

ABSTRACTS

30th Annual Scientific Conference & General Meeting

1. OR/ABS/NAN/2018/C001

SERUM VITAMIN D, PARATHYROID HORMONE, CALCIUM, PHOSPHATE, AND MAGNESIUM LEVELS IN HEALTHY NIGERIANS AND PATIENTS WITH CHRONIC KIDNEY DISEASE IN THE GUINEA SAVANNAH BELT OF NORTHERN NIGERIA

Ibrahim Abubakar¹, Mohammed Amina², Sambo Ibrahim Aliyu³, Yusuf Rasheed³, Oguche Musa Sunday¹, Okam Amechi¹, Tuko Moses Tari¹, Bosan Istifanus Bala¹

¹Department of Medicine, Nephrology unit, Ahmadu Bello University Teaching Hospital Zaria, Nigeria.

²Department Chemical Pathology, Federal Medical Centre, Bida, Nigeria

³Department Chemical Pathology, Ahmadu Bello University Teaching Hospital Zaria, Nigeria

Background: Despite increasing burden of chronic kidney disease, there is inadequate data on indices of Chronic Kidney Disease-Mineral Bone Disorder (CKD-MBD) in Zaria. This study attempts to address this concern.

Methods: A cross-sectional study design was used to collect 250 blood samples from 125 patients with various stages of CKD and 125 age-matched healthy Nigerians, from March 2013 to December, 2014 to determine their serum levels of Vitamin D, intact PTH, Cat⁺, PO₄, and Mg by well-validated techniques*.

Results: There were 125 CKD patients; mean age 48±15.48 (range 18-85) years; 67 (53.6%) males, and 58 females (46.4%). Aetiological causes of CKD were Hypertensive nephropathy 45.6%, Adult polycystic kidney disease 16.8%, Chronic glomerulonephritis 12%, Diabetic nephropathy 16.8%, others including sickle cell nephropathy 8%. About 8.8% were in stage 1, 16% stage 2, 21.6% stage 3, 12% stage 4 and 41.6% stage 5. Results of analytes are shown in graphs below:

Conclusions: Majority of patients exhibited hypocalcaemia, low vitamin D and high PTH levels in the early stages of CKD which is surprising. Levels of phosphate was consistent with stages of CKD described in other studies.

2. OR/ABS/NAN/2018/C002

ANKLE BRACHIAL PRESSURE INDEX AND ITS CLINICAL CORRELATES IN CHRONIC KIDNEY DISEASE AT THE UNIVERSITY COLLEGE HOSPITAL, IBADAN.

Aminu OO¹, Abiola IB¹, Efuntoye OO¹, Coker JM¹, Bello TO¹, Raji YR², Ajayi SO², Salako BL², Arije A², Kadiri S²

¹Nephrology Unit, University College Hospital, Ibadan, Oyo state, Nigeria.

²Nephrology Unit, Department of Medicine, College of Medicine, University of Ibadan, Ibadan, Oyo state. Reserved

Background: Chronic kidney disease (CKD) has been described as an independent risk factor for peripheral arterial disease (PAD). The occurrence of multiple cardiovascular risk factors specific to CKD multiplies the risk of PAD. Chronic Kidney Disease - Mineral Bone Disease (CKD-MBD) is the main harbinger of PAD among patients with CKD. Ankle brachial pressure index (ABPI), a marker of atherosclerosis has

been found to have high sensitivity and specificity for the diagnosis of PAD in CKD. This study assessed prevalence of PAD and its clinical correlates among individuals with CKD.

Methods: This was a cross sectional study of patients with CKD of various aetiologies. Clinical information was obtained using a pre-tested interviewer's administered questionnaire. Information obtained were demographic, aetiology and grade of CKD, dialysis vintage, lifestyle and medication history. ABPI was measured using a 8Hz lifedop Wallach summit Doppler ultrasound equipment. Blood was drawn for serum creatinine, phosphorus, calcium and albumin. Data obtained was analyzed using SPSS version 20.

Results: There were one hundred and thirty-two participants, 66 cases (50%) and 66 controls (66%). Mean age of the cases and controls were 47.5 ± 15.9 and 41.6 ± 11.6 years respectively. Males accounted for 54.5% of cases and 48.5% of the controls. Thirty-nine cases (53.8%) had ABPI < 0.9 compared to no control with ABPI < 0.9 , $p < 0.01$). Majority were asymptomatic (54.9%). More than half of the CKD cases (55.6%) with PAD had ESRD and have been on chronic haemodialysis. Female gender [Odd Ratio (OR), 3.1], dyslipidemia (OR, 0.5) and elevated systolic blood pressure (OR, 2.4).

Conclusion: Abnormal ABPI is a common occurrence among patients with CKD and the prevalence and severity increase with severity of kidney disease. Female gender, dyslipidemia and elevated systolic blood pressure were associated with ABPI < 0.9 . Routine screening for PAD using ABPI should be included in evaluation of patients with CKD.

3. OR/ABS/NAN/2018/C003

ESTIMATED PREVALENCE OF CHRONIC KIDNEY DISEASE AND RELATIONSHIP BETWEEN INFLAMMATION, ALBUMINURIA AND CHOLESTEROLS IN PATIENTS WITH HYPERTENSION

Olanrewaju TO, Omotoso AB, **Faponle AE**, Kolo PM, Biliaminu SA, Aderibigbe A,
Department of Medicine, and Chemical Pathology, University of Ilorin Teaching Hospital, Ilorin, Nigeria

Background: Hypertension is an important cause and outcome of chronic kidney disease (CKD). Inflammatory markers such as highly sensitive C-reactive protein, microalbuminuria and cholesterol are predictors of cardiovascular disease (CVD) in patients with hypertension. Information on the relationships between these risk factors for CVD is sparse among patients with hypertension in Nigeria. The aim of this study is to determine the prevalence of CKD, and relationship between the risk factors for CVD in patients with hypertension in a tertiary health institution in Nigeria.

Method: This is a cross-sectional study adult patients with systemic hypertension who had been diagnosed and on treatment for minimum of one year at a tertiary health institution in the North-Central zone in Nigeria. Blood pressure, weight, height, waist circumference, and hip circumference were measured. Body mass index and waist hip ratio were calculated. Fasting serum cholesterol, serum uric acid and serum creatinine were also measured. Inflammation was determined by highly sensitive C-reactive protein (hsCRP), while microalbuminuria was defined by urinary albumin-creatinine ratio (ACR) of 30-300mg/g. Estimated GFR (eGFR) was derived from the 4-variable MDRD formula. CKD was defined by the combination of eGFR $< 60 \text{ ml/min/1.73m}^2$ and ACR $> 300 \text{ mg/g}$.

Results: A total of 240 adults, aged 18 years were studied. Males accounted for 33.3% with M:F ratio of 05:1. The mean age was 58.9 ± 12.1 years and the median duration of hypertension was 6 (range, 1-37) years. 33% had uncontrolled hypertension. The mean hsCRP was $7.8 \pm 2.8 \text{ g/L}$, median (range) of ACR was 93 (3.3-1931) mg/g and eGFR $49.3 (16.5-167.2) \text{ ml/min/1.73m}^2$. Albuminuria $< 300 \text{ mg/g}$ was found in 51%; and $> 300 \text{ mg/g}$ in 25.5%. Patients with very high cardiovascular risk (hsCRP $> 3 \text{ g/L}$ and LDL-cholesterol $> 3.37 \text{ mmol/L}$ (130mg/dl)) account for 45%. The prevalence of CKD was 18.5%. The marker of inflammation (hsCRP) correlates with microalbuminuria ($r = 0.302$, $p = 0.001$), total cholesterol ($r = 0.672$, $p = 0.001$), triglycerides ($r = 0.578$, $p = 0.001$), and LDL cholesterol ($r = 0.478$, $p = 0.001$).

Conclusions: The prevalence of CKD is high among treated patients with hypertension. Inflammation, microalbuminuria and cholesterols are well correlated in these patients, and may suggest enhanced cardiovascular risk.

4. OR/ABS/NAN/2018/C004

THE PERFORMANCE OF SALIVA UREA NITROGEN DIPSTICKS IN THE DIAGNOSIS AND STAGING OF CHRONIC KIDNEY DISEASE IN PATIENTS WITH DIABETES IN CAMEROON.

Gloria Ashuntantang^{1,2} Victorine Nzana¹, Maimouna Mahamat^{1,2}, Aristide Nono², Leo Fozou¹, Francois Kaze Folefack^{1,3}

¹Faculty of Medicine and Biomedical Sciences, University of Yaounde I, Cameroon

²Yaounde General Hospital, Cameroon

³University Teaching Hospital, Yaounde, Cameroon

Background: The salivary urea nitrogen (SUN) dipstick has been suggested as a potential point of care screening tool for both acute and chronic kidney disease. Diabetes mellitus affects both the structure and function of salivary glands thus affecting both the level of saliva urea and its Ph.

Objective: To evaluate the diagnostic performance of SUN measured by dipsticks to the detect of chronic kidney disease stages 3-5 in Cameroonian patients with diabetes mellitus.

Methods: We carried out a cross sectional study in the nephrology and the endocrinology units of the Yaounde General and the University Teaching Hospitals. Sampling was non-accidental and probabilistic. We included 58 consenting patients with diabetes mellitus: 33 with confirmed CKD stages 3-5 and 25 without CKD. Patients unable to produce unstimulated saliva, with dental carries or with acute events were excluded. Saliva urea nitrogen was measured semi-quantitatively in unstimulated saliva samples using SUN dipsticks (*Integrated Biomedical Technology (IBIS), Indiana, USA*).

