR HYPERTROPHY, GEOMETRY, ADULTS, NIGERIANS

ABS-OR-1006

PATTERN OF ACUTE RENAL FAILURE IN ILORIN: A REVISIT

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Objective: Acute renal failure is a common cause of morbidity and mortality in Nigeria. The early detection and prompt treatment of acute insults to the kidneys may prevent renal failure which is capital intensive in its management. Majority of Nigerians cannot afford the cost of renal replacement therapy which is available but expensive. There is no renal replacement therapy subsidy in Nigeria and the current NHIS is blank on renal replacement therapy. These underscore the need for some form of preventive nephrology in order to reduce and possibly avoid renal failure. In line with the foregoing, a 19 year (January 1990- December 2008) retrospective appraisal of causes, management and outcome of acute renal failure was undertaken. This study is a revisit as a similar study was carried out about a decade ago in our centre.

Methods: All the patients that met the criteria for ARF and presented primarily to the nephrology unit or were referred to the unit from other departments of UITH for intervention were studied. Data was analysed using SPSS version 16.

Results: A total of 113 patients (52males and 61 females), age range between 3-69 years with mean of 28.3 were reviewed. About 80.5% of the patients were less than 40 years of age with male to female ratio of 1:1.2 and mean ages of 27.3 and 29.1 years respectively. Eight six (76.1%) patients were oliguric at presentation. Unusual weakness, altered sensorium, vomiting and hiccups were presents in 92%, 86.7%, 37.1% and 27.4% respectively. Severe anaemia that necessitated blood transfusion was present in 48 cases (42.4%). The main aetiological factors were septicaemia (36.2%), severe gastroenteritis (22.1%), AGN (9.7%), Drug induced (7%) and ante/post partum haemorrhage (6.1%). Obstructive uropathy, septic abortion, acute pyelonephritis, intravascular haemolysis and holy green water constituted 5.3%, 4.4%, 3.5%, 2.6% and 0.8% respectively while 1.7% were unknown. Sixty three patients were managed conservatively with 62% mortality while 33 and 9 patients had haemodialysis and peritoneal dialysis with mortality rates of 15% and 67% respectively. The important prognostic factors identified were extremes of age, severe infection, late presentation, delayed intervention therapy and underlying/concurrent medical illness. Major factors that influenced mode of therapy were severity of ARF and financial constraints. Haemodialysis seems to be the preferred method of renal replacement therapy as it was associated with better outcome.

Conclusion: There is an improvement in mortality from ARF in the last decade as a previous study in our centre revealed mortality rate of 31% and 64% among haemodialysed and conservatively managed patients. Majority of the patients were below 40 years of age and the leading aetiological factors still remain preventable and treatable conditions. Haemodialysis remains the most cost effective modality of treatment for severe ARF in our environment.

ABS-OR-1007
ACUTE KIDNEY INJURY: A REVIEW OF THE CAUSES, SEVERITY AND OUTCOME IN ILE-IFE, NIGERIA

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Background: Acute kidney Injury (AKI), defined as an abrupt deterioration in kidney function is associated with high mortality even in developed countries. A new staging was recently introduced by the AKI network.

Aims and Objectives:
1. To assess the magnitude, causes, severity and outcome of AKI in our setting
2. To determine the relationship between the stage (severity) and mortality

Patients and Methods: We retrospectively reviewed case records of patients treated for AKI over a 2 – year period (2008-2009). Patients with evidence of CKD were excluded. Information on socio-demographic data, precipitating factors, investigations, treatment and outcome were collated and analyzed.

Results: Thirty-two (32) patients treated within the period met the inclusion criteria. The age ranged from 15 to 75years with a mean (± SD) of 38.5 (± 15.54). More females were affected with a percentage of 65.6% and a M:F ratio of 1:1.9. The major precipitating factors identified were sepsis, hypovolaemia and nephrotoxins. Twenty six (83.9%) presented with oliguria and 5(16.1%) were non-oliguric, 29(93.5%) of the patients presented in AKI stage 3 while 2(6.5%) in stage 2. The biochemical parameters at presentation revealed serum urea, creatinine , sodium, potassium and bicarbonate of 30.3mmol/l , 768.24μmol/l, 130.13mmol/l, 4.5mmol/l and 19.17mmol/l respectively. 19 patients (61.3%) survived while 12(38.7%) died. 90.6% of the patients had Haemodialysis. Age of patients was found to significantly influence outcome (p = 0.025) while AKI staging, gender, number of sessions of Haemodialysis did not influence outcome.

Conclusion: Oliguric AKI (very severe) remained the commonest presentation with attendant high mortality. Age of patients above 60 years predicts poor outcome.

ABS-OR-1008
SICKLE CELL NEPHROPATHY IN CHILDREN SEEN AT UITH ILORIN

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Introduction: Sickle cell nephropathy (SCN) is an anticipated complication in children with sickle cell disease especially in the second decade of life but it is seldom detected early except they present with clinical features such as haematuria, enuresis or oedema. The spectrum of sickle cell nephropathy varies from hyposthenuria to nephrotic syndrome. It is known to occur in both sexes and varies in severity.

Objective: To review the cases of sickle cell nephropathy seen over the last 14 years (1995-2009) at the Paediatric Nephrology clinic of UITH.

Methodology: The five cases of SCN seen during the period were analyzed for age, sex, and renal manifestations.

Results: The age range of the children was 9-15years with a mean of 11years. Four of the five patients were females, with one male. Three of the four females presented with features suggestive of nephrotic syndrome while the other one had gross haematuria which resolved within 24 hours. The only male had enuresis. The NS in one of the patients progressed to end stage renal disease requiring renal replacement therapy

Conclusion: Children with sickle cell disease should be screened for renal complications especially from the late first decade of life. This will help in the early detection of renal disorder that could lead to chronic kidney disease. It is also suspected that the severe forms of SCN such as NS may have a predilection for the female gender. A more extensive study is needed to test the veracity of this observation.

ABS-OR-1009
CHRONIC KIDNEY DISEASE:PATTERN AND PREDICTORS OF PROGRESSION IN CONSERVATIVELY TREATED PATIENTS

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Background: Chronic Kidney Disease (CKD) is a progressive disease with majority terminating in end-stage kidney disease with associated significant morbidity and mortality except renal replacement therapy is instituted optimally. Pattern and predictors of CKD progression in conservatively managed patients who were on regular treatment and long-term follow-up have not been adequately described.

Aim: To determine the rate of progression of treated Pre-renal replacement therapy CKD as measured by annual decline in eGFR and to identify the determinants of the progression.

Method: This is a retrospective cohort study of three hundred and ten CKD patients who were managed conservatively for minimum of $4^1/_2$ years at the CKD clinic of Sheffield Kidney Institute in UK. Data were obtained from the computerized proton database of the hospital. Patients with early stage 3 CKD (GFR of 40-60ml/min) who have not received kidney transplant or commenced dialysis were recruited for the study. Initial and Mean-follow up data were obtained for systolic blood pressure (SBP), diastolic blood pressure (DBP), Mean arterial pressure (MAP), eGFR, 24hour urinary protein (24hp), haemoglobin (Hb), serum albumin (ALB), bicarbonate (HCO3), parathyroid hormone (PTH), phosphate (P04) and calcium Phosphate product (CAP). CKD progression was defined as mean eGFR decline of e"2ml/min/year. SPSS version 13 was used to analyze the data. Variables with non-parametric distribution were log-transformed and the results used in the analysis. Correlation and regression models were used to determine predictors of progression of CKD.

Results: The mean age of the patient was 58.59 ± 14.69years and 191(61.6%) were males. Mean duration of follow-up was 7.49 ± 1.80years. Median annual decline in eGFR was 1.62ml/m/year (range: -2.3 to 6.8ml/m/year), showing progressors ($\geq$2ml/m/year) in 132(42.6%) cases, non progressors (0 to 2ml/m/year) in 150(48.4%) cases and improvers (-2.3 – 0ml/m/year) in 28 (9%) cases. HCO3, ALB and Hb correlated negatively with progression ($r = -0.366$, $p = 0.000$; $r = -0.233$, $p = 0.000$; and $r = -0.289$, $p = 0.000$ respectively) while 24hp, PTH, PO4 and CAP correlated positively with progression ($r = 0.320$, $p = 0.000$; $r = 0.391$, $p = 0.000$; $r = 0.392$, $p = 0.000$; $r = 0.267$, $p = 0.000$). Age; SBP, DBP and MAP did not correlate with progression. Stepwise linear regression showed that P04 was the best independent predictor of progression ($r = 0.573$, $r^2 = 0.322$, $P = 0.000$) followed by PO4 and HCO3($r = -0.470$, $r^2 = 0.401$, $P(PO4) = 0.000$, $P(HCO3) = 0.000$). PO4, HCO3 and PTH were the next predictors accepted by the model ($r = 0.376$, $r^2 = 0.422$, $P(PO4) = 0.000$, $P(HCO3) = 0.002$ and $P(PTH) = 0.046$). 24hp > 0.5g also predicts progression but in small number of patients ($r = 0.237$, $r^2 = 0.056$, $P = 0.005$).

Conclusion: Significant proportion of CKD is progressive even with treatment although kidney function may improve in small number of patients. With adequate control of blood pressure and proteinuria which are potent predictors of CKD progression, hyperphosphatemia, acidosis and hyperparathyroidism play significant role in determining further progression of CKD.

ABS-OR-1010
CHARACTERISTICS OF PATIENTS ATTENDING DIALYSIS UNIT OF AHMADU BELLO UNIVERSITY TEACHING HOSPITAL, ZARIA

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Background: Ahmadu Bello University Zaria has been offering care for renal patients during the last 3 decades and up to the 1990's its catchment area covered the entire much of the northern Nigeria with a population of over 50 million people. However, haemodialysis services only became available late 2005.

Methodology: This is retrospective study of over a three-year period from january 2006 to january 2009. A total number of 120 patients were studied. Statistical Package for Social Sciences (SPSS) computer version 15.0 was used to analyze the data.

Results: There were 80 males (66.7%) and 40 females (33.3%). Age ranged between 15 to 75 years with mean age of 40.32 15.23. The indication for dialysis among these patients were as follows: chronic glomerulonephritis 56 (46.7%), with mean age of 28.40 ; hypertension 40 (33.3%), mean age 51.13 8.20; acute renal failure 9 (7.5%) with mean age 31.80; obstructive uropathy 8 (6.7%) with mean age 66.63; diabetic nephropathy 5 (4.2%), with mean age 57.60; others 2 (1.7%),with mean age 48.0 The mortality was observed in 48 (40%), while 61 (50.8%), were lost to follow up, 11(9.2%) were discharged. Access used were femoral 99 (82.5%), arterio-venous fistula 14(11.7%), and jugular 7(5.8%). Only two (1.7%) of the patients were transplanted.