Results: We included 58(33 CKD, 25 non-CKD) participants with diabetes. Males accounted for 58.8%(n=34) and the mean age was 64.3±8.04 years (range 49 - 87 years). The CKD and non-CKD groups were comparable in age and sex distribution and glycemic control. The median SUN was significantly higher in the CKD population compared to the Non CKD population (29.5 vs 9.5; p<0.001) and irrespective of stage of CKD. SUN levels increased significantly with worsening stage of CKD being highest in CKD stage 5. There was a significant strong positive correlation between SUN and BU measurements (r=0.909, p<0.001), and SUN and SCr (r=0.810, p<0.001). The diagnostic performance of SUN in identifying CKD stage 5 was excellent (AUC =0.975: sensitivity= 81.8%, specificity= 100%, p=<0.001, cut-off=37.0mg/dl) and was comparable to the performance of BU(AUC=0.957, Sensitivity = 90.9%, Specificity=90.9% p=<0.001, cut-off=115.0mg/dl).

Conclusion: SUN can be used to identify CKD stages 3-5 in patients with diabetes. SUN has a good diagnostic performance in detecting CKD stage 5 among diabetes patients with CKD.

5. OR/ABS/NAN/2018/C005.

PERSPECTIVES ON CAREGIVER BURDEN IN PATIENTS WITH ADVANCED PRE-DIALYSIS CHRONIC KIDNEY DISEASE: AN EXPLORATORY QUALITATIVE STUDY

Effa EE*, Okpa HO*, Ekrikpo UE**, Otokpa ED*, Mbu, PN*

*Renal Unit, Department of Internal Medicine, UCTH, Calabar

**Renal Unit, Department of Internal Medicine, University of Uyo Teaching Hospital, Uyo

Background: The majority of majority of ESRD patients in our environment cannot afford renal replacement therapy and need frequent clinic visits for reviews in the company of relatives or friends who act as caregivers. In addition, relatives may bear the financial and psychological burden of care for these patients. Some of these burdens appear to have been imposed by prevailing social norms. Exploring the underlying experiences and perceptions may add to the robustness of our holistic understanding of chronic kidney disease care.

Objectives: To assess the perceptions and experiences of caregivers of patients with advanced chronic kidney disease who are yet to start kidney replacement therapy (dialysis).

Methods: Semi-structured, face-to-face, audio recorded in-depth interviews on unpaid adults presently involved (spending at least 36 hours a week with the patient) in the care of a relative who has pre-dialysis chronic kidney disease. The patients themselves had been attending the renal clinic for at least three months. The interview explored various aspects of burden of care experienced by care givers aided by the Zarit Burden of Care questionnaire. Interviews were transcribed and coded using MAXDA 12 software and a thematic framework analysis used for data analysis.

Results: Five in-depth interviews were conducted. Themes were categorized into six areas as follows: perception of condition & treatment, dominant stresses, treatment fears, disruptive issues, patient related escalation factors and coping mechanisms. In particular, for the themes in the category ‘dominant stresses’, several sub-themes were identified including emotional, economic, psychological, physical, mental and financial stresses.

Conclusions: Caregivers of pre-dialysis patient populations experience multi-factorial related stresses. They tend to evolve personal coping mechanisms and may need to have some ongoing psychological support.

6. OR/ABS/NAN/2018/C006

PHYSICAL ACTIVITY AS A THERAPEUTIC OPTION FOR PATIENTS WITH CHRONIC KIDNEY DISEASE: RENAL MULTIDISCIPLINARY TEAM PERSPECTIVE.

Faatihah Niyi-Odumosu^{1,4}, Lise Smith², David Stensel¹, Shakrullah Odumosu³, Jonathan Barrat⁵, John Feehally⁵, Nicolette Bishop¹

¹National Centre for Sports and Exercise Medicine, School of Sports Exercise and Health Science, Loughborough University, Loughborough, United Kingdom

²Leicester Kidney Lifestyle Team, Leicester General Hospital, Leicester, United Kingdom

³University of Ilorin Teaching Hospital, Ilorin, Nigeria

⁴Department of Physiology, University of Ilorin, Ilorin, Nigeria

⁵University of Leicester, Leicester, United Kingdom

Background: Despite growing evidence of the benefits of increased physical activity (PA) in CKD, it is rarely addressed by renal care team.

Objective: In order to develop an individualised pragmatic exercise program, identification of renal doctors’, nurses’, and other team member’s views, attitudes, experiences, and barriers to exercise practices (or prescription) is imperative.

Methods: This study examined comparable reports from UK (Greenwood *et al.*, 2014) and USA (Delgado and Johansen. 2010; Johansen *et al.*, 2003) on exercise counselling practice patterns (in CKD) amongst Nephrologists, Nurses, Physiotherapists, Dietitian, and Exercise Scientist. The cross-sectional survey-designed studies addressed “demography” “opinions and practices”, “exercise counselling habits”, and “barriers to provision of PA and rehabilitation services”.

Results: Participants (n = 855; 31 to 60 years) that completed the surveys, 76.7% were Nephrologists, more likely to prescribe or recommend PA than other professionals. Older nephrologists, those that provided primary care to the patients, and the physically active, were more likely to ask and recommend PA. Young (non-counselling) nephrologists were more likely to believe that other medical interventions were essential in

the management of patients with CKD than exercise. Common barriers were lack of funding, time, confidence, and conviction that patients will respond to implementation of PA or exercise.

Conclusion: Knowledge, attitudes, and beliefs towards the implementation of PA in CKD is encouraging with a big gap among younger nephrologists and renal multidisciplinary team. This may be addressed by incorporating information about the benefits of PA in fellowship training and/or practice guideline, and addressing reported barriers.

7. OR/ABS/NAN/2018/C007

METABOLIC SYNDROME AND KIDNEY DAMAGE: PREVALENCE AND ASSESSMENT OF RISK AMONG APPARENTLY HEALTHY RESIDENT OF ADO EKITI, SOUTH WEST, NIGERIA

Dada SA, Ajayi DD, Eytayo EE, Rafiu MO, Aremu OA.

Background: Individuals with metabolic syndrome are at increased risk of morbidity and mortality from several health conditions such as chronic kidney disease. With the rising prevalence of chronic kidney disease (CKD) worldwide and given the peculiar poor socio-economic situation in the sub-Saharan Africa, there is a need for regular screening of the vulnerable groups for components of metabolic syndrome as it constitutes significant risk factors in the development of CKD.

Objectives: There is limited information on the relationship between metabolic syndrome and chronic disease in the Nigerian population. Data from few available studies are equally contradictory. In this study, we set out to determine the prevalence of chronic kidney disease and associated metabolic risk factors among selected apparently healthy resident of Ado Ekiti, Nigeria.

Method: Data for this study were collected during the year 2016 edition of an annual religious outreach program at Ado-Ekiti, Nigeria. A total of 366 adult males and females participated in the study. Metabolic syndrome was defined according to National Cholesterol Education Program Adult Treatment Panel III. Glomerular filtration rate was estimated using the abbreviated Modification of Diet in Renal Disease formula. CKD was defined as eGFR < 30-59 ml/min/1.73 m² and/or >2+ dipstick proteinuria.

Result: There was a significant difference in the prevalence of CKD among persons with (15.7%) and without (4.7%) metabolic syndrome (p= 0.001). Logistic regression showed that metabolic syndrome is associated with risk of CKD, OR 2.969 CI 1.589-5.545.

Conclusion: This study showed that metabolic syndrome was associated with CKD.

8. OR/ABS/NAN/2018/C008

OBESITY, METABOLIC SYNDROME AND THE RISK OF CHRONIC KIDNEY DISEASE.

Afolabi TA, Olanrewaju TO, Aderibigbe A, Biliaminu SA, Chijioko A

Division of Nephrology, Department of Medicine, University of Ilorin Teaching Hospital, Ilorin.

Background: Obesity is associated with chronic kidney disease (CKD). Whether metabolic syndrome modifies this association remains unclear.

Objective: To determine the association between body mass index (BMI) and metabolic syndrome with risk of CKD in this study.

Method: A cross-sectional study of 116 participants, consisting of 58 normal weight participants (BMI 18.5-24.9 kg/m²) with equal number of age and sex matched participants with obesity (BMI > 30 kg/m²). CKD was defined as Decreased GFR (GFR <60ml/min/1.73m²) AND/OR Albuminuria: (urine albumin/creatinine ratio >3mg/mmol). Metabolic syndrome (defined as the presence of any one of diabetes mellitus, impaired fasting glucose and 2 or more of the following: blood pressure: > 140/90 mmHg, dyslipidaemia: triglycerides

> 1.695 mmol/l and high density lipoprotein cholesterol < 0.9 mmol/l (male), < 1 mmol/l (females), central obesity: waist-hip ratio > 0.90 (male), > 0.85 (female), or body mass index > 30 kg/m² or albuminuria: urinary albumin-creatinine ratio > 3 mg/mmol) was assessed in both obese and normal weight individuals. Odds ratio was generated to determine the association between CKD and obesity, and also to determine how metabolic syndrome modifies this risk.

Results: Metabolic syndrome significantly modified the association of BMI with CKD. The mean age was 50.65 ± 11.00 and 50.01 ± 11.64 in the obese and normal weight groups respectively. The proportion of males was 39%. The mean BMI was 32.07 ± 5.05 and 22.25 ± 2.98 in the obese and normal weight participants respectively. After adjustment for systemic hypertension and diabetes mellitus, higher BMI was associated with lower risk of CKD in those without (OR 1.236 95% CI 0.807-1.893, p=0.340) compared to those with (odds ratio 3.422 95% CI 1.143-5.131, p=0.018) the metabolic syndrome. Compared with normal weight participants without metabolic syndrome, obese participants with metabolic syndrome had greater risk of CKD (odds ratios of 1.93 and 2.17, respectively), however obesity without metabolic syndrome was associated with lower risk of ESRD (odds ratio 0.68).