Conclusion: Chronic glomerulonephritis is the commonest cause of ESRD and indication for dialysis ,followed by hypertension. Obstructive uropathy is the 3rd cause of ESRD in Zaria. The latter is wholly preventable by early urological intervention and closer collaboration between nephrologists and urologists in our centre. Majority of our patient absconded because of prohibitive cost of dialysis therapy.

ABS-OR-1011
THE BURDEN OF CHRONIC RENAL FAILURE AMONG MEDICAL ADMISSIONS IN AHMADU BELLO UNIVERSITY TEACHING HOSPITAL SHIKA, ZARIA

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Introduction: Chronic kidney disease (CKD) is an important public health issue globally as its assuming an epidemic proportion. The actual burden of CKD in Africa and Nigeria in particular is largely conjectural. CKD is associated with increased cardiovascular morbidity and mortality.

Aims and objectives: The study was carried out to determine the relative contribution CKD to medical admissions and determine causes of CKD in the new site of Ahmadu Bello University Teaching Hospital Zaria.

Methodology: This a retrospective study over a 3 year period between january 2006 and December 2008.Admissions case notes were studied to establish the hospital prevalence of CKD in Zaria.

Results: A total number of 3281 patients were admitted into the Medical ward in the period under review. Chronic Renal failure accounted for 112 (3.41%) of total admission. Only 109 cases were available for review. There were 57 males (52.3%), while females were 52 (47.7%). Their ages ranges between 12 to 80years with mean age of 41.89 Chronic glomerulonephritis accounted for 49.5% (54) of the cases, Hypertension 35.8% (39), Diabetic Nephropathy 8.3% (9), Obstructive Uropathy 5.5% (6), and others 0.9% (1).

Conclusion: CKD is a minor contributor to medical admissions in Zaria. Chronic glomerulonephritis remains the most important cause of chronic renal failure in our hospital, while hypertension ranked second and Diabetes mellitus is the 3rd aetiological entity.

ABS-OR-1012
PROTEINURIA AMONG MEDICAL ADMISSIONS IN BENIN CITY: A STUDY OF 100 CONSECUTIVE CASES.

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Background: Proteinuria is a risk factor for cardiovascular disease and mortality. Persistent proteinuria is diagnostic of chronic kidney disease(CKD) regardless of GFR level. Interventions that reduce proteinuria such as Blood pressure control can retard the progression of kidney disease.

Aims and objectives: To determine the prevalence of proteinuria among medical admissions in University of Benin Teaching Hospital (UBTH) and the relationship between proteinuria and some risk factors studied.

Materials and Method: 100 consecutive medical patients admitted through the UBTH emergency unit over a 30 day period were studied. Information on their sociodemographic and health status as well as their laboratory investigations and final diagnosis were obtained. Data were analysed using the SPSS version 15.

Results: Of the 100 patients studied 46% were males giving a sex ratio of 1:1.2(M:F). Mean age was 47.5±15.9yr. Majority were Binis(54%). Prevalence of proteinuria was 65%. Proteinuria was seen in 66.6% of hypertensives, 58.6% of diabetics,68% of patients who had CKD, 67.4% of febrile patients and 75% of HIV seropostive patients. There was no statistically significant association between proteinuria and DM, HTN or RVD. 12% of the 100 patients had CKD while only 2% had AKI.

Conclusion: Urinalysis is recommended for all medical cases at initial contact, however only persistent proteinuria predicts renal damage. Proteinuria was more prevalent among diabetics, hypertensives, renal disease and HIV patients but a substantial proportion of individuals with proteinuria did not have these conditions.

ABS-OR-1013
QUALITY AND PATTERN OF SLEEP IN PATIENTS WITH CHRONIC KIDNEY DISEASE

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Introduction: Sleep problems are common in many chronic medical illnesses. However, no indigenous study has examined the quality and pattern of sleep in Nigerian patients with chronic kidney disease.

Aim: To determine the prevalence of 'poor sleep' in patients with Chronic Kidney Disease (CKD) in Benin City and to examine its association with some clinical and laboratory parameters in these patients

Methods: This was a cross-sectional analytical study of patients presenting consecutively in the outpatient department and the casualty unit of the University of Benin Teaching Hospital. Quality of sleep was measured in these patients using the Pittsburg Sleep Quality Index (PSQI) which is a scale that examines seven sleep domains (sleep latency, sleep disturbance, habitual sleep efficiency, subjective sleep quality, daytime sleep disturbance, sleep duration, and use of sleep medicine). The scores of these patients were compared with those of healthy control subjects which were selected from the general population.

Results: A total of 65 CKD patients (52M, 13F) completed the study. The mean age of subjects with CKD was 50.28+/-17.9 years. Glomerulonephritis (33.9%), Hypertension (23.1%) and Diabetic Nephropathy(23%) were the principal aetiologies of CKD amongst the patients. A total of 46 (70.8%) CKD patients were found to be poor sleepers(PSQI score > 5) with a mean score of 9.28 ± 6.17 compared to control subjects with a mean PSQI score of 4.45 ± 2.83 and only 37% being poor sleepers. Three(4.62%) of the CKD patients had impairment in all seven sleep domains, 5(7.69%) had no impairment in any of the domains while impairment was found to exist in varying severity in the different sleep domains in the other CKD patients. There was no significant difference in the total PSQI score between patients with CGN, hypertensive nephrosclerosis or diabetic nephropathy, the three principal aetiologies of CKD in these patients. Blood Pressure was found to be a determinant of quality of sleep, as there was a significant statistical difference in the mean scores between patients with and without controlled BP, with the former having a higher PSQI score and thus worse sleep quality. PCV was strongly inversely correlated with total PSQI score as well as number of sleep domains affected (p=0.003 each). Estimated GFR was also significantly inversely correlated with number of sleep domains affected as well as total PSQI score.(p=0.000 and p=0.006 respectively)

Conclusion: From the results of this study, it is reasonable to conclude that a very large percentage of CK D patients suffer from poor sleep and that optimizing renal function, increasing haematocrit level as well as ensuring blood pressure control to target goals are measures likely to positively impact on the quality of sleep in these patients.

ABS-OR-1014
BASELINE DEMOGRAPHIC AND LIFESTYLE CHARACTERISTICS OF THE KHDC PREVENTION PROGRAMME PARTICIPANTS AT MAIDUGURI

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Background: The non-communicable diseases such as chronic kidney disease, hypertension, diabetes and cardiovascular disorders account for the majority of global deaths. At the level of the general population in developing countries these diseases are largely undetected, with low awareness and treatment rates. This Vascular disease detection and Intervention Programme in Northeast Nigeria (VADIPIN) is an ongoing International Society of Nephrology (ISN) supported KHDC prevention programme.

Methods: Our community based study commenced in April 2008 and involved the general population of adults 18 years and older who resided in 6 clusters locations in Maiduguri. Following the ethical approval from the relevant authorities at Maiduguri, we embarked on public enlightenment campaigns using the local TV stations. All consenting adults were requested to fast and to assemble at the designated mobile clinics

located in the vicinity of their residences. Participants filled out or were interviewed using the questionnaire that enquired into their demographic, lifestyle, personal and family medical histories.

Results: One thousand and forty-three individuals (f = 469) aged 18 to 79 (mean 36.8) years participated in the surveys. 99% of the study participants were Nigerians of whom the majority hailed from the ethnic groups of the Northeast, Nigeria. Seventy-four percent of the population had at least some primary school education. 92% of respondents had a minimum of one serving of fruits/vegetables per week. Dietary salt restriction was reported by 4% while 11.9% actually believed that their salt intake was greater than average. 93% of respondents had never smoked while 87.6 reported abstinence from alcohol. 73% reported that they had physical exercises for up to three days per week while 11% used complexion cream preparations. A minority (8%) reported that they avoided the use of energy drinks but 18% resorted to local herb for treatment of different ailments.

Conclusion: The study population was physically active but had a low awareness of the benefit of salt restriction to the general population. Alcohol and smoking habits were uncommon but the use of local herbs and complexion creams by significant number of individuals maybe issues of public health importance.

ABS-OR-1015
KNOWLEDGE, AWARENESS AND PREVALENCE OF THE RISK FACTORS OF CHRONIC KIDNEY DISEASE IN A COMMUNITY IN SOUTH WEST NIGERIA

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Background: Chronic kidney disease is a global health problem. The prevalence in developed, economically emerging and developing countries has been on the rise and in fact more than the rate at which population growth rises. Chronic kidney disease, from some hospital-based studies in sub-Saharan Africa (SSA), has epidemiological characteristics that are strikingly different from those observed in other regions. Despite the menace of chronic kidney disease in SSA and especially in Nigeria, the most populated country in Africa, there is paucity of data on community studies.

Aims: The aim of this study was to determine the knowledge, awareness and prevalence of chronic kidney disease and its associated risk factors in a community in South West Nigeria.

Methods: A total of 468 participants were randomly recruited for the study using multi-stage technique. Structured questionnaires were used to extract information on socio-demographic characteristics and information on their knowledge of kidney disease with biophysical measurements done. Participants were screened for the presence of macroalbuminuria and microalbuminuria. Serum creatinine were measured with Glomerular Filtration Rate estimated using Modified Diet in Renal Disease equation. Prevalence of the risk factors for CKD, level of knowledge and the association between the risk factors and CKD were determined.

Results: Four hundred and fifty four participants were included in this study. The mean age $\pm$ SD of the participants were 45.8 ± 19.0 years. Among the participants, 20.4% of the participants 0.6% gave history of diabetes but 3.7% were diagnosed to have diabetes. The overall prevalence of albuminuria was 12.7%. The prevalence of macroalbuminuria and micralbuminuria was 8.9% each with higher value among females. The prevalence of chronic kidney disease with GFR < 60 ml/min/1.73m^2 was 12.3%. With logistic regression, increasing age (OR =0.919, 95% CI = 0.878-0.961) and female gender were predictive of chronic kidney

disease (OR = 4.87, 95 % CI=1.336-17.736) using GFR < 60 ml/min/1.73m^2. With albuminuria, systolic blood pressure (OR=1.038, 95% CI=1.006-1.071), diabetes mellitus (OR=15.764, 95% CI=1.247 – 199.238) were predictive of chronic kidney disease. Only 35.5 % of the participants had heard of chronic kidney disease before the time of the study. Less than 30% had good knowledge of chronic kidney disease.