Conclusion: Higher BMI is associated with a lower risk of CKD in individuals without but not those with metabolic syndrome.

1. OR/ABS/NAN/2018/C009

ESTIMATED PREVALENCE OF CHRONIC KIDNEY DISEASE AND ITS RISK FACTORS IN NORTH-CENTRAL NIGERIA: ANALYSIS OF AGGREGATE DATA FROM EIGHT COMMUNITIES

Olanrewaju T.O, Aderibigbe A, **Busari KA**, Chijioke A, ¹Braimoh KT, ²Popoola A, ²Kuranga S.A, ²Ajape A, ³Buhari MO, ⁴Adedoyin OT, and ⁵Bilaminu S.A, and for the Ilorin Renal Study Group.

Department of Medicine, ¹Radiology, ²Surgery, ³Pathology, and ⁴Paediatrics. University of Ilorin and University of Ilorin Teaching Hospital, Ilorin, Kwara State, Nigeria.

Background: Chronic kidney disease is a growing challenge in developing countries, particularly in sub-Saharan Africa. There is dearth of information on the epidemiology of CKD in Nigeria that is necessary to estimate its burden in a bid to design preventive and management strategies. The aim of the study is to determine the prevalence of CKD and its risk factors in Kwara State, located in North Central zone of Nigeria.

Method: Eight communities from 7 local government areas in Kwara state, Nigeria were screened during world kidney days. Blood pressure, fasting and random blood sugar, urinalysis, weight, height, waist circumference (WC) and hip circumference were measured. Body mass index (BMI) and Waist-Hip ratio (WHR) were calculated. Albuminuria, and kidney length by ultrasound were measured in subset of participants while eGFR was derived from serum creatinine, using MDRD formula.

Results: A total of 1350 adults, 18 years with mean age of 43.70 ± 14.12 years were screened, Males accounted for 43% and M: F ratio was 0.75:1. The mean kidney lengths were: right, 93.02 ± 8.03 cm and left, 92.70 ± 9.30 cm. The prevalence of proteinuria was 13.5%; hypertension 20.7%; diabetes 2.4%; obesity by BMI was 21% and abdominal obesity by waist circumference was 14.3%. Microalbuminuria of above 30 mg/L was detected in 46.3%, and above 50 mg/L in 21.9%. The prevalence of CKD by estimated GFR below 60 ml/min/1.73 m² and/or Proteinuria was 15.8%. Hypertension (OR 1.560, 95% CI = 1.291-1.864, P = 0.006) obesity (OR 1.382, 95% CI = 1.141-1.953, P = 0.008), and age (OR 1.206, 95% CI = 1.07-3.791, P = 0.028) were the identified predictors of CKD.

Conclusions: The prevalence of CKD is high among Nigerians, with hypertension, obesity and advancing age as main risk factors. World kidney day affords opportunity for community-based screening of CKD. Efforts should be intensified at preventing and controlling hypertension and obesity in order to reduce the increasing burden of CKD in Nigeria.

2. OR/ABS/NAN/2018/C010

THE SICKLE CELL AS TRAIT IS A RISK FACTOR OF CHRONIC KIDNEY DISEASE IN CAMEROONIANS

Ashuntantang G^{1,2}, Tanjoh R¹, Tayou J^{1,3}, Maimouna M², Nzana V¹, Nono A², Kaze Folefack F³

¹Faculty of Medicine & Biomedical Sciences, University of Yaounde I

²Yaounde General Hospital

³Yaounde University Teaching Hospital

We conducted a case-control study from January - April 2017 at the Yaounde General Hospital (YGH) and University Teaching Hospital (YUTH) to determine if the sickle cell gene is a risk factor of chronic kidney disease in Cameroonians. Cases were consenting patients with CKD stages G1A3 through 5D receiving nephrology care. Controls were consenting individuals without chronic kidney disease seen in the outpatient consultations of the same hospitals, matched for age, gender and comorbidities. We excluded participants with known SS, those with recent blood transfusion (within 3 months) and pregnant women. Sampling was consecutive. We performed haemoglobin electrophoresis for all participants. The glomerular filtration rate (eGFR) was estimated by the CKD-EPI equation. The study was approved by the ethical review boards of the hospitals. A total of 298 participants were included; 148 with CKD(cases) and 150 without CKD(controls). The mean age of participants was 53.34±15.38. Cases and controls were comparable for age, sex distribution and comorbidities. The mean eGFR was 111.29ml/min/1.73m² for controls and 14.62 ml/min/1.73 m² for cases. The prevalence of the sickle cell trait AS was significantly higher in cases compared to controls (23% vs 10.7%, OR=2.49; p=0.004). Compared to AS participants without CKD, AS participants with CKD had significantly more diabetes (41.2% vs 12.5%; p=0.043); however there was no significant difference in median percentages of HbA1 (60% vs 59.7%, p=0.6), HbA2((3.3% vs 3.29 %, p=0.2), and HbS (36.9% vs 36.9%, p=0.5). The sickle cell AS trait may be therefore explain in part the high prevalence of CKD in Cameroonians.

3. OR/ABS/NAN/2018/C011

THE VIABILITY OF PALLIATIVE CARE AS A TREATMENT OPTION FOR ELDERLY PATIENTS WITH END-STAGE RENAL DISEASE IN UMUAHIA, SOUTH-EAST NIGERIA; A PRELIMINARY REPORT

Okwuonu CG¹, Alole LM², Ojimadu NE², Oviasu E³

¹Nephrology unit, Department of Internal Medicine, Federal Medical Centre Umuahia, Abia State

²Department of Family Medicine, Federal Medical Centre Umuahia Abia State

³Nephrology unit, Department of Internal Medicine, University of Benin Teaching Hospital Benin Edo State

Background: The number of elderly patients developing end-stage renal disease (ESRD) is on the increase in Nigeria. With multiple co-morbid conditions, evidence is needed to inform decision making for or against dialysis among these patients.

Objectives: To compare symptom burden, quality of life, functional status and one-year survival between elderly patients managed with palliative care and haemodialysis (HD).

Methods: A cross-sectional analysis of patients from 60 years and above with ESRD who were treated with either haemodialysis or palliative care over a period of one year. The symptom burden, quality of life and functional status were assessed by standard validated methods. Survival was defined as time from diagnosis of ESRD to either death or been censored. Kaplan-Meier survival analysis and Log rank test was used to estimate and compare survival. Cox proportional hazard regression models were used to investigate the impact of independent variables on survival.

Results: Haemodialysis was offered to 57 (75%) while 19 (25%) choose palliative (non-aggressive) renal care for various reasons. Patients who opted for palliative care had a significantly higher mean symptom burden score and lower quality of life scores than their counterparts on dialysis treatment ($p=0.760$). There was no significant difference in mean functional status scores between the two groups ($p=0.837$). The mean survival time for those on dialysis treatment (7.1 months) was slightly higher than mean survival time for those on palliative care (5.8 months) but there is no significant evidence of difference in survival times for both groups (Log rank = 1.2, $p=0.27$).

Conclusion: Palliative care may be a viable option for management of ESRD as it has comparable survival advantage with haemodialysis; howbeit with a higher symptom burden and lower quality of life.

4. OR/ABS/NAN/201 8/C01 2

RELATIONSHIP BETWEEN DIABETIC NEPHROPATHY AND DIABETIC RETINOPATHY AND ASSOCIATED RISK FACTORS IN A TERTIARY HOSPITAL, SOUTHERN NIGERIA.

Ahmed SD¹, Oyabure JO¹, Unuigbo Ei²

¹Irrua Specialist Teaching Hospital, Irrua, Nigeria

²University of Benin Teaching Hospital, Benin City, Nigeria

Background: Prevalence of diabetes mellitus (DM) is increasing globally with a concomitant increase in its complications. Diabetic nephropathy and retinopathy are some of the microvascular complications of DM. These two small vessel complications are associated, and one could serve as risk factor for the other. There are reports that diabetic retinopathy (DR) puts diabetics at risk of developing diabetic nephropathy (DN). DR is associated with albuminuria and patients with DN have DR most times. Hyperglycemia is a factor for the development and progression of DN and DR, and intensive glycemetic control has been reported to retard or prevent these complications.

Objectives: This study aimed to determine the prevalence of DN AND DR in type 2 diabetics and the factors associated with their concomitant development.

Materials and Methods: Questionnaires were administered to the subjects to obtain socio-demographic and clinical information. Anthropometric measurements of weight, height, body mass index, waist circumference, hip circumference, and waist/hip ratio were obtained. Direct ophthalmoscopy was done for all subjects to determine the presence of diabetic retinopathy. Blood samples for fasting lipid profile, glycosylated hemoglobin, serum creatinine and spot urine samples collected for urinalysis and micro albumin assay. Fasting lipid profile was determined using Radox Kit enzymatic method, while glycosylated hemoglobin was measured by means of an In 2 it Bio Red HbA 1 c Analyzer machine.

Results: Four hundred patients with the type 2 diabetes mellitus completed the study with analyzable data. The prevalence of diabetic nephropathy in the study population was 52.5%. 40.5% had uncontrolled hypertension, while 65% of the study population had poor glycemetic control. The independent predictors of DN were elevated serum triglyceride and obesity. The prevalence of diabetic retinopathy was 39.5% in the study population. Independent predictors of DR were history of hypertension, increased WHR and uncontrolled hypertension. History of hypertension and uncontrolled hypertension were the strongest predictors of DR in the study subjects. 126 (31.5%) of the study population had co-occurrence of both DN and DR. The independent predictors of DN and DR were history of hypertension and obesity.