Conclusion: Chronic kidney disease is prevalent in our communities. The risk factors were also prevalent and effort should be made to introduce policies and strategies to reduce the burden of chronic kidney disease and its associated risk factors in the community. There is need to also increase the awareness of chronic kidney disease.

ABS-OR-1016
SAFETY AND COST EFFECTIVENESS OF RENAL BIOPSY AS A DAY PROCEDURE: ZARIA EXPERIENCE

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Background: Renal biopsy is an important and intergral part of management of most glomerular diseases. In fact is the 'gold standard' for making such diagnosis. Renal biopsy involves patients being admitted after the procedure. This study was set out to evaluate and examine the safety of the procedure as day-case.

Methodology: We Examined the records of patient who have undergone renal biopsy in our centre , over a 3 year period. (January 2006 to Jan. 2009). A total of 30 patients were studied. The indications for the procedure were Nephrotic Syndrome 18 (60.0%),HIV with signifant Proteinuria 10 (33.3%) and unexplained proteinuria in apparently healthy adults 2 (6.7%).There were 21 males (70.0%) and 9 females (30.0%) and their ages ranges between 12 and 55 years, with mean age of 29.97 11.30. All had pre- biopsy evaluation that included PT,KCCT, FBC and Platelets, urine m/c/s and renal ultra sound scans. All patients were rested supine for 3 to 4hrs after biopsy, and had no visible haematuria or abnormal vital signs. Only one (3.33%) of the patients complained of loin pain a week after the procedure. A repeat renal ultrasound and renal function did not revealed any abnormality. Pain was controlled with simple analgesia.

Conclusion: Renal biopsy is quite safe as a day case procedure. Its also cost effective as it obviates the need for admission especially in our hospital that is constrained by availability of bed space.

ABS-OR-1017
HISTOPATHOLOGIC CHARACTERISTICS OF PATIENTS PRESENTING WITH NEPHROTIC SYNDROME IN THE GUINEA SAVANNAH BELT OF NIGERIA

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Background: In the last 3 decades, since Awounor -Renner reported on the histological pattern of glomerulonephritis in children with nephrotic syndrome in zaria, no similar report has emerged from this part

of the country. The aim of this study was therefore to evaluate the histological pattern of adults presenting with nephrotic syndrome in this centre.

Methodology and Results: Twenty adult Nigerians who presented with nephrotic syndrome were studied. They consisted of 13 males (65.0%) and 7 females (35.5%). Age ranged between 12 to 55 years with mean age of 29.97All had percutaneous blind renal biopsy, after ultra sound mapping and determination of kidney depth from skin surface prior to the procedure. All had baseline investigations done which included, evaluation of renal function (urea, electrolytes and creatinine), full blood count platelets count, and clotting profile, urine culture, and renal ultra sound. The kidney tissue obtained was fixed in 10% formaldehyde, paraffin-embedded and stained with haematoxyllin and eosin, periodic acid schiff, congo red, methenamine silver blue and viewed with light microscopy. The Histological characteristics were as follows: Minimal change 8 (40.0%), Membranous glomerulopathy 6 (30.0%), Focal segmental glomerulosclerosis 4 (20.0%) and Membranoproliferative glomerulonephritis 2 (10.0%).

Limitations: Lack of immunofluorescent and electron microscopic techniques were significant constraints for reliable tissue diagnosis

Conclusion: This study illustrated that the most common histologic pattern in adults this environment is minimal change disease (MCD). This finding was somewhat suprising as it might reflect artefact from sampling error where focal lesions may be missed.

ABS-OR-1018
A REVISIT OF THE PATTERN OF RENAL DISEASE IN THE UNIVERSITY COLLEGE HOSPITAL, IBADAN OVER A ONE YEAR PERIOD FROM NOVEMBER 2008-2009

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Objectives: To highlight patterns of renal disease in the renal unit of UCH.

Materials and Method: This is a retrospective study. The ward admission register of the renal wards was used for collation of patients from November 1[st, 2008]-November 1[st,] 2009. The diagnosis were reviewed vis a vis their clinical and biochemical data and data analyzed by statistical means.

Results: A total of 256 patients were seen within the period under study (2008-2009) 126 were males (49.2%) of the total patients seen. 130 were females (50.8%). In the year under study, chronic kidney disease was the commonest disease presentation, accounting for 86% and the commonest aetiology was chronic glomerulopathy (60%).The mean age of presentation was 48.2 for males and 47.68yrs for females. Others causes include hypertensive nephrosclerosis (7.8%), Diabetes mellitus(6%), and retroviral infection(5.8%). Other renal conditions seen were acute renal failure (10%), urinary tract infection (2%), obstructive uropathy(1.5%) and others like urolithiasis, polycystic kidney disease accounted for the remaining negligible percentage. In other related studies done in sub-sahara Africa (1994), glomerulonephritis was recorded as the commonest cause of ESRD (1771 people-52.1%) and hypertension in (1549 people-45.6%) of patients by the South Africa dialysis and transplant registry, comparable with our findings. In a ten-year study of 368 patients with chronic renal failure in Nigeria, the etiology of renal failure was undetermined in 62%. Of the remaining patients whose etiology was ascertained, hypertension accounted for 61%, diabetes mellitus for 11% and chronic glomerulonephritis for 5.9%. Chronic glomerulonephritis and hypertension are principal causes of CRF in tropical Africa and East Africa, together with diabetes mellitus and obstructive uropathy.

Conclusion: CKD still remains the commonest presenting disease in the renal unit with chronic glomerulonephritis being the commonest cause, the average age of presentation being 47.94yrs. Retroviral infection is rapidly emerging contributor to renal disease. There is a need for regular screening of the populace to reduce the burden of CKD.

ABS-OR-1019
PREVALENCE OF HYPERTENSION, DIABETES AND PROTEINURIA: 2009 WORLD KIDNEY DAY SCREENING PROGRAM AT OSOGBO, OSUN STATE, NIGERIA

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Background: Chronic kidney failure (CKF) which represents the end of the continuum of chronic kidney disease (CKD) is a devastating medical illness with dire social and economic consequences for the patients, their families and the country. CKD is asymptomatic in early stages which lead to delay in recognition. Reports from Nigeria showed that hypertension, glomerulonephritis and diabetes are the leading causes of CKD. Early detection of these diseases is possible with measurement of blood pressure, blood glucose and urine examination, which in turn will allow early initiation of appropriate medical therapies and educational strategies with likely positive impact on kidney outcome.

Aims and objectives: To determine the prevalence of diabetes, hypertension and proteinuria among participants of the 2009 World Kidney Day Screening Program (WKDSP).

Materials and Methods: A cross sectional study involving 586 participants (360 males, 226 females) was conducted in 4 centres as part of 2009 WKDSP. Each participant completed a simple questionnaire and underwent blood pressure (BP) measurement, blood glucose determination and urinalysis.

Results: Ninety six (16.4%) and 11 (1.9%) participants were known before screening to have hypertension and diabetes respectively. Fifty six (9.6%) and 11 (1.9%) participants were newly diagnosed to have hypertension and diabetes respectively. Forty one (42.7%) participants with known hypertension were uncontrolled. Fourteen (2.4%) of the participants had proteinuria e"1+. Participants with proteinuria had significantly higher systolic and diastolic BPs.

Conclusion: This study showed a high prevalence of undetected and uncontrolled hypertension among participants. There is a need to put in place public health policies to stem the scourge of hypertension, diabetes and CKD.

ABS-OR-1020
A RETROSPECTIVE STUDY OF THE PATTERN OF CLINICAL PRESENTATION AND OUTCOME OF LUPUS NEPHRITIS IN ADULT NIGERIANS

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Background: SLE, a multisystem autoimmune disease with predominant female and racial predilection is uncommon in our setting though the incidence is increasing. Lupus Nephritis is common and is recognised to be a major predictor of mortality.

Aim & Objectives: 1. To assess clinical characteristics and renal histopathology
2. To assess response to steroid and/or immunosuppressive therapy.
3. To determine (if any) factors that portend worse outcome.

Materials and Methods: We retrospectively studied 23 patients that manifested e"4 ACR criteria for diagnosis of SLE. Socio-demographic data, clinical and laboratory parameters were collated. All patients had combination of ACEI, diuretics and steroids. Induction remission therapy was done using I.V. methyl prednisolone 500mg daily for three days and maintenance therapy with prednisolone at the dose of 1mg/kg/day. 15 of the patient were thereafter managed with immunosuppressive.

Results: The age ranged between 15 and 63yrs (mean± S.D.; 31.7±1.28yrs). The common clinical findings at the time of diagnosis included body swelling (88%), frothy urine (80%), facial rash (84%), joint pain (84%) and anaemia (92%), 70% had massive proteinuria with mean(±SD) of 3.74(±1.37)g. Antinuclear antibodies and anti-double stranded DNA antibodies were detected in 40%. Of the 9 patients that had renal biopsy done 4 had membranous GN (stage V). Fifteen patients developed renal failure, 13(56.2%) had HD while CAPD and renal transplantation were offered to 1(4.3%) and 2(8.7%) respectively. Eight (32%) patients had sustained remission while others had between 1-3 relapses during the follow up period. The mean duration of survival after diagnosis was 20±1.56months.

Conclusion: The incidence of Lupus nephritis is increasing it significantly contributes to morbidity and mortality.

ABS-OR-1021

PATIENT LEVEL COST OF DIALYSIS TREATMENT IN NIGERIA

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Background: The cost of treating individuals with kidney failure is prohibitive in all the countries of the world. In the developing countries besides the issue of availability, the affordability of renal replacement therapy may be the most important factor that determines survival of patients with ESRD.

Methods: In this study we sought to determine the costs of dialysis treatment in the different centres from all parts of Nigeria according to their practices in the year 2008. We employed the use of questionnaires which were filled out by the Nigerian nephrologists and dialysis nurses in attendance at the Abuja 2009 AFRAN-NAN conference.

Results: Responses came from 21 (two private and 19 public) dialysis centres situated in six of the 6 geopolitical zones of Nigeria. The centres had between one and 19 years with a mean of 5.4 years of operational experience. The prevalent dialysis populations in the centre summed up to 401 (mean = 23) whereas 276 (mean = 19) patients initiated treated in the previous year. In 17 of the centres the majority of the incident patients were lost to follow up in the first month. The mean cost per session of dialysis in the public hospitals was =N=15,210 ($100) and about 2x more expensive in the private centres. In all but one centre (where some persons were insured) all the patients settled dialysis fees by out of pocket payments. Continuation of dialysis treatment for patients with ESRD beyond the first year was possible in a minority of cases in the majority of the centres.