Conclusion: The prevalence of co-occurrence of DN and DR in persons with T2DM in south-south Nigeria is high. The independent predictors of DN and DR were history of hypertension and obesity. The need to institute measures to retard the progression of both nephropathy and retinopathy in type 2 diabetics is very apt.

5. OR/ABS/NAN/201 8/C014

ASSESSMENT OF THE PREVALENCE, PATTERNS AND FACTORS ASSOCIATED WITH ERECTILE DYSFUNCTION AMONG CKD PATIENTS

Adelakun A.A¹, Omosule B.O¹, Igbokwe M.C², Sanusi A.A¹, Arogundade F.A¹, Bamikefa T.A¹, Ezeugonwa R¹, Okunola O.O¹, Omotoso B.A¹, Akinsola A.A¹

¹Renal Unit; Department of Medicine, Obafemi Awolowo University Teaching Hospital Complex, Ile-Ife.

²Urology Unit, Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Nigeria.

Corresponding Author: Dr. Adelakun Adegbola A; adegbolaadelakun@gmail.com

Background: Erectile dysfunction is common among the Chronic Kidney disease (CKD) population. This can be related to the various causes of CKD or to CKD related autonomic neuropathy. This study sought to establish the prevalence and factors associated with Erectile Dysfunction (ED) in CKD patients.

Objectives: To determine the prevalence, pattern and factors associated with erectile dysfunction in a CKD population.

Materials and Methods: A cross sectional study among in-patients with CKD of the renal unit and CKD patients attending the Medical Clinic of OAUTHC Ile-Ife over a 6 month period. ED was assessed using the International Index of Erectile Dysfunction questionnaire (IIED); a validated, multi-dimensional, self administered tool. Data was analyzed using the SPSS version 20; statistical significance taken at $p < 0.05$.

Results: 40 male patients were recruited. Mean age of participants was 54 years (SD=2.08). The majority (52%) of patients had been diagnosed with CKD for between 2-5 years. 75% of patients were in CKD stages 3 and 4 with hypertension (35.7%) and diabetes mellitus (28.5%) accounting for the majority of causes. ED was established in 95% of patients with 60% of patients having mild and mild to moderate ED. Age ($p=0.006$), Alcohol use ($p=0.007$) and presence of comorbidities ($p=0.05$) were factors associated with ED.

Conclusions: In this study, we established that ED is a common finding among CKD patients with the majority having mild to moderate dysfunction. Age of patient, alcohol use and the presence of comorbidities were significant contributors. The assessment of ED should form part of the management plan of CKD to reduce the attendant morbidity.

6. OR/ABS/NAN/201 8/C015

ALBUMINURIA IN HAART-NAIVE HIV PATIENTS IN UNIVERSITY OF ILORIN TEACHING HOSPITAL

Olanrewaju TO, Aderibigbe A, Oyedepo DS, Faponle AE, Busari KA, Chijioke A, Salami AK', Dada SA, Adewale AA

Division of Nephrology and IPulmonology, Department of Medicine, University of Ilorin Teaching Hospital, Ilorin, Nigeria

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. Albuminuria is a marker of cardiovascular disease and CKD progression; and early detection provides opportunity for targeted therapy to delay or prevent development of ESKD. Studies on albuminuria in HIV in North-Central Nigeria are sparse, so its magnitude in this patient population has not been sufficiently 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 Albuminuria 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 albuminuria.

Results: 72 patients out of 102 recruited have complete data for analysis. The mean age was 39±10 years with 33(45%) males and 39(54%) females. Fifty (69%) patients had AIDs (CD4+ count <200 cells/uL) while albuminuria defined as urine albumin estimation of >30 ng/L was present in 51 (70.8%) of patients. Median CD4+ count and albuminuria were 94(6-729) cells/uL and 60(10->150) mg/L respectively; while the mean PCV was 25±7. Albuminuria 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: Albuminuria is very common in HAART-naive HIV patients in Ilorin and seems to be worse as the disease progresses. A larger sample size and prospective study is required to confirm this relationship. Screening for albuminuria is recommended to facilitate early detection and intervention.

7. OR/ABS/NAN/201 8/C016 PREVALENCE AND PATTERN OF RISK FACTORS FOR CHRONIC KIDNEY DISEASE AMONG UNDERGRADUATES OF ADEYEMI COLLEGE OF EDUCATION, ONDO STATE

Akinbodewa AA¹, Adejumo OA¹, Ogunleye A¹, Lamidi OA¹, Alli OE¹, Olalusi OV¹, Fadipe F¹, Fadamoro F¹, Daonni, David EA¹, Olaoye TR¹, Ogunmosin D²

¹Kidney Care Centre, University of Medical Sciences Teaching Hospital, Ondo City, Ondo State, ²Health Centre, Adeyemi College of Education, Ondo City, Ondo State

Background: The prevalence of the risk factors for chronic kidney disease (CKD) is fast increasing among youths globally. The Nigerian youths are not excluded due to adoption of Western diet and culture.

Methods: Consecutive volunteers at a screening centre in the College were studied. Their bio-data, blood pressure and anthropometric parameters were obtained. Blood samples were drawn for serum creatinine and fasting total cholesterol. Data was analyzed using SPSS 20.

Results: A total of 640 students were studied (M:F=3.8:1) with an age range of 17-37 years. Their mean age was 23.1±2.8 years. Their mean body mass index (BMI), total cholesterol (TC) and estimated Glomerular Filtration Rates (eGFR) were 21.7±3.6 kg/m², 4.5±1.1 mmol/L and 88.6±22.3 ml/min/1.73m² respectively. Thirty three (5.2%) had eGFR < 30 ml/min although 350 (54.7%) had eGFR at KDOQI stage 2. Ninety seven (15.2%) had BMI above normal range while 8.9% had waist hip ratio above cut off. Two hundred and fifty seven (40.2%) and 56 (9.1%) had pre-hypertension and hypertension. One hundred and seven (18.3%) and 52 (8.1%) had TC in the 'borderline high' and 'above high' margins respectively. There was a negative correlation between the eGFR and age ($p=0.00$, $r = -0.149$), weight ($p=0.04$, $r = -0.081$), hip circumference ($p=0.016$, $r = -0.095$) and TC ($p=0.003$, $r = -0.118$). Regression analysis showed that increasing age and total cholesterol predict poor renal function.

Conclusion: The risk factors for CKD were prevalent among our subjects. There were indications of risks for the development of CKD at an earlier age from some of these risk factors.

**8. OR/ABS/NAN/2018/M009:
RESISTANT HYPERTENSION AND ITS DETERMINANTS IN HYPERTENSIVE PATIENTS
IN NEPHROLOGY CLINIC UATH.**

Mamven Manmak, **Ucha Ifeanyi**, Benjamin Oyime, Okechukwu Chisom, Nwankwo Emeka

Background: Resistant hypertension(RH) is defined as blood pressure that remains above goal despite concurrent use of three antihypertensive agents of different classes, one of which should be a diuretic. Patients whose blood pressure is controlled with four or more medications are considered to have resistant hypertension. Resistant hypertension(RH) plays a part in not achieving optimal blood pressure control. RH increases the risk of, coronary heart disease, heart failure, End stage renal disease and stroke. We set out to review the proportion of patients with hypertension who have resistant hypertension in our practice with an aim to determining the predictors of this.

Methods: Review of record of patients with hypertension in our MOPD clinic was done (from 2010-2017). Patients who were on anti-hypertensive medication for at least 6 months were selected. Hypertension was defined as blood pressure of 140/90 or known hypertension on treatment. Controlled blood pressure was <140/90. Data on Demographics, duration of hypertension and predisposing risk factors, were assessed. Variables were analyzed using logistic regression to evaluate determinants of RH.

Results: 2363 patient record were reviewed, 1082 were selected. 399 patient had good BP control (MAP 87.22 9.51), while 683 had uncontrolled BP (MAP 114.66 14.89). A total of 215 had RH (MAP 115.5 19.63). The average Age of patients with RH was 46.61 12.0. There were 134 males and 81 females. (M:F, 1.66:1). Younger Age [OR 2.410 ,95%CI (1.557-3.730); p<0.001], and presence of CKD [OR 3.463 ,95%CI (2.417-4.060); p<0.001] were significant determinants of RH in this study group cohort.

Conclusion: RH in this study is high. Special attention should be paid to this group of patients, early identification of these patients should be sought and appropriate measures taken to refer, modify, or intensify therapy thereby reducing the associated morbidity and mortality.

**1. OR/ABS/NAN/2018/A001
DIAGNOSTIC ACCURACY OF NEUTROPHIL GELATINASE-ASSOCIATED LIPOCALIN
FOR EARLY DETECTION OF ACUTE KIDNEY INJURY AMONG PATIENTS IN INTENSIVE
CARE UNIT IN A TERTIARY HOSPITAL IN NIGERIA**

Ibiyemi MP, Olanrewaju TO, Afolabi TA, Odumosu AS, Busari KA, Oyedepo DS, Faponle AE, Chijioko Ax, Aderibigbe A.

Division of Nephrology, Department of Medicine, University of Ilorin Teaching Hospital, and University of Ilorin, Ilorin, Nigeria.