Conclusion: Taken at the face value the cost of dialysis in Nigeria is cheaper than in the Western industrialized countries. If however the purchasing power parity and modes of financing are put into consideration, the cost of dialysis care in Nigeria is largely unaffordable and unsustainable for the majority of ESRD patients.

ABS-OR-1022
TWO YEARS OF HAEMODIALYSIS IN UYO: A DESCRIPTIVE STUDY

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Background: The epidemiologic transition appears to be gaining a foothold in Nigeria with an increase in the number of individuals presenting in our centres with chronic non-communicable diseases. In January 2008, the Akwa Ibom State government set up a dialysis centre to cater for patients who require haemodialysis in the state and its environs. It is important to review the baseline sociodemographic and clinical characteristics of our patients and assess the predictors of mortality.

Methodology: This is a retrospective analysis of data collected over two years on patients seen at the dialysis unit at the University of Uyo Teaching Hospital, Uyo. Descriptive analysis of the characteristics of the patients was performed using Chi-square for categorical variables and the Wilcoxon rank sum test for continuous variables that were not normally distributed. A logistic regression model was built to determine factors that predict mortality in our patients.

Results: 96 patients were dialyzed in the 2 year period, 54 (56.8%) and 42 (43.2%) were male and female respectively. The median creatinine level at presentation was 1180µmol/L . The mean age at presentation was 44.9 years and median Packed Cell volume at first dialysis was 23%. 29 (30.85%) had chronic glomerulonephritis, 14 (13.82%) came in acute renal failure, 15 (16%) had ESRD due to diabetic nephropathy. Only about 25% of the patients had at least 70% compliance to scheduled dialysis and the median number of sessions before death was 3 per patient.

Conclusion: There is great need to intensify public health enlightenment on renal health issues and to encourage government subsidy on the cost of dialysis in Nigeria.

ABS-OR-1023
THE ASSESSMENT OF HEMODIALYSIS ADEQUACY AMONG ESRD PATIENTS IN ILORIN USING UREA REDUCTION RATIO

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Introduction: Urea Reduction Ratio (URR) as a method of measuring adequate dialysis that correlate with patient outcome was first popularized by Lowrie and Lew in 1991. URR is a measure of adequacy of delivered dose of dialysis expressed as a percentage reduction in blood urea level after a session of dialysis. It is mathematically related to Kt/V and both can be derived from each other with some amount of precision by various equations or a normogram. Although, Kt/V is recommended as the best measure of dialysis adequacy, URR is the most utilized because of its simplicity and both methods have similar predictive power in terms of patient outcome. A URR of 65% which corresponds with Kt/V of 1.2 is the minimum acceptable dose in the standard thrice weekly hemodialysis. Unlike in Europe and America, there is no unified data system for recording and analyzing URR from various dialysis units in tropical developing countries. In Nigeria, there is paucity of data on adequacy of hemodialysis. The few available reports showed that inadequate dialysis is common and patients survival is very poor. A one year review of patients on maintenance hemodialysis at UITH, Ilorin was evaluated to determine the adequacy of delivered dose of dialysis and the outcome.

Methods: All cases that met the criteria for ESRD and had hemodialysis between October 2008 and November 2009 were retrieved. Patients that had regular 4 hourly session of dialysis for at least twice a week in two consecutive months were included in the study. Data was analyzed using SPSS version 16.

Results: Twelve out of 33 patients (36%) with ESRD met the inclusion criteria. The mean age of the patients was 48.25 ± 17.85 with male to female ratio of 2:1. Majority were retired civil servants (33.3%), followed by serving civil servants (25.0%) and students (16.7%). The etiological factors of ESRD were Hypertensive nephrosclerosis (41.7%), CGN (33.3%), Diabetic nephropathy (25.0%), chronic allograft dysfunction (8.3%). None of the patients was able to sustain thrice weekly hemodialysis sessions. Mean pre-dialysis and post dialysis urea were 25.29 ± 11.87 mmol/l and 14.78 ± 8.10 mmol/l respectively. Mean URR was $41.83 \pm 16.30\%$ and overall mortality was 66.7%. The factors that appeared to have contributed to inadequate dialysis and poor outcome were late presentation, uremic bleeding, septicemia, repeated blood transfusion and inability to sustain recommended thrice weekly haemodialysis due to poor finances.

Conclusion: Our study showed that inadequate hemodialysis is common and is associated with high mortality rate. Major contributory factors to poor outcome were ignorance, late presentation and poor socioeconomic status of these patients. There is need to intensify awareness programs on early diagnosis of CKD. We recommend incorporation of renal replacement therapy subsidy into the current National Health Insurance Scheme of the Federal Government.

ABS-OR-1024
A TEN YEAR REVIEW OF INTRA-DIALYSIS COMPLICATIONS AS SEEN AT RENAL CARE CENTRE ILORIN

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Introduction: In Nigeria, haemodialysis (HD) is the most readily available dialytic therapy. It remains the most viable management modality for our uraemic syndrome patients who either present in acute renal failure or chronic renal failure. Peritoneal dialysis could have been the best option in the tropics including Nigeria as it is neither machine nor power dependent. However, most centres utilized HD due to scarcity and high cost of peritoneal dialysis fluids with associated high rate of peritonitis. Despite the in-built safety measures of HD machines, it is still associated with complications, some of which may be life threatening. We therefore undertook a study of the pattern of intra-dialysis complications and their outcome in our centre in the last decade. The factors that contributed to these complications and measures taken to ameliorate them were identified.

Method: All case notes of patients who had dialysis in our centre between December 1999 and November 2009, with diagnosis of either ARF or CRF were retrieved and analysed. The socio-demographic, clinical diagnosis, intra-dialysis complications and the outcome were obtained for analysis using SPSS version16.

Results: One hundred and fifty three patients were managed with 802 sessions of HD. Their ages ranged between 10 and 75 years with male to female ratio was 1.2:1. Haemodialysis sessions were bicarbonate based and blood flow rate of 200-350 mls per minute, using hollow fibre dialyzer via femoral/jugular cannulations. Majority of the cases were chronic renal failure (70.5%). One hundred and ninety seven sessions were associated with various complications (24.6%). Hypotension was the commonest (40%) of the intra-dialysis complication followed by hypertension (29%), convulsions (8%), muscle cramps (6%), back pain (5%), pruritus (4%), vomiting (3%), chest pain (3%), disequilibrium syndrome (1%) and dialysis membrane rupture (1%). There were no significant differences in intra-dialysis complication pattern between cases of ARF and those with CRF. The overall mortality from intra-dialysis complications was 3%.

Conclusion: Intra- dialysis complications are common with majority due to hypotension. Most of the identified complications are preventable and treatable conditions as the mortality rate was low. There is need to be proactive in identifying potential precipitating factors and prompt treatment of complications in order to avoid unnecessary discontinuation of the procedure and/or patient death.

ABS-OR-1025

HEPATITIS C- INDUCED KIDNEY AND LIVER DISEASEE AMELIORATED BY INTERFERON AND RIBAVIRIN THERAPY: CASE REPORT

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Background: Asymptomic hepatitis C infection is common is haemodialysis population. We report a Nigerian woman whose liver and kidney injuries abrogated after antiviral therapy. And hepatitis C -associated liver and kidney co-infection is an important cause of increased morbidity and mortality in patients with chronic liver and kidney diseases.

Case report: N.S is a 28 years old lady who presented to our renal unit via the general outpatient department (GOPD) on account of newly diagnosed hypertension and proteinuria. She had minimal urinary symptoms. No history of exposure to nephrotoxic drugs. She offered no past history of jaundice, blood transfusion or indiscriminate exposure to sharps objects. She had no personal history of diabetes. She described a history suggestive of Alport's syndrome in two of her siblings who died from chronic kidney disease. Mother is type 2 diabetic. Her medications in the preceeding 6 months prior to presentation include ramipril and hydrochlorthiazide. Physical examination was unremarkable, blood pressure being 126/84mm Hg. Results of blood tests were as follows: urea, electrolytes and creatinine were entirely normal; .corrected serum calcium-2.66mmmol/l , phosphate 0.52mmo/luric acid-320µmol/l , creatinine clearance – 104ml/min/1.73m^2,24 hrs. Urine protein- 1.2gm/day. HBsAg –negative, HCV antibodies- reactive, Platelets 373 x10^9/L,PCV - 33%,WBC- 6.2 x 10 ^{9}, serum proteins -65g/l, albumin 49g/l, globulin -16g/l, AST – 5 i.u/l, ALT- 26i.u/l, AST : ALT ratio < 1,AlP -25 i.u/l. Abdominal ultrasound scan showed normal sized kidneys with good cortico-medullary differentiation. Retroviral screening was negative, clotting profile including PT -20s, (control =15s) KCCT-48s (control=32s). Light microscopy findings of kidney biopsy was suggestive of mesangiocapillary glomerulonephritis, while liver biopsy was consistent with chronic persistent hepatitis. She was placed on subcutaneous pegylated interferon 180µg weekly and ribavirin 400mg twice a day for 24wks. Renal and liver biopsies performed 6 months after therapy showed complete resolution of the respective lesions.

Conclusion: It's imperative to fully evaluate the liver and kidney in patients positive for Hepatitis C antibodies presenting with glomerular disease as antiviral agents may exert dramatic benefit.

ABS-OR-1026
HAEMODIALYSIS THERAPY IN ACUTE RENAL FAILURE ILORIN EXPERIENCE

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Introduction: Haemodialysis is most utilized form of renal replacement therapy in our environment both for acute and chronic renal failure. This is largely because of high infection rate associated with peritoneal dialysis and unaffordable cost of renal transplantation. A 17 year review of haemodialysis therapy in acute renal failure at UITH Ilorin was evaluated to determine its cost effectiveness in view of the ever rising cost of this mode of therapy.

Methods: All cases that met the criteria for ARF and who had haemodialysis between November 1992 to October 2009 were retrieved and analysed using SPSS version 16.

Results: There were 45 patients (19 males and 26 females), with male to female ratio of 1:1.4. The age range was between 10-69 years while 76% of cases are less than 40 years of age. Majority were traders followed by students. The aetiological factors were septicaemia (35.5%), AGN (15.5%), septic abortion and herbal remedies (11.1% each), ante/post-partum haemorrhage and severe gastroenteritis (6.6% each), drug induced (4.4%), eclampsia (2.2%) and unknown (6.6%).The duration of illness before dialysis range between 1-30 days with 80% of cases less than 14 days. The waiting time before commencing dialysis range between 1-9 days with majority less than a week (91.1%). The range of blood transfusion was between 1-6 units with 65% of cases receiving 1-3 unit of blood. Sessions of dialysis ranged between 1-6 with 89% of cases having less or equal to 3 sessions before recovery. The duration of hospitalization was less than 3 weeks in 76% of cases. Hypotension was the commonest (44.4%) intra-dialysis complication followed by twitching (15.5%), dialysis membrane rupture (6.6%), muscle cramps, back pain (4.4% each), chest pain, weakness and headache (2.2% each).The outcome was favourable with 6 deaths constituting 13.3% of the cases.