Background: Acute kidney injury (AKI) is a common complication among hospitalized patients with the highest incidence among those that are critically-ill. Several studies have found Neutrophil Gelatinase-Associated Lipocalin (NGAL) to have a better diagnostic and predictive ability for AKI compared with serum creatinine. However its role among patients in Africa is yet to be determined. The study aims to determine the diagnostic accuracy of NGAL for early detection of AKI among adult critically-ill patients in a tertiary Hospital in Nigeria. It will also determine the sensitivity, specificity, positive and negative predictive values of NGAL for AKI among these patients.

Methods: This is a prospective study of 89 critically-ill adult patients, and 89 age- and sex-matched apparently healthy individuals. Serum creatinine were measured at admission and after 48hours, while serum NGAL was measured at admission using ELISA-based turbidimetric assay. AKI was defined by Acute Kidney Injury Network (AKIN) criteria. The pattern of serum NGAL, the diagnostic accuracy for AKI, and the relationship between serum NGAL and the duration of admission was determined.

Result: The mean ages of the patients and control participants were 40 ± 13 years and 36 ± 15 years respectively ($p=0.067$). 42.7% of the patients developed AKI (Stage 1, 57.9%; stage 2, 36.8% and stage 3, 5.3%). The Median serum NGAL was significantly higher in the patients (120 (10-380) ng/ml) than the control participants (29(10-98)ng/ml, $p=0.001$). At the serum NGAL cut off of 135ng/ml, the sensitivity of NGAL for AKI was 94.74% and the specificity was 92.16%. The positive and negative predictive values were 90% and 95.90% respectively. The diagnostic accuracy was 93.26%. The admission serum NGAL strongly correlated with the duration of admission ($r=0.786$; $p=0.001$). Serum NGAL at admission correlated with serum creatinine taken 48 hours after admission than serum creatinine at admission.

Conclusion: Serum NGAL is an early predictor of AKI compared with serum creatinine among adult critically-ill patients in a tertiary hospital in Nigeria, and may be a useful marker of outcomes in these patient population.

2. OR/ABS/NAN/2018/A002

DETERMINANTS OF ACUTE KIDNEY INJURY OUTCOME AMONG PATIENTS WITH CONFIRMED LASSA VIRAL DISEASE OVER A PERIOD OF 12 MONTHS: A SINGLE CENTRE RETROSPECTIVE STUDY.

Momoh A.J, Olatunde L.O, Ojo O.E., Odeyenni A.A
Renal Unit, Federal Medical Center, Owo, Ondo State, Nigeria

Background: Acute kidney injury (AKI) is a challenging problem in the developing world especially Nigeria because of the burden of disease, the lack of resources to support patients with established AKI and the late presentation of these patients to health care facilities. This is infact worsened with peculiarity of lassa fever as highly infectious disease and non availability of dedicated hemodialysis machine.

Objective: This study sought to determine the incidence of acute kidney injury and its contribution to mortality rate in our centre.

Methodology: Retrospectively, data from 51 patients with confirmed lassa fever admitted to Infectious Diseases ward, Federal Medical Centre, owo Ondo state was reviewed over a period of 12 months. Data comprises of patients' demographics, aetiology, need for dialysis, outcome, laboratory parameters, length of hospital admission and analysed using SPSS version 16. AKI was classified according to Kidney Disease Improving Global Outcomes criteria.

Results: There were 27(52.9%) males and 24(47.0%) females. The incidence of acute kidney injury is 11 (21.6%). Factors associated with AKI and its outcome includes; Age, Co-morbidity, Late presentation and pregnancy. The overall mortality rate of 13.7% (7 patients, 4 females and 3 males) was noted with renal impairment constituting 85.7% (n=6).

Conclusion: AKI contributes significantly to the mortality rate of patients with lassa viral disease.

3. OR/ABS/NAN/2018/A004

SEVERITY AND OUTCOMES OF ACUTE KIDNEY INJURY AMONG ADULT PATIENTS IN UATH, GWAGWALADA.

Okechukwu Chisom, Mamven Manmak, Nwatarali Nonso, Nwankwo Emeka

Background: Acute Kidney Injury (AKI) is a global health problem associated with high morbidity and mortality even in high-income settings. The outcome of AKI may depend on the severity of the disease, early assess to appropriate treatment and presence of co-morbidities among others. We set out to determine the short-term outcomes of AKI patients in UATH.

Methods: Medical records of all patients seen by the nephrology unit from Jan 2013-Dec 2017 were reviewed. The diagnosis and severity of AKI was defined as per the KDIGO recommendations. Outcomes within 3 months and 1 year of diagnosis were analysed and included full recovery, partial recovery, no renal recovery (dependent on dialysis), recurrence, and death. Predictors of increased mortality were also assessed

Results: 330 cases with AKI, mean age was 42.8 15.9 YEARS. There were 192 Males and 138 Females. The main aetiologies were hypovolaemia 95 (28.7%), sepsis 88 (26.5%), obstructive uropathy 22 (6.6%), pregnancy related 19 (5.7%). Outcome within first 3 months: 102 (30.8%) died, 203 (61.5%) were discharged with 60(18.1%) recovering fully, 108(32.6%) partial recovery, 21(6.3%) showed no renal recovery (dependent on dialysis), Within one year: recovery was maintained in 34 (56.6% of recovered patients), 14(12.9%) patients with partial recovery reverted to full recovery, 35 (32.4%) progressed to CKD, 12 patients had repeat AKI, 6 patients died. Predictors of increased risk of death in this study were, older Age [OR 1.163, 95% CI (0.623-2.171); p<0.027], ICU admission [OR 8.797 ,95%CI(4.703-16.456); p<0.001], Haemodialysis [OR 1.621, 95%CI(0.943-2.785); p<0.045] and presence of diabetes mellitus [OR 1.533, 95%CI(0.719-3.264); p<0.01]

Conclusion: AKI is associated with poor outcomes in our practice as majority of patients present to us in the severe form. AKI is a major risk factor for CKD and ESRD. Prompt recognition and appropriate management of patients is warranted. We should encourage and find means to ensure our patients present early and to come for follow up even after recovery to curb morbidity and mortality.

4. OR/ABS/NAN/2018/G001

PREVALENCE OF HISTOLOGICAL PATTERNS OF PRIMARY GLOMERULONEPHRITIS IN ADULTS BIOPSIED AT UNIVERSITY OF NIGERIA TEACHING HOSPITAL ENUGU OVER A 9 YEAR PERIOD (JANUARY 2008 TO DECEMBER 2017).

Ijoma CK¹, Ulasi II¹, Arodiwe EB¹, Onodugo OO¹, Okoye JO¹, **Ezeanowi JO²**, Onu UC¹, Keke UV², Idam Ea².

¹Department of Medicine, University of Nigeria Teaching Hospital, Ituku Ozalla, Enugu State.

²Department of Medicine, Federal Medical Centre, Owerri, Imo State.

Background: Primary glomerulonephritis remain the leading cause of end stage renal disease in many developing countries. It is considered a common cause of chronic kidney disease and its prevalence and histological pattern differ according to geographical area, race and age in different regions of the world. Renal biopsy plays a major role in the diagnosis of glomerulonephritis. **Aim:** To determine the prevalence of the histological pattern of primary glomerulonephritis locally and to compare it with the findings in previous studies.

Method: This is a retrospective study. We reviewed the available biopsy results of patients with primary glomerulonephritis between January 2008 to December 2017. Data obtained include patients' demographics, clinical presentation, urinalysis and biopsy reports. In the earlier years, the biopsies were done blindly by surface anatomy but presently they are done under ultrasound guidance.

Results: A total of forty six (46) biopsy results were available. Of these 32 patients (69.6%) were males and 14 patients (30.4%) were females. Most patients were of younger age group with a mean age of 28 years. The commonest presenting symptom was edema and majority of the patients had proteinuria at presentation. The biopsies showed Minimal Change Disease (MCD) in 16 patients (34.8%), Focal segmental Glomerulosclerosis (FSGS) in 12 patients (26.1%), Mesangiocapillary Proliferative Glomerulonephritis (MesPGN) in 9 patients (19.6%), Membranoproliferative Glomerulonephritis (MPGN) in 7 patients (15.2%) and Membranous Glomerulonephritis (MGN) in 2 patients (4.3%).

Conclusion: Our study indicates that GN predominantly affected the younger age group. MCD remained the commonest pattern of primary GN followed by FSGS. This is in keeping with most studies in Africa.

5. OR/ABS/NAN/2018/G002

EPIDEMIOLOGIC AND HISTOPATHOLOGIC SPECTRUM OF CHILDHOOD NEPHROTIC SYNDROME IN UITH ILORIN-PRELIMINARY REPORT

Adedoyin O. T, Buhari M.O., **Abdulazeez A.T**, Alege A, Maiyegun R.O.

Department of Paediatrics and Child Health and Pathology, University of Ilorin Teaching Hospital, Ilorin Nigeria

Background: The histopathologic characteristics of childhood nephrotic syndrome have become unclear in the tropics with workers reporting non-MCNS in some centers. This varied findings informed the need for the establishment of a baseline data for children with nephrotic syndrome seen in UITH.

Objectives: To determine the epidemiology and histopathologic spectrum of nephrotic syndrome in children seen at UITH Ilorin.

Method: A prospective histopathological analysis of renal biopsy specimen obtained from children with nephrotic syndrome seen within the last 7 years in our center was carried out. The renal biopsy was carried out under ultrasonic guidance.

Results: A total of 30 children with NS had their renal biopsy specimen analyzed. Their mean (SD) age was 7.4 ± 3.8 years with a range of 2-13 years. There were 13 males and 17 females giving a male: female ratio of 0.8:1. Minimal change nephrotic syndrome (MCNS) occurred in 27 (90.0%) of the total cases of nephrotic syndrome seen. 2 (6.6%) patients had focal segmental glomerulosclerosis (FSGS) while 1 (3.3%) patient had mesangial proliferation. 22(81%) of the MCNS patients were steroid-responsive while all the FSGS and the mesangial proliferative disease were steroid resistant. All the patients are alive.