Conclusion: Acute renal failure is a common cause of morbidity and mortality in our environment. Majority of the patients are less than 40 years of age with slight female preponderance. The implicated aetiological agents still remain preventable and treatable infectious causes, majority of which presented in a setting of septicaemic illness. Duration of hospital stay, waiting time before dialysis and total duration of illness appear to have positive influence on the outcome as majority were less than two weeks.We recommend at least 3 sessions of haemodialysis in ARF patients as majority of our patients did well after 3 sessions.

ABS-OR-1027
EFFICACY AND COST EFFECTIVENESS OF DIALYSER RE-USE: A METHOD OF REDUCING THE COST OF DIALYSIS IN A RESOURCE POOR COMMUNITY

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Background: The cost of dialysis is exorbitant and relatively unaffordable to the majority of needy patients.Re-use haemodialysis may offer some relieve.

Aims and objectives: 1.To assess cost effectiveness of dialyser re-use in our patients on maintenance haemodialysis.
2.To determine the adequacy of HD delivered to the patients.

Methodology: We study a total of 14 patients that had a total of 42 sessions. Their socio-demographic data, predialysis and postdialysis results were collated and analyzed. Dialysis adequacy was assessed using urea reduction ratio (URR). Data was analyzed using SPSS package version 14.

Results: Their ages ranged between 18 and 67 years, with median of 45 years. First and second dialyser use constituted 33.3% each while the third use was in 31%. Only one patient had fourth session (2.4) %. Mean URR achieved during first use, second and third dialyser use are 60.6%, 58% and 65% respectively. 50% achieved adequate dialysis on first use while 42.8% achieved adequate dialysis on second and third re-use. No statistical significant difference between first, second and third dialyser re-use. The cost of a session of first session of dialysis was 17,200 while the costs of each re-use ranges between 6,500 and 10,000.

Conclusion: Dialyser re-use is an effective cost saving treatment modality particularly in underserved communities.

ABS-OR-1028
A CLINICAL PROFILE OF COMPLICATIONS IN ADULTS WITH THE NEPHROTIC SYNDROME UNTREATED WITH STEROIDS OR CYTOTOXIC AGENTS

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Background: The Nephrotic syndrome continues to be one of the common modes of presentation of CKD in Nigeria accounting for 2 – 4 % of hospital admissions. A higher morbidity and mortality has been noted in those who present with complications early. Male gender, hypertension, impaired plasma creatinine and creatinine clearance in patients with this syndrome have been associated with progression to chronic renal failure and death. This study set out to determine the clinical profile of patients with the nephrotic syndrome attending the renal clinic and the complications encountered during a one year follow up.

Method: Fifty two (52) adult patients with clinical features of idiopathic nephrotic syndrome being managed with diuretics and lipid lowering agents alone were followed up for one year in the renal clinic, University College Hospital, Ibadan. Urine samples for urinalysis, urine microscopy, culture, sensitivity, 24 hour urinary protein estimations, creatinine clearance and blood samples for serum electrolytes, urea, creatinine, lipids, albumin and total protein were also taken both at the onset and end of the follow up period. Periodic blood pressure and weight measurements were done and other investigations were requested based on the suspected complications.

Result: 77.8% of the patients were between the ages of 18 and 30. More males (55.6%) were seen. All had generalized edema, 96% had nephrotic range proteinuria, 55.6% microscopic hematuria and 37% leucocyturia only 7.4% of which had a growth of pathogenic organisms. The commonest complications were refractory edema (68.5%), renal failure (60.4%), anemia (58.7%), and hypertension (29.6%). Other encountered complications were infections (UTI and chest) 5.7%, spontaneous bacterial peritonitis (5.6%), arrhythmias (5.6%) and DVT (3.8%).The majority had financial constraints (85.2%) .

Conclusion: The nephrotic syndrome remains a problem in our practice**,** presenting mainly in young males in the prime of life. Most of them present late and develop complications early and have financial constraints which make the management difficult and the outcome poor. We recommend that management of CKD should be included under the NHIS scheme.

ABS-OR-1029
NEPHROTIC SYNDROME IN NIGERIAN CHILDREN: CLINICAL AND GLOMERULAR CHARACTERISTICS

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Aims and objectives: This study determined the incidence and prevalence of childhood nephrotic syndrome (CNS), pre-treatment glomerular pathology, renal and patient outcome in Nigerian children with idiopathic CNS (ICNS).

Materials and methods: A non-randomized 9-year (June 2000 and June 2008) prospective study of CNS was conducted. Pre-treatment percutaneous renal biopsy was performed in all patients after obtaining an informed consent. The patients were followed-up for varied time length of at least six months. Patients recruited up till June 30, were followed till December 31, 2008. The Kaplan-Meier and log-rank statistics were used for comparative analysis.

Results: CNS accounted for 1.26% of paediatric admissions. The overall CNS incidence was 0.64/100000/ year (prevalence, 5.1/100000). Median CNS onset age was 7.1 (2.5–14.0) years. Male: female ratio was 1.7. Fifty-four of 78 (69.2%) nephrotic children had ICNS (incidence, 0.44/100000/year; prevalence, 3.53/ 100000) while 24 (30.8%) had secondary CNS. Thirty-nine of 54 (72.2%) ICNS patients were 5 years old and above. 18 of 54 were hypertensive (33.3%) with a mean blood pressure of $124.4 \pm 12 / 87.5 \pm 13$ mmHg. 25/54 (46.3%) had reduced eGFR (59.2 ± 14.9 mL/min/1.73m^2) and 17/54 (31.5%) had microhaematuria. The glomerular lesions in ICNS were membranoproliferative glomerulonephritis (MPGN, 44.4%), focal segmental glomerulosclerosis (FSGS, 25.9%), minimal change disease (MCD, 18.5%), mesangial proliferative glomerulonephritis (7.4%) and membranous nephropathy (3.7%). Overall ICNS cumulative complete remission (CR) rate 4 to 8 weeks post prednisolone treatment was 49.6%. Twenty-two of 25 with CR were early steroid responders while 3 were late responders. Median time to CR was 12.0 (3.0 – 46.0) days. Thirty relapses occurred; median time to first relapse was 11.0 months. Cumulative five-year relapse-free rate was 26.6%. Five-year renal survival was 16.1%. All patients with CR were followed-up for 6 – 93 (median, 22.0) months.

Conclusions: Prevalence of non-MCD was very high with significant resistance to prednisolone; poor renal survival was due to high frequency of MPGN and FSGS. Pre-treatment renal biopsy is advocated in our kind of patients so that steroid-sparing agents can be started early.

ABS-OR-1030
MICROALBUMINURIA IN HAART-NAÏVE HIV PATIENTS IN NIGERIA

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Background: HIV is an important cause of chronic kidney disease (CKD) in sub-Saharan Africa, the cost of management of which is highly prohibitive in most countries in the region. This observation demands the necessity of screening tools to detect early kidney involvement in HIV for prompt intervention. Microalbuminuria is a marker of cardiovascular and CKD; and early detection provides opportunity for

targeted therapy to delay or prevent development of ESKD. Studies on microalbuminuria in HIV in Nigeria are sparse, so its magnitude and utility in this patient population is not well described, hence this study.

Methods: This is cross-sectional study of consecutively recruited HAART –naïve HIV-seropositive patients seen at HIV clinic of University of Ilorin Teaching Hospital. Demographic data of the patients were collated at the clinic and blood samples were analyzed for CD4+ count, electrolytes, pack cell volume (PCV), urea and creatinine. Sport morning urine samples were collected for microalbuminuria determination by HemoCue point of care analyzer. SPSS version 16 (SPSS Inc, Chicago, IL, USA) was used to analyze the data. Correlation statistics were used to determine strength of association between severity of HIV (as indicated by CD4+ count and PCV) and microalbuminuria.

Results: 72patients out of 102 recruited so far have enough data for analysis. The mean age was 39±10years with 33(45%) males and 39(54%) females. Fifty (69%) patients had AIDs (CD4+ count <200cells/uL) while microalbuminuria defined as urine albumin estimation of >30mg/L was present in 51(70.8%) of patients. Median CD4+ count and microalbuminuria were 94(6-729) cells/uL and 60(10 ->150)mg/L respectively; while the mean PCV was 25±7. Microalbuminuria correlates negatively and significantly with CD4+ count (r = -0.246, p = 0.039) and PCV (r = -0.348, p = 0.003). CD4+ also correlates positively and significantly with PCV (r = 0.466, p <0.001).

Conclusions: Microalbuminuria is very common in HAART-naïve HIV patients in Nigeria and seems to be worse as the disease progresses. A larger sample size and prospective study is required to confirm this relationship. Screening for microalbuminuria and treatment is however recommended to reduce the burden of HIV-related CKD in sub-Saharan Africa.

ABS-OR-1031
PREGNANCY AND CHRONIC KIDNEY DISEASE(CKD): CHALLENGES AND OUTCOME

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Background: Pregnancy is associated with various physiological and haemodynamic changes resulting from various hormonal interplay. This increases the functional burden on the kidney. The ability of the kidney to cope with this heightened functions determine the outcome of the pregnancy. Thus pregnancy in kidney with impaired function poses great challenges as the increased functional demand worsens the innate kidney function, and the impaired kidney function has adverse effect on the outcome of the pregnancy. We report a case of pregnancy in a patient with chronic kidney disease.

Objective: To highlight the challenges and outcome of pregnancy in a patient with chronic kidney disease.

Case Report: A 24 years old youth corper, referred from a private hospital on account of pregnancy in a background chronic kidney disease. She presented at the referral hospital 2 years earlier with CKD stage 3 secondary to chronic glomerulonephritis but was neither compliant to medication or regular follow up. At presention she was 14 weeks gestation, hypertensive, had proteinuria and azotaemia. The challenges, possible complications and outcome were explained to the patient and spouse. She developed eclampsia at 22 weeks gestation and blood pressure was very difficult to control despite using maximum doses of antihypertensive

with deteriorating kidney function. She had intra uterine fetal death at 24 weeks. Two weeks later blood pressure control and renal function improved remarkably.

Conclusion: Pregnancy in patients with CKD is associated with lots of challenges and outcome is not good.

ABS-OR-1032
LAPAROSCOPIC DYE-INDUCED ACUTE RENAL FAILURE: CASE REPORT

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Background: Acute renal failure is an important cause of morbidity and mortality in our emergency and ICU settings. Despite plethora of data on acute renal failure associated with radiocontrast agents, only scant data are available pertaining to renal failure after exposure to laparoscopic dyes in gynaecologic setting. Therefore, we report a Nigerian lady who developed acute renal failure after evaluation for infertility using laparoscopy and dye test.

Case report: S.S is a 26 years old nurse assistant. She presented with 6 weeks history of generalized body weakness, anorexia, vomiting, abdominal pain, 2 weeks history of facial swelling and diminution in urine output. She had a laparascopy and dye test for primary infertility 5 days prior to development of the aforementioned symptoms. She had been on fertility medications (clomiphene) for 2 months. There was no history suggestive of abuse of non steroidal antiinflammatory drugs, or use of mercury containing creams or soaps. No history of consumption of herbal remedies. No past history of body swelling. Other relevant inquiries including for hypertension, diabetes, kidney disease and family history were not contributory about family history. Physical examination revealed a young lady, dyspnoeic, pale, anicteric, with anasarca. BP-130/80mmHg, normal heart sounds, with no pericardial rub, Aside basal crackles on chest auscultation the rest of the systems were unremarkable. Results of blood tests were as follows: packed cell volume-25%, total white blood cell-8.8x10^{9}L, Erythrocyte sedimentation rate- 140mm/hour, urea -29.5mmol/l, creatinine-742 µmol/l; electrolytes were within normal limits. Urine showed trace protein on dipstick, and bland sediment on microscopy. Both kidneys showed normal bipolar dimensions on ultrasound with normal corticomedillary differentiation. eGFR-9.03ml/min/1.73m^2, with protein excretion -1.3g/24hrs. 12-lead electrocardiogram revealed normal findings. She made a remarkable recovery after 6 sessions of HD, and was subsequently discharged. She has remained well.

Conclusions: We recommend inquiry of history of dye exposure during gynaecological evaluation in women with kidney disease

ABS-OR-1033
SOLID ORGAN D NATION IN NIGERIA: HOW ALTRUISTIC?

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Background: Organ transplantation has a dual arm of recipient and donor. Organ donation is most limiting factor determining the rate of organ transplantation in most countries. There are various guidelines and laws guiding organ donation. Altruistic donation without attachment to material or monetary gains is a widely accepted condition for acceptance of a donor for transplantation. In Nigeria there is no formal guideline or

law on organ donation and transplantation. This study is to highlight how altruistic is organ donation among kidney transplant patients in Nigeria.

Materials and Method: The clinical details of end stage kidney disease patients who has had or being prepared for kidney transplantation presenting from 1st January2009 to 31st December 2009 were documented. The data obtained were analysed.

Results: A total of eleven patients presented during the period, 73% were males, age range of 24 to 75 years, and 36% were businessmen. Duration of renal disease varies between 3 to 38 months before going for transplantation, financial constraint caused the delay for transplantation in 55% of patients, only 36% of patients sponsored their transplant, various organizations sponsored transplantation in 45% of patients. Only 18% of recipient had relationship with the donor, the others had financial commitment with the recipient paying between 1 and 1.8 million naira to the donor. There were middle men in 64% of cases. Seventy three percent of the transplant was done in India, with only one patient (9.1%) transplanted in Nigeria.

Conclusion: Poverty is the leading factor causing delay in kidney transplant in Nigeria and kidney donations are not altruistic in majority of cases. This could be due to high level of poverty in the country.

ABS-OR-1034
RENAL ANGIOMYOLIPOMA MASQUERADING AS GIANT RENAL ABSCESS- A CASE REPORT

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Introduction: This report describes an unusual presentation of renal angiomyolipoma in a 51yr old man who presented with left-sided flank pain and high-grade fever of the same duration. Clinical evaluation was in keeping with left-sided pyonephrosis and the diagnosis was confirmed by Abdominal CT. He subsequently had nephrectomy on the affected side and microscopic pathology of the nephrectomy specimen showed typical features of angiomyolipoma.

He has since made an uneventful recovery and is being followed up at the outpatient clinic.

Discussion: Angiomyolipoma of the kidney is the most common benign neoplasm of the kidney. Its clinical manifestation varies with the size of the tumour. Its clinical presentation as a giant renal abscess, though rare, can be explained by the biologic behaviour of the tumour. In evaluating renal abscesses one should be aware of underlying local causes that may predispose to abscess formation.

Keywords: RENAL ANGIOMYOLIPOMA, RENAL ABSCESS, BENIGN NEOPLASMS

ABS-OR-1035
PATTERN OF UROLOGICAL ABNORMALITIES SEEN IN CHILDREN AT THE UITH ILORIN

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Introduction: There is increasing diagnosis of urological abnormalities in recent times because of the presence of hi-tech equipments such has ultrasound and CT scan. Hitherto, they were missed largely because IVU is not part of the routine medical test done during pre-school entrance screening except they were indicated. Furthermore, UTI which could have raised the suspicion of some anomalies are either missed or has low incidence around there.

Objective: To describe or determine the pattern of urological anomalies seen in children at the UITH.

Methodology: A review of urological anomalies seen from 1995 to 2009 was carried out using the renal register kept at the nephrology division of the UITH.

Result: A total of 21 cases were seen during the period under review. The leading urological disorders encountered were PUV in 6 children. Others include uretero-pelvic junction obstruction-4, polycystic kidney-3, All the rest which include right ectopic kidney, Bilateral vesico–ureteral reflux, multicystic kidney, right renal cyst, left pelvic kidney, bladder diverticulum, bilateral ureterocoele and dysplastic kdney occurred in one child each. It amounted to about one case seen per year. 2 deaths were recorded among the patients with PUV.

Conclusion: There is still remarkable number of cases of urological anomalies occurring in children. Despite consanguinity among some tribes around here, few cases of urological anomalies of genetic origin were seen. The outcome in all of them has been satisfactory with few deaths recorded. Routine antenatal screening for urological anomalies should be stepped up

ABS-OR-1036
CORRELATION OF ANTHROPOMETRIC MEASUREMENT WITH RENAL SIZES IN CHILDREN

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Background: Renal dimensions are important for diagnosis and prognosis of nephropathies. They are dependent on anthropometry.

Objective: To determine the renal sizes in children sonographically and to correlate these measurements with anthropometric measurements.

Methodology: This is a prospective renal ultrasonography on patients attending our out -patient clinic between June and August 2009. Weight and height were done using standard methods while ultrasound measurement was done using Siemens ultrasonography machine. Longitudinal ,transverse and AP measurements were taken and recorded to nearest millimeters. Surface area(SA) was calculated using the

formula and BMI using Weight in kg/ height in meters 2. Renal volume was also calculated. P values </= 0.05 was regarded as significant.

Results:A total of 100 subject were enrolled into the study 48% were female while 52% were males. In male infants the left kidney bipolar length, AP and transverse parameters were significantly larger than the right measurements(P=0.02,0.000,0.005 respectively) The left kidney measurements in the male preschool and school were bigger however not significantly so(p=0.19) The mean right kidney in the adolescents was 67.0SD7.04 and the left kidney 70.5SD6.85 (p= 0.085) .The left kidney volume was significantly larger than the right kidney (p=0.000)

Conclusion: It was concluded that kidney sizes increases early in infancy as well as during adolescent and that age and weight are strong determinants of kidney volume.

ABS-OR-1037
MANAGEMENT CHALLENGES IN A SMALL CHILD WITH ACUTE RENAL FAILURE OF UNKNOWN CAUSE

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Background: Acute renal failure can be a severe life threatening condition especially in small children

Objective: To highlight management challenges encountered while managing the case.

Methodology: A case report on A.B who presented with severe acute renal failure.

Results: AB was a 3 year old girl with rickets, recurrent oedema and hypertension which culminated into acute renal failure. She had three sessions of haemodialysis after which patient had remarkable recovery, though materials had to be sourced from a very far distance. There were diagnostic and treatment challenges but dialysis presented a special challenge as there were no appropriate dialysers, material for access. There were problems with making an accurate diagnosis, limited response to treatment and eventually developed acute renal failure (ARF) necessitating dialysis. Haemodialysis presented a special challenge because of lack of material for vascular access, appropriate dialysers. The report of how these challenges were overcome is presented.

Conclusion: Facilities for paediatric haemodialysis of children of all ages should be made available in all our tertiary institutions.

ABS-PO-2001

OCCURENCE OF RHEUMATIC HEART DISEASE   AND ACUTE GLOMERULONEPHRITIS

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Introduction: Rheumatic heart disease and acute glomerulonephritis rarely co-exist. Only few occurrences have been reported in the literature with none among blacks of African descent.

Case Report: We report   a 13 year old girl from South West Nigeria who presented in our hospital with 3 month history of cough, orthopnea and breathlessness both on exertion and at rest and three weeks history of bilateral pitting oedema up to the sacrum from the foot. T here was previous history of leg swelling some months prior to this presentation which resolved without hospitalization. There was associated raised jugular venous pressure and pan systolic murmur radiating to the axilla with pulmonary accentuation. Blood pressure of 170/120mmHg at admission. Proteinuria was 3+ at admission however serum protein albumin and triglyceride were within normal range. Serum creatinine   was on the upward trend from 315umol/l at admission. Erythrocyte sedimentation rate was 45mm/hr. Urine output was between 0.3-1.1mls/kg/hr and the oedema   never really subsided. Echocardiography suggested   rheumatic heart disease and mitral incompetence.

Conclusion: In view of the presence of cardiac symptom and increased erythrocyte sedimentation   rate with oedema, hypertension, azotaemia and previous history of body swelling, a suspicion of RHD and AGN which may have progressed to CGN is suspected. These remain rare combinations with few reports in the literature and in Blacks living in Africa.

ABS-PO-2002

PSYCHIATRIC MANIFESTATION IN A CHILD WITH URAEMIA: A CASE REPORT

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Introduction: Uraemia manifest in various ways including central nervous system manifestations. Common CNS manifestations include drowsiness, slurred speech, memory loss, seizures and coma. Psychiatric manifestations are rare but could present as acute confusional state.