Conclusion: MCNS remains the commonest histopathological characteristic of childhood nephrotic syndrome in UITH Morin. Most of them were steroid responsive.

6. OR/ABS/NAN/2018/G003

CLINICAL AND LABORATORY CHARACTERISTICS OF PATIENTS WITH PRIMARY GLOMERULAR DISEASES SEEN AT USMANU DANFODIYO UNIVERSITY TEACHING HOSPITAL (UDUTH), SOKOTO.

Muhammad AS¹, **Yusuf SA**¹, Liman HM¹, Makusidi AM¹, Hussaini JI¹, Sahabi SM², Abdullahi K², Muhammad Us²

¹*Renal Unit, Department of Internal Medicine, UDUTH, Sokoto.*

²*Histopathology Department, UDUTH, Sokoto*

Background: Primary glomerulonephritis (GN) remains a leading cause of end stage renal disease (ESRD) in many developing countries. It is presumed to be responsible for up to 52% of patients with ESRD in Africa. Histological diagnosis is sine qua non for proper management and prognostication of these conditions.

Method: This was a retrospective study that looked at the clinical and laboratory characteristics of patients that had kidney biopsy between January 2015 and October 2017 at UDUTH, Sokoto. Patients' demography, clinical details and laboratory test results were retrieved from their case notes for analysis. Data was analysed using Statistical Package for Social Sciences Version 25.

Result: Twenty three patients were biopsied, 12 (52.2%) were male with a M : F of 1.09:1. Their mean age was 26.7 ± 8.4 years with a range of 16 - 50. The mean systolic and diastolic blood pressure were 123.85 ± 18.5 and 78.85 ± 16.4 mmHg respectively. The mean estimated glomerular filtration rate (eGFR) was 80.82 ± 28.2 ml/min/1.73m². The mean urine protein-creatinine ratio (UPCR) was 5.75 ± 3.6 . The mean haematocrit was $32.14 \pm 5.7\%$. The mean total cholesterol and albumin were 277.27 ± 123.8 mg/dl & 2.47 ± 0.9 g/dl respectively. Focal Segmental Glomerulosclerosis (FSGS) and Minimal Change Disease (MCD) accounted for 8 (34.8%) each, Membranoproliferative GN 4 (17.4%), Post-infectious GN 1 (4.2%) and 2 (8.7%) were

unrepresentative. All the patients were on diuretics, 10 (43.5%) on statins, 14 (60.8%) on angiotensin converting enzyme inhibitors (ACEI) and 13 (56.5%) on prednisolone. 10 (43.5%) were in remission (negative or trace urinary protein with disappearance of oedema and normalization of hypercholesterolemia and hypoalbuminemia), 4 (17.4%) defaulted follow up while 9 (39.1%) never achieved remission.

Conclusion: FSGS and MCD were the most prevalent glomerular lesions in our study and treatment increased rate of remission amongst this group of patients. Remission rate achieved was less than 50% which is unsatisfactory.

7. OR/ABS/NAN/2018/G005

PATTERN OF PRESENTATION AND MANAGEMENT OUTCOME OF LUPUS NEPHRITIS IN A NIGERIAN TERTIARY HOSPITAL: REPORT OF 11 CASE SERIES.

Bala S.M, Babatunde L.A, Tuko M, Hamidu A, Sakajiki A.M, Ibrahim D.A, Atanda A, Abdu A
Aminu Kano Teaching Hospital, Kano

Background: Lupus Nephritis is a rare but important cause of CKD (Chronic Kidney Disease) worldwide. It is commoner in blacks and more commonly among women. Lupus Nephritis pattern of presentation, management outcome is not known to be reported North-Western part of Nigeria.

Aim and Objective: To describe the pattern of presentation and management outcome in patient with Lupus Nephritis from a tertiary Health centre in Northern Nigeria.

Methodology: A retrospective archival review from September 2010 to September 2017 of all patients that were managed for lupus nephritis in Aminu Kano Teaching Hospital.

Results: All the patients were of black race. Nine (9) are women. Age ranges from 18-52 yrs. Two (2) presented with active sediment nephrotic syndrome, as an initial presentation. Seven (7) had an initial diagnosis of SLE with renal involvement at later stage. Two (2) presented with neuropsychiatric manifestation of SLE and renal involvement at the same time. Six (6) had kidney biopsy with various histological manifestation of Lupus Nephritis. They all had remission on commencement of therapy with three (3) of the patients requiring haemodialysis. There were more relapse and poor outcome among the two (2) male patients with time-to-event outcome of less than 2 years.

Conclusion: Lupus nephritis patients' presentation is late in our environment and consistently affected younger women with variable clinical and histological presentation. There was poor outcome among the male lupus nephritis patients.

8. OR/ABS/NAN/2018/M001

ASSOCIATION BETWEEN EXCESS WEIGHT AND GLOMERULAR FILTRATION RATE AMONG HEALTHY NIGERIAN POPULATION.

Dada SA¹, Raimi TH², Aremu Oa³

^{1,3}*Nephrology Unit, Department of Medicine, EKSUT*

²*Endocrinology Unit, Department of Medicine, EKSUTH*

Background: There is an increasing interest in the relationship between excess weight and the occurrence of kidney disease. Obesity has been shown to have important pathophysiologic consequences for the kidney. Report from studies examining the significance of body mass index (BMI) as a risk factor for development of CKD have been largely controversial. Such studies are sparse among the indigenous black population.

Objective: We examined the relationship between increased weight (*i.e.*, BMI) and renal function evaluated by the estimated glomerular filtration rate (eGFR) using the Modification of Diet in Renal Disease Study Group equation.

Method: This is a cross sectional study involving 659 participants during a public medical screening programme. The Participants were categorized into two groups: those with an eGFR > 60 and <60 mL/min/1.73m². BMI was calculated as weight divided by the square of height and classified using the WHO Criteria. Correlation was performed with the Pearson's correlation test. Logistic regression was used to examine the association between BMI and CKD after adjusting for potential cofounders.

Result: The mean age of the participants was 39.11 ± 15.18 years with a range of 18-85years and 57.5% were female. Three hundred and sixteen (48.1%) had normal weight (BMI, 18.5 to 24.9 kg/m²), 33.7% were overweight with BMI of 25.0-29.9 kg/m² and 18.2% had BMI 30.0 kg/m² or greater There is a significant difference in the mean eGFR among person with normal weight compared with obese individuals. P< 0.001. We found a weak but statistically significant negative association between eGFR and BMI (-.343, p=0.000). Logistic regression was performed to assess the relationship between BMI and eGFR < 60ml/min/1.73m². Higher BMI remained independently associated with CKD (OR 1.308, 95% CI 1.216-1.407 p=0.001) after adjustment for potential confounders such as sex, hypertension, age, and smoking status.

Conclusion: These findings showed that excess weight has a significant association with glomerular filtration rate and should be consider as an important risk factor for CKD.

9. OR/ABS/NAN/2018/M002

GLOMERULAR FILTRATION RATE USING SERUM CYSTATIN C IN HEALTHY NEWBORNS AT UNIVERSITY OF ILORIN TEACHING HOSPITAL, ILORIN.

Olayinka R Ibrahim¹, Ayodele O Soladoye², Olanrewaju T Adedoyin³, Olugbenga A. Mokuolu³

¹Department of Paediatrics, Federal Medical Centre, Katsina

²Department of Human Physiology, Faculty of Basic Medical Sciences, College of Health Sciences, University of Ilorin, Ilorin, Nigeria

³Department of Paediatrics and Child Health, University of Ilorin Teaching Hospital & Faculty of Clinical Sciences, College of Health Sciences, University of Ilorin, Ilorin, Nigeria

Background: The assessment of renal system in the newborns rely on the estimation of glomerular filtration rate (GFR) using serum creatinine which has been found to be unreliable. The search for better biomarker of GFR led to the identification of serum cystatin C. This study was designed to determine the serum cystatin C and use it to estimate GFR among newborns at University of Ilorin Teaching hospital.

Methods: This was comparative cross-sectional, study carried-out between 15th Jan- 15th Mar 2017. A total of 60 preterms and 30 terms were consecutively recruited for the study. The serum cystatin C was analysed using Human cystatin C ELISA kit (SL057Hu), SunLong Biotech Co Ltd., China. The GFR was estimated using Zappitelli's equation. The data was analysed using SPSS Version 20 and p <0.05 was considered significant.

Results: The mean serum cystatin C was 0.97 ± 0.35 (range 0.5-1.8) mg/L. The mean serum cystatin C in males and females were comparable (0.98 ± 0.36 mg/L vs. 0.96 ± 0.34 mg/L, p=0.730). Mean serum cystatin C was slightly higher among preterms compared with term babies, though not statistically significant. (0.99 ± 0.36 mg/L vs. 0.93 ± 0.33 mg/L; p=0.728). Mean cystatin C based GFR was 75.86 ± 29.4 ml/min/1.73m². The mean of estimated GFR was comparable between all preterms and terms babies (74.13 ± 28.0 vs. 81.28 ± 31.85 p=0.760).

Conclusion: Serum cystatin C and estimated GFR were 0.97 ± 0.35 mg/L and 75.86 ± 29.4 ml/min/1.73m²respectively, with no significant differences between preterm and term babies.