Case report: We report a12year old boy who first presented in our clinic with anasarca. Examination revealed generalized oedema, massive proteinuria, hypoproteinaemia, hyperlipidaemia. A diagnosis of nephrotic syndrome was made. He was admitted, commenced on diuretics and later had steroids. However, the oedema wanes and recurs until oedema no longer resolve with diuretic alone necessitating plasma transfusion to which the patient responded for a while only to become severely oedematous again. On the 35th day, he began to talk excessively and irrationally. He was also talking and singing to self loudly on the ward. He was aggressive, restless and insomniac. Analysis of his speech indicated that he was talkative and was also talking out of context. His behavior was suggestive of someone having visual hallucination but there was no evidence of delusion. He had no family history of psychiatric illness and has never had any episode of

psychiatric illness. Low dose haloperidol (antipsychotic drug) was added to his medication by the psychiatrist, to which he responded positively.   The creatinine was found to be on the upward trend. He had about 4 sessions of dialysis during which the oedema will resolve only to resurge again. At a point they could no longer afford dialysis anymore and he had to be placed on diuretics, antihypertensive and steroid and discharged to both the psychiatric clinic and the nephrology clinic. All the psychiatric symptoms have resolved, oedema has subsided and serum creatinine has normalized.

Conclusion: In view of the absent family and previous history of psychiatric illness in this child, we are of the opinion that psychiatric manifestation is as a result of uraemia.

ABS-PO-2003

CONGENITAL MESOBLASTIC NEPHROMA- CASE REPORT

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O.A is a 12 day old male neonate who was referred to OOUTH on the 21st of September 2007 with a provisional diagnosis of intestinal obstruction but was found to have renal mass at surgery and histopathology reported congenital nephroblastoma.

ABS-PO-2004
UNDIAGNOSED HYPERTENSION AND PROTEINURIA IN A MARKET POPULATION: RESULTS OF WKD 2009 SCREENING EXERCISE

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Background: Hypertension and kidney diseases are common in our urban and rural communities but majority of affected individuals do not know. We conducted free medical examination and screening during WKD 2009 which happens to coincide with one of the market days in Odo-Ogbe market, Ile-Ife, Nigeria to be able to detect possible magnitude of undiagnosed hypertension and possibly kidney disease.

Aim and Objectives: To find out the percentage of the participants with undiagnosed hypertension or proteinuria. We also try to ascertain the anthropometric correlates of both in the studied population.

Materials and Methods: Participants were taken through a brief medical history and had their socio-demographic data and anthropometric data taken. Blood pressure was assessed using mercury sphygmomanometer on the left arm using a standard cuff size, with the patients in sitting position while urinalysis was done with the aid of diptick. Weights were taken using bathroom scale while the heights were recorded using stadiometer. Data was analysed using SPSS package version 16.

Results: A total of 286 participants aged 13 – 90 years (Mean ± SD; 49.53 ± 15.65yrs) were screened. There was female preponderance with 278 (90.2%) being females. Systolic and diastolic blood pressures

ranged between 90-220 mmHg and 50-120mmHg respectively, 108 (37.7%) of participants had hypertension out of which only 20 (6.7%) were previously diagnosed. Sixty nine (24.1%) of participants had stage 1 hypertension while 39 (13.6%) had stage 2 (JNC VII). The BMI ranged between 15.6 and 46.6 Kg/m^2 (Mean ± SD; 26.76 ± 5.28 Kg/m^2). The 59.2% of participants had BMI above 25Kg/m^2. Eighty five participants (29.7%) had proteinuria while only 13 (4.5%) had glycosuria. A significantly higher percentage of participants with stage 2 hypertension had proteinuria compared with stage 1 or non hypertensives (p<0.0001). Similarly, a significantly higher percentage of participants with hypertension had glycosuria compared with non hypertensives (p=0.009). There was a good correlation between age and BMI(r=0.171,p=0.004) as well as Systolic (r=0.378, p<0.0001) and diastolic blood pressures (r=0.197, p=0.001). The correlations were sustained even after correcting for age.

Conclusion: A high percentage of the studied population (31%) had undiagnosed hypertension and proteinuria (29.7%) while BMI significantly correlated with blood pressures. Community screening for these disabling non communicable diseases and lifestyle modifications should be encouraged.

ABS-PO-2005
THE PREVALENCE AND PATTERN OF UNDIAGNOSED HYPERTENSION AMONGST FAMILY PRACTICE POPULATION IN ILE-IFE, NIGERIA

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Background: The prevalence of hypertension and its complications amongst the black race is high and constitute a significant burden of the health problems. We set out to determine the prevalence of hypertension and its correlates amongst our family practice population.

Methods: All new patients attending the family practice clinic (general outpatient department)over a periods of six months were screened for hypertension. The diagnostic criterion used was as in the JNC VII or WHO guidelines. Those found to be hypertensive were further investigated. Their anthropometric parameters were taken and their serum chemistry, fasting blood sugar and lipid profile were determined. In addition their abdominal ultrasound scan was done to assess structural abnormalities of abdominal viscera particularly the kidneys.

Results: Out of a total of 1106 patients that were screened, 216 (19.6%) were found to be hypertensive. The age of the respondent s ranged between 17-82 years (Mean 57.53 ± 13.02) and majority of them were females 61.4%. Mean systolic , Diastolic Blood Pressure , Serum Creatinine and Urea were 172.9 (±19.2) mmHg, 95.42 (±14.72)mmHg, 94.50 (±42.13) µmol/L, 5.94(±11.62) mmol/L. The Mean total cholesterol, Triglyceride and HDL were 4.39(±0.99) mmol/L, 1.07(±0.66) mmol /L, 1.20(±0.61) mmol /L. 58% of the patients were either overweight or obese while 40% had glomerular filtration rate (GFR) less than 60 mls / min. Age of the patient significantly correlated with Systolic and Diastolic blood pressures with p=0.001 and p=0.000 respectively. Triglyceride also significantly correlated with BMI, waist-hip ratio p=0.035 and 0.007 respectively. GFR negatively correlated with age and systolic blood pressure.

Conclusion: A high proportion of our patients have CKD. Regular community screening and Preventive programme mounted at the primary and secondary care levels would assist in retarding progression.

ABS-PO-2006

INCOME DISTRIBUTION AND SOURCES OF FUNDING FOR MAINTENANCE HAEMODIALYSIS OF PATIENTS IN THE UNIVERSITY OF PORT HARCOURT TEACHING HOSPITAL

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Background: End stage renal disease (ESRD) is prevalent in Nigeria, with attendant high morbidity and mortality rates. In Nigeria, the evidence for the inability of ESRD patients to pay for their treatment has mostly been empiric. Similarly there has been no formal study of the sources of funding for dialysis in the country. Such studies when replicated across the country will provide an evidence based tool to engage Government on the need for a Government driven ESRD program.

Methods: A prospective direct questionnaire based study of End stage renal disease patients receiving maintenance haemodialysis was conducted at the University of Port Harcourt teaching hospital.

Results: Twenty four (24) males and 16 females(M/F=1.4:1) were studied, with mean age of 40.62 ± 14.9 years, mean e-GFR , 6.53 ± 1.6 mls/min. and mean duration on dialysis of 5.03 ± 1.6(3-12) months.The mean annual income of the patients was N1, 147, 172.02 (N60, 000.00 to N3,200,000.00).The estimated annual cost of haemodialysis in Port Harcourt per patient is N2,340,000.00. Sixty (60) percent of the patients earned below one million naira per annum. Only 10 percent of the patients earned over 3 million naira p.a .The annual incomes of 62.5% of the patients were less than fifty percent the annual cost of dialysis.
Annual incomes showed positive correlation with the duration on dialysis($r= + 0.14$) and number of dialysis sessions received ($r= +0.3$). Dialysis was funded from family income in 65 percent of the cases. Funding was from extended family members in 17.5% and philanthropic sources in 10% of cases. There was no Government support to any patient or funding through insurance.

Conclusions: The annual incomes of the great majority of ESRD patients are less than 50 percent of the annual cost of maintenance haemodialysis and cannot sustain optimal long term haemodialysis. A Government driven ESRD Care program is therefore inevitable in the country if we are to improve access to haemodialysis.

Keywords: INCOME DISTRIBUTION, SOURCE OF FUNDING, MAINTENANCE HAEMODIALYSIS, UNIVERSITY OF PORT HARCOURT TEACHING HOSPITAL

ABS-PO-2007

CREATING AWARENESS AND COMPARATIVE SCREENING FOR DIABETES IN RURAL AND URBAN COMMUNITIES IN OGUN STATE, NIGERIA

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Background/Aim: The 21st century has the most diabetogenic environment in human history. In 2007, there were 246 million people with diabetes in the world, but by 2025, that number is estimated to reach 380 million. Diabetes is now the major cause of end stage kidney failure throughout the world in both developed and emerging nations. The focus on diabetic kidney disease for World Kidney Day 2010 brings awareness of the magnitude of the problem and ramifications for global health for people with diabetes and kidney disease. Diabetes mellitus is the most common endocrine disorder in Nigeria. The role of community

participation in the prevention of diabetes and hypertension cannot be overemphasized. This informed the study, with the aim of creating awareness at the grassroot community level, emphasising preventive measures.

Methods: In 2007, a diabetes awareness campaign with free blood glucose screening, aimed at preventing diabetes was conducted within rural Isara community and urban Sagamu community in Remo division in Ogun state, Nigeria. Diabetes was defined as fasting blood glucose > 126mg/dl and random blood glucose > 200mg/dl. Hypertension was defined as blood pressure measurements > 140/90 mmHg. Obesity was also assessed using Body Mass Index and the waist – hip ratio. Data was analyzed using SPSS software version 13.

Results: In rural community of Isara, two hundred and forty respondents (18-80years) were screened during the campaign for diabetes and hypertension. The mean age, Body Mass Index and Waist-Hip ratio were 53.9+15.7years, 25.9+4.8 Kg/m2 and 0.91+0.08 respectively. The mean random blood glucose was 102.9 + 25.5 mg/dl. The mean systolic blood pressure was 134.2+24.8 mmHg, while the mean diastolic blood pressure was 78.7+14.4mmHg. In the urban Sagamu community, a total of 340 respondents were screened. The mean age, Body Mass Index and Waist-Hip ratio were 47.7+15.4years, 28.8+6.3 Kg/m2 and 0.99+0.1 respectively. The mean fasting blood glucose was 95.2+32.9 mg/dl. The mean systolic blood pressure was 128.8+18.6 mmHg, while the mean diastolic blood pressure was 82.1+12.4mmHg.

Conclusions: Our findings suggest that overweight and obesity are becoming a public health burden in the urban Nigerian community. Creating awareness on diabetes and hypertension and instituting lifestyle modification measures to curb non-communicable disease and obesity are of paramount importance.