1. OR/ABS/NAN/2018/R001

A STUDY OF INTRA-DIALYTIC COMPLICATIONS IN PATIENTS WITH RENAL FAILURE IN NNAMDI AZIKIWE UNIVERSITY TEACHING HOSPITAL (NAUTH), NNEWI.

Ossineke Stanley O., Ulasi Ifeoma I, et al.

Background: Globally, kidney diseases are on the rising trend, likewise, renal replacement therapy (RRT), especially, haemodialysis, (HD). HD is currently the commonest mode of RRT in the Sub-Sahara Africa. It is, however, fraught with so many complications; many of which cause morbidity and mortality outside the primary kidney problems sometimes. Hence, there must be concerted efforts to identify them early and institute preventive measures or treat them efficiently, especially, when their occurrences are inevitable.

Aims: To determine the prevalence and types of intra-dialytic complications among renal failure patients in Nnamdi Azikiwe University Teaching Hospital, Nnewi, Anambra State.

Subjects and Method: The renal failure patients were made up of chronic kidney disease/end-stage renal disease/end-stage renal disease (CKD/ESRD) and acute kidney injury (AKI) patients. The study was a prospective one. It was carried out among 126 renal failure patients undergoing HD at the renal centre of NAUTH, Nnewi in Anambra state. The consenting patients were thoroughly examined physically and findings were properly documented in a questionnaire administered by the researcher. They also underwent relevant laboratory investigations intended to elicit possible intra-dialytic complications and the results were carefully recorded in the same questionnaire. Results of the findings were statistically analyzed using Statistical Package for Social Sciences (SPSS) software version 17.

Results: There were 126 renal failure patients studied; 84 were CKD/ESRD patients, while 42 were AKI. There were 61 females and 65 males; within the age brackets of 19 to 79 years. The study showed that out of the 86 patients with complications, 52 were males (60.5%) while 34 were females (39.5%). Fifty-five of the 86 patients with complications had ESRD (64%) while 31 had AKI (36%). Intra-dialytic complications occurred more in the age groups of 45 - 64 years and > 65 years (62 of the 86 patients = 72.1%). In this study, hypotension was the commonest intra-dialytic complication observed with a prevalence of 20.6% (for patient-based analysis) and 21.1% (for session-based analysis), while hypertension occurred with prevalence of 19.8% (for patient-based analysis) and 16.5% (for session-based analysis). In patients with hypotension, hypoalbuminaemia was found to play a significant role. Cardiovascular-related intra-dialytic complications (namely hypotension and hypertension) were the commonest type of complications encountered by the patients: hypotension occurring in 26 of the 86 patients (30.2%) (ESRD patients = 19 and AKI patients = 7) and hypertension seen in 25 subjects (29.1%) (ESRD patients = 17 and AKI = 8 patients).

Conclusion: This study has shown that intra-dialysis complications were common (54.5% of the total number of sessions had intra-dialysis complications). It has also shown that the commonest intra-dialysis complication was hypotension (21.1% of the total of session based analysis), and then followed by hypertension (16.5% of the total of session based analysis). Other minor complications included blood loss, fever, chest pain, cramps and seizure. Some of the relations were statistically significant while others were not. The dose of dialysis (KT/V) was also found to be significantly related ($p < 0.01$) to the incidence of intra-dialysis complications.

2. OR/ABS/NAN/2018/R002

PAEDIATRIC HAEMODIALYSIS AT THE UNIVERSITY COLLEGE HOSPITAL IBADAN-AN UPDATE

Adebowale D Ademola, Adanze O Asinobi

Background: Haemodialysis is potentially important as renal replacement therapy (RRT) in children with acute kidney injury (AKI) and chronic kidney disease (CKD) in developing countries. We reviewed our nephrology unit database to provide an update on the role of haemodialysis in children and adolescents with AKI and CKD.

Method: Review of the paediatric nephrology unit database to assess the demography, diagnosis and in-hospital mortality of children who received haemodialysis in our hospital from September 2015 to November 2017. We do not have facilities for kidney transplantation.

Results: Seventy children and adolescents received haemodialysis, in a total of 78 admissions. The children were aged 2-17 (IQR 7-13) years, and 44 (62.9%) were males. Forty-eight (68.8%) patients had AKI while the others had CKD. The patients with AKI were aged 2-16 (IQR 5.3-11) years, and 60.8% were males, while patients with CKD were aged 7-17 (IQR 10-14.3) years, with 68.2% males. The main causes of AKI were malaria (n=22, 45.8%), sepsis (n=7, 4.6%), and rapidly progressive glomerulonephritis (n=4, 8.3%), Haemoglobinopathy (n=4, 8.3%), and malignancy (n=3, 6.3%). The main causes of CKD were glomerulonephritis in 17 (77.3%), and Posterior urethral valves in 3 (13.6%). Mortality among the patients with AKI and CKD were 8.3% and 31.8% respectively (p=0.03)

Conclusion: Haemodialysis is feasible in the management of children with AKI and CKD in developing countries in centres with HD facilities and paediatric nephrologists. Patients with CKD will however need chronic RRT and kidney transplantation

3. OR/ABS/NAN/2018/R003

OUTCOMES OF TUNNELED INTERNAL JUGULAR VENOUS CATHETERS FOR CHRONIC HAEMODIALYSIS AT THE UNIVERSITY COLLEGE HOSPITAL, IBADAN, NIGERIA.

Coker JM¹, Abiola IB¹, Efuntoye OO¹, Aminu OO¹, Bello TO¹, Jinadu YO, Raji YR², Ajayi SO², Salako BL², Arije A², Kadiri S²

¹Nephrology Unit, University College Hospital, Ibadan, Oyo state, Nigeria.

²Nephrology Unit, Department of Medicine, College of Medicine, University of Ibadan, Ibadan, Oyo state.

Background: Venous access is an important aspect of haemodialysis treatment. Arteriovenous (AV) fistula has been described as the most preferred haemodialysis access type for patients on chronic dialysis. There continues to be a challenge with the creation of AV fistula, due to shortage of vascular surgeons skilled in the creation of the fistula and due to the vascular disease, that is often associated with CKD. We describe the outcomes of the tunneled internal jugular venous catheters amongst our patients at the University College Hospital Ibadan.

Methods: This is a retrospective study of patients on maintenance haemodialysis at the University College Hospital, Ibadan, we reviewed the dialysis records of all patients on chronic dialysis over a period of 5 years (January 2013 - December 2017). Information obtained include demographics, types and aetiology of renal failure, types of vascular access, number of attempts at creating the access, observed complications and outcomes.

Results: A total number of 148 catheters were inserted during the period under review, 100 were males while 48 were females. Age range was between 10-78 years. All procedures were done using Seldinger's technique. Majority of the catheters were placed in the right internal jugular vein, only in one case was the

catheter placed in the left internal jugular vein. There were 6 cases (4.0%) of failed first attempt. The immediate complications recorded were 2 cases (1.4%) of haemothorax requiring closed thoracotomy tube drainage, 3 cases (2.0%) of arrhythmia, 4 cases (2.7%) of reactionary haemorrhage and 2 deaths (1.4%). Catheter site infection and catheter related bacteremia were the commonest long term complications and occurred in 15 cases (10.1%). Other complications recorded were three cases (2.0%) of dislodged catheters, one case (1.0%) of superior vena cava syndrome and 10 cases (6.7%) of catheter thrombosis.

Conclusion: Internal jugular tunneled dialysis catheters despite its shortcomings, has been a safe procedure with good outcomes among patients on maintenance haemodialysis. This modality of vascular access should serve as a stop gap pending the creation of AV fistula or early kidney transplantation.

4. OR/ABS/NAN/2018/R004

COMORBIDITIES IN HAEMODIALYSIS PATIENTS: A REVIEW OF 56 CASES OF ESRD PATIENTS DIALYSED IN LASUTH OVER A ONE YEAR PERIOD.

Olarewaju B.A., Amisu M.A, Awobusuyi J.O, Adekoya A, Umeizudike T.I
Lagos State University Teaching Hospital, Ikeja, Lagos.

Background: Comorbid conditions are highly prevalent in haemodialysis patients and are significant predictors of mortality and other adverse outcomes. However, the overall burden of comorbidities in the haemodialysis cohort in most dialysis units in the country has received little attention, as treatment is focused mainly on individual patients, and published data from various units in the country tend to focus on a few comorbidities in their analysis of these patients. This study was undertaken to globally assess, the burden of comorbidities in chronic kidney disease patients dialyzed in our haemodialysis unit over a one year period.

Method: A retrospective analysis of 56 Patients whose records are domiciled in the dialysis unit of LASUTH, from 1st of January 2017 to 31st December 2017 was undertaken. Data on frequency of haemodialysis, the duration of stay on dialysis, as well as documented comorbid conditions were obtained from patients' case files. The data was analyzed using Microsoft Excel 2016.

Results: 29 male and 27 female patients had records available for analysis. Age range was 19-81 years. Hypertension was the commonest comorbid condition, observed in 89.2% of the patients. Anaemia was observed in 85% of the patients while 28.6% were diabetic. 3.6% had stroke congestive cardiac failure respectively. 12.5% had dyslipidaemia with hypertriglyceridaemia and elevated LDL as commonest findings. Other findings include hypocalcaemia, 42%, hyperphosphataemia 46% and hypoalbuminaemia 26% of the patients. In most patients (75%), especially in patients dialyzed in the unit for more than six months, dialysis frequency was irregular (less than once a week).

Conclusion: Comorbid conditions are very common in the haemodialysis population. The assessment of the global burden of such conditions in any unit is important, as this may influence practice pattern and policy formulations, with significant impact on outcomes of treatment in this group of patients.