ABS-PO-2008

PREVALENCE OF ANAEMIA AND OTHER HAEMATOLOGIC DERANGEMENTS IN END STAGE RENAL DISEASE PATIENTS IN THE UNIVERSITY OF PORT HARCOURT TEACHING HOSPITAL

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Background: Anaemia and other haematologic derangements are common in patients with chronic kidney disease, especially end stage renal disease. Anaemia is an independent risk factor of cardiovascular morbidity and mortality in CKD. The prevalence of anaemia and other haematologic derangements in the population of ESRD patients before commencement of maintenance dialysis at the University of Port Harcourt Teaching hospital (UPTH) is not known.

Objective of study: To determine the prevalence of anaemia and other haematologic derangements in dialysis naive end stage renal disease patients in the University of Port Harcourt Teaching Hospital.

Methods: A retrospective analysis of the haematologic indices of ESRD patients at the UPTH from January to December 2007 was conducted.

Results: Fifty males and 20 females (M/F= 2.5:1) were studied, with mean age of 44 $\pm$ 17.0(18-85) years and mean e-GFR of 7.1 $\pm$ 2.1(3.5-10.8) mls/min. Mean haematocrit was 22.8 $\pm$ 3.1(10-38) percent, with mean haemoglobin concentration of 8.8+3.1(3.3-16) g/dl. Others were mean ESR, 93.1 + 45.1(7-136)mm/hr, mean peripheral total leukocyte count 7,533.5 $\pm$ 3,949.6(2,499-18,800)/mm^3 and a mean platelet count of 145,000 $\pm$ 66,605 (60,000-400,000)./mm^3. Anemia was the dominant haematologic abnormality occurring in

66 (94.3%) patients. Moderate to severe anaemia occurred in 58 (82.9%) of the patients. Twelve patients (17%) had leukocytosis, 2 (2.9%) had leucopenia and there were no abnormalities in platelet count. The e-GFR of the patients showed positive correlation with haematocrit (r= +0.2) and haemoglobin concentration (r= +0.1) respectively, while serum urea and creatinine showed negative correlation with haematocrit (r = -0.2) and haemoglobin concentration (r = -0.2) respectively.

Conclusions: Anaemia was the dominant haematologic abnormality in dialysis naïve ESRD patients in the University of Port Harcourt teaching hospital. Both haematocrit and haemoglobin levels showed positive correlation with e-GFR. There is need for more attention to be paid to the correction of anaemia in our patients.

Keywords: HAEMATOLOGIC ABNORMALITIES, END STAGE KIDNEY FAILURE, UNIVERSITY OF PORT HARCOURT TEACHING HOSPITAL

ABS-PO-2009
PREVALENCE OF RISK FACTORS FOR CHRONIC KIDNEY DISEASE IN A RURAL ADULT POPULATION IN RIVERS STATE

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Background: The prevalence of chronic kidney disease (CKD) is on the increase globally with attendant heavy disease burden and high morbidity and mortality especially in the resource poor countries. Due to the magnitude of CKD burden and the high cost of care, especially for end stage kidney disease, preventive measures are increasingly being explored. Early detection of modifiable risk factors of CKD in population groups and early intervention is the strategy to possibly prevent and reduce the incidence and prevalence of CKD in the population. We undertook a survey to determine the prevalence of some risk factors of CKD and identify the at-risk individuals.

Method: Body mass index (BMI), dip-stick urine protein and urine glucose, random blood glucose and blood pressures were measured in adult subjects of Barako, a rural community in the Gokana Local Government area of Rivers state during a one day Rotary eye camp exercise.

Results: Out of the 154 subjects that responded, 152 satisfied the inclusion criteria and were studied. They had a mean age of 48.9 $\pm$ 14.8(18-85) years and M:F ratio of 1:1.4. The mean body mass index (BMI) was 25.8 $\pm$ 4.8 (11.1-40 .9) kg/m^2. Forty-nine subjects (34.8%) were pre-obese while 13.5% were obese. Proteinuria was seen in 29.7% while none of the subjects had glycosuria. The mean random blood glucose was 6.6 $\pm$1.4(4.2-9.8) mmol/l. Four subjects (5%) were previously diagnosed diabetics. The mean systolic blood pressure was 129.9 $\pm$ 21.6(100-220) mmHg, mean diastolic blood pressure was 70.9 + 13.1(50-110) mmHg and the prevalence of hypertension was 27.9%. BMI showed positive correlation with proteinura (r = +0.2), while both systolic and diastolic blood pressures showed weak positive correlations with proteinuria (r = +0.02 and r = +0.06 respectively).

Conclusions: The study shows, that the evaluated risk factors of CKD, obesity, hypertension, diabetes and proteinuria are common in this rural community of Rivers State. The subjects of the community are at risk of CKD and there is therefore need for intervention.

Key words: CHRONIC KIDNEY DISEASE (CKD), RISK FACTORS, RURAL COMMUNITY, RIVERS STATE

ABS-PO-2010
SCREENING FOR CHRONIC KIDNEY DISEASE IN OIL PRODUCING COMMUNITY IN RIVERS STATE

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Background: Petroleum product had been associated with acute and chronic kidney disease. Nigeria is a major oil producing and exporting country. The degree of impact of these products in kidney function of communities in Nigeria where oil is being explored is not known.
Aims and objectives: To determine the frequency of chronic kidney disease in an oil producing community.

Subjects and Methods: This is a pilot study.Tthe study location was Ido in Asari Toru Local Government Area of Rivers State. All subjects aged 18 years and above were screened. Their height, weight, blood pressure were recorded. Their urine was collected for dipstick urinalysis, blood was collected for electrolyte, serum urea, serum creatinine and lipid profile. The body mass index was calculated using height and weight, the glomerular filtration rate was calculated using Cockcroft and Gault fomular. The data was analysed using SPSS vs 13..

Results: A total of 99 subjects were screened, 64% were female, less than 15% were aged 30 years and below while16.7% were above 60 years. The mean GFR was 80.2+33.3ml|min, 32.6% had GFR less than 60ml|min, and 2.2% had GFR less than 30ml|min. the GFR had a significant negative correlation with family history of diabetes mellitus (-.35, p - 0.016) and total cholesterol(-2.2, p – 0.045), positive correlation with BMI(0.24, p – 0.018). 36.5% had proteinuria, 29.8% 1+, 5.7% 2+, 1% 3+.

Conclusion: The rate of chronic kidney disease is high in oil producing community, and exposure to crude oil is a likely contributory factor.

ABS-PO-2011

DIALYSIS TREATMENT FOR ACUTE KIDNEY INJURY IN ADULT PATIENTS AT THE UNIVERSITY OF PORT HARCOURT TEACHING HOSPITAL: PREVALENCE AND CLINICAL CHARACTERISTICS

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Background: Acute kidney injury (AKI) in adults is a common and frequent cause of hospital morbidity and mortality especially in the developing countries. A proportion of AKI patients require renal replacement therapy (RRT) in the course of their management. Information on the hospital prevalence and the clinical attributes of such adult AKI patients treated by dialysis in Nigeria is sparse.

Objective: To determine the prevalence, epidemiologic and clinical characteristics of adult patients who received RRT for AKI in our hospital.

Methods: A retrospective analysis of the clinical data of all non-intensive care unit (non-ICU) adult AKI patients treated with RRT in the form of intermittent haemodialysis during an interrupted six year period (1997-1999 and 2007-2009) at the University of Port Harcourt teaching hospital was conducted.

Results: During the periods understudy a total of 6151 medical admissions were recorded, of which 614 (9.9%) were chronic kidney failure and 121 (1.9%) AKI patients. Of the 121 cases of AKI, 62 (51.2%) received intermittent haemodialysis. Thus the prevalence of dialysis treated adult AKI patients was 1.0%. They constitute 8.4% of kidney failure and 51.2% of AKI patients. They comprised 34 males and 28 females (M/F = 1.2:1) with a mean age of 41.3 ± 18.5 (13-83) years. The clinical settings for AKI for these dialysis treated patients were medical 44 (70.9%), surgical 15 (24.2%) and pregnancy related 3 (4.8%). The indications for dialysis in the patients were severe azotaemia at presentation or rapidly rising azotaemia 39 (48.4%), uraemic encephalopathy 20 (32.3%), severe metabolic acidosis (serum bicarbonate d" 15 mmol/L) 19 (30.7%), acute pulmonary oedema 3 (4.8%) and severe hyperkalaemia (plasma potassium e" 6.5mmol/L) 3 (4.8%).
Conclusion: AKI patients who received dialysis constitute about fifty percent of our AKI patients and a great majority present in the failure grade of RIFLE criteria.

ABS-PO-2012
CASE FATALITY AMONG PATIENTS WITH CHRONIC KIDNEY DISEASE IN UNTH ENUGU .

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Background: Chronic kidney disease (CKD) incidence is increasing in our environment. Most of the patients present late so mortality is very high.

Aims and objectives: To determine the death rate and causes of death among patients with CKD in an urban tertiary hospital in 2006.

Materials and methods: The medical records of in-patients with CKD admitted into the medical wards of University of Nigeria Teaching Hospital, Enugu between January to December 2006 were reviewed. From the available data, we calculated the case fatality for the period of study.

Results: During the period, 2610 admissions were made into the medical wards. Of these 55(2.1%) were due to CKD. Of the CKD admissions, the male female ratio was 34(61.8%): 21(38.2%). Thirty seven of the CKD patients died giving a case fatality of 67.3%. Of 20 patients that died from CKD, uraemic encephalopathy and congestive cardiac failure were the commonest causes of death accounting for 55% and 25% respectively. Other causes of death were cerebrovascular accident, anaemic heart failure, hypertensive encephalopathy and post dialysis hypoglycaemia, each accounting for 5%.

Conclusion: CKD is an important cause of hospital admission. The case fatality is very high most of which are preventable. There is need to institute a free dialysis programme in government owned hospitals.

ABS-PO-2013

PREVALENCE OF CHRONIC KIDNEY DISEASE IN A RURAL NORTHERN NIGERIAN SETTLEMENT

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Background: Chronic kidney disease (CKD) has been increasing globally. However, there is limited data about the population prevalence of CKD in developing countries.

Aims and objectives: The aim of this study was to investigate the prevalence of CKD in adults in a rural settlement in Northern Nigeria.

Materials and Methods: A crossectional study was carried out. Using a multistage stratified random sampling, 480 adults were recruited into the study. Relevant demographic and clinical data were obtained using a questionnaire. Urine and blood Samples were taken for relevant investigations. Results were analysed using SPSS for windows.

Results: Overall, CKD (defined based on K/DOQI definition) was found in117 (26%) of the study population. The prevalence of various stages of CKD was 20% for stage 1, 3.6% for stage 2, 0.7 % for stage 3, 0.9% for stage 4 and 0.7% for stage 5.

Conclusions: CKD, especially the early stages, is common in the study population, providing a good opportunity for community based prevention strategy.

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