5. OR/ABS/NAN/2018/R007

PAEDIATRIC PERITONEAL DIALYSIS AT THE UNIVERSITY COLLEGE HOSPITAL IBADAN- AN UPDATE.

Adebowale D Ademola, Adanze O Asinobi

Background: Peritoneal dialysis (PD) has been previously demonstrated to be suitable for paediatric RRT in developing countries. We reviewed our unit database to provide an update on the role of peritoneal dialysis as RRT in children.

Method: Review of the paediatric nephrology unit database to assess the demography, diagnosis and in-hospital mortality of children who received peritoneal dialysis in our hospital from October 2015 to November 2017. Peritoneal dialysis is usually provided with nasogastric tubes adapted as PD catheters, occasionally we use rigid catheters and the Kimal® PD catheter.

Results: Twenty-five children and adolescents received peritoneal dialysis over the period. The children were aged 7 days - 17 years, with a median of 1 (IQR 0.42-3.5) years. Twenty-four patients had AKI while one patient had CKD. The main causes of AKI were sepsis (n=16, 66.7%), malaria (n=5, 20.8%), others (n=3, 12.5%). In-hospital mortality among the patients was 16.7%

Conclusion: Peritoneal dialysis remains relevant in paediatric RRT in developing countries and should be promoted

6. OR/ABS/NAN/2018/R008

PERITONEAL DIALYSIS IN NIGERIAN CHILDREN: EXPERIENCE FROM ILORIN.

Adedoyin O.T, Abdulazeez A.T, Alege A, Maiyegun R.O.

Department of Paediatrics and Child Health, University of Ilorin Teaching Hospital, Ilorin Nigeria

Background: Peritoneal dialysis (PD) was commenced few years ago in our center. Hitherto those who could not access haemodialysis for sundry reasons were usually referred to neighbouring hospitals that could offer PD. The outcome at those centers was sometimes unfavourable probably because of time loss before the commencement of the PD. The decision to commence PD against all confounding odds such as lack of peritoneal fluid has benefited some of the children who would have travelled miles away from their immediate home to obtain same.

Objectives: To carry out an audit of cases of acute kidney injury (AKI) that had PD as a form of renal replacement therapy (RRT) over a four and half year period (May 2013-December 2017).

Methodology: A retrospective analysis of case notes of children (0-14 years) seen between May 2013 to December 2017 at the University of Ilorin Teaching Hospital with diagnosis of AKI and had PD (using manually constituted fluid) was carried out. Data extracted include age, sex, diagnosis, duration and complications of dialysis.

Results: A total of 22 patients had PD over the four and half year period, May 2013-December 2017 comprising 13 males (59%) and 9 females (41%) giving a male to female ratio of 1.4:1. The age ranged from 3 days to 14 years with mean of 6.1 ± 5.8 years. The mean duration of dialysis was 6.8 ± 3.3 days. The causes of AKI included severe malaria (4), sepsis (4), obstructive uropathy (1), glomerulonephritis (4), HIVAN (2), haemoglobinuria from G6PD (1) and diarrhea disease (1), vincristine overdose (1), Nephrotic syndrome (1), nephritic-nephrotic (2) and dysplastic kidneys (1). The outcome showed that 11 patients (50%) were discharged, while 11 patients died with case fatality of 50%.

Conclusion: The rising prevalence of AKI globally calls for pragmatic approach from nephrologists especially in developing countries where facility may not be available for more sophisticated modality of RRT. Simple constitution of PD fluid under aseptic procedure is a valid option for RRT among children with AKI especially those without underlying co-morbid condition as demonstrated in our review.

**7. OR/ABS/NAN/2018/R014
PROBLEMS ASSOCIATED WITH ADMINISTRATION OF PERITONEAL DIALYSIS IN CHILDREN SEEN IN UITH ILORIN**

Adedoyin O. T, Abdulazeez A.T, Alege A, **Maiyegun R.O.**

Department of Paediatrics and Child Health, University of Ilorin Teaching Hospital, Ilorin Nigeria

Background: The administration of peritoneal dialysis (PD) in children is fraught with many challenges in a resource scarce setting such as ours. These problems range from unavailability of ready-made dialysate, cost of preparing local solutions, maintenance of asepsis as well as possible complication of catheter blockage.

Objectives: To identify the problems associated with the administration of peritoneal dialysis in children seen in UITH, Ilorin

Methodology: The case records of children offered peritoneal dialysis between 2013 and 2017 were reviewed to obtain challenges encountered in the course of administering peritoneal dialysis.

Results: Out of seventeen patients who had PD, only one (5.9%) could provide factory made dialysate for use. Three patients were able to provide the materials necessary to commence PD within less than 24hrs of making decision. Fifteen (88.2%) patients had cloudy effluents at one point or the other. Eleven (64.7%) patients had their PD catheter reinserted due to either blockade or infection. The total number of PD sessions varied widely from as low as 4 sessions to 88 sessions per patient with a mean (SD) of 42 ± 23.7 sessions. Two patients who had short sessions (4 and 6 sessions) actually died shortly after commencement of PD. The volume of dialysate required per day also depended on the weight of the patient. Average volume per day was 3000ml (500ml per session). The cost of 1L of locally made PD solution was #3000 (\$8). Therefore patients spent an average of #9000 (\$24) per day. 1 Litre of factory-made PD solution costs #2200 (\$6) implying that the patient spent average of #6600 (\$18) per day.

Conclusion: The challenges facing peritoneal dialysis in UITH Ilorin are many. Availability of factory-made PD solution was a major problem. The only child who used factory-made solution for PD could also not sustain it due to delay in transportation from supplier and had to use locally-made solution at some points. The high cost of the PD per day contributed to delay in commencement of dialysis in most of the patients.

**8. OR/ABS/NAN/2018/M003
PREVALENCE AND PREDICTORS OF ANAEMIA AMONG CHRONIC KIDNEY DISEASE PATIENTS AT A TERTIARY HEALTH FACILITY IN JOHANNESBURG, SOUTH AFRICA**

AM Nalado^{1,2}, JN Mahlangu³, B Waziri¹, R Duarte¹, G Paget¹, G Olorunfemi¹, S Naicker¹.

¹*Department of Internal Medicine, School of Clinical Medicine, Faculty of Health Science, University of the Witwatersrand, Johannesburg, South Africa.*

²*Department of Internal medicine, College of Health Sciences, Bayero University, Kano, Nigeria.*

³*School of Pathology, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa.*

Divisions of Epidemiology and Biostatistics, School of Public Health, University of the Witwatersrand, Johannesburg, South Africa.

Background: Anaemia is a common complication of Chronic Kidney Disease (CKD), is involved in significant cardiovascular morbidity. However, risk factors of anaemia in CKD population in Johannesburg, are not well established. Hence a cross sectional study involving non-dialysis CKD patients was conducted to determine prevalence, and possible predictors of anaemia in the local CKD population.

Methods: This was a cross sectional study. Black adult patients (18-79 years, n=255), CKD attending the renal outpatient clinic of the Charlotte Maxeke Johannesburg Academic Hospital, South Africa were recruited as cases for the study. Parameters collected included demographics e.g. age, sex, duration of CKD, clinical data included weight, height, blood pressure measurements, and laboratory data e.g. serum electrolytes, and haematological parameters. Patients were classified as anaemic based on haemoglobin level 13g/dl in men, and <12g/dl in women. The parameters were evaluated for their predictive value for anaemia development using multivariate logistical regression and odds ratios. Statistical analysis was performed using STATA 14 (USA).

Results: The mean age of CKD patients was 52.7 (\pm 14.3) years. The prevalence of anaemia was (46.9%). Multivariate analysis showed that probability of developing anaemia was greater for patients with stage 5 CKD (OR 16.5, p <0.001), reticulocyte haemoglobin content (CHr) (OR13.26, p <0.001), hypoalbuminemia (OR 5.31, p =0.006), and diabetes mellitus (OR 1.96, p =0.007), and transferrin saturation (TSAT) (OR 0.3, p 0.073). Gender and age were not found to be significant predictors of anaemia

Conclusion: The prevalence of anaemia in non-dialysis CKD was high. Risk of anaemia increased in patients with advance CKD, diabetes, hypalbuminaemia, and those with CHr <28pg, and TSAT <20%. This study has increased our understanding of the predictors of anaemia in CKD patients.

9. OR/ABS/NAN/2018/M007

THE VARIABILITY IN THE ESTIMATION OF GFR USING RENAL FORMULAE: IMPLICATIONS FOR THE EVALUATION OF EARLY RENAL DYSFUNCTION IN ADULTS WITH SICKLE CELL DISEASE

Olanrewaju TO, Oyedepo DS, Faponle AE, **Busari KA**, Ibiyemi MPE, Chijioko A, Aderibigbe A
Division of Nephrology, Department of Medicine, University of Ilorin Teaching Hospital

Background: Sickle cell disease (SCD) is a recognized cause of chronic kidney disease (CKD) which manifests as sickle cell nephropathy (SCN). Glomerular hyperfiltration (GHf), proteinuria or microalbuminuria are early markers of SCN. Screening for these markers would be an important component of the overall strategy for prevention of CKD/ESKD among this patient population. **Aim:** To determine the prevalence of glomerular hyperfiltration using two renal formulae, and proteinuria among adult patients with SCD in UITH Ilorin.

Methods: This is a retrospective study of 73 adult Patients with SCD being managed at the Renal care centre of UITH. Data on the demography, genotype, BP, Weight, dipstick proteinuria of the patients were collated. eGFR by MDRD and CKD-EPI formulae were determined. GHf was defined as $GFR > 140 \text{ ml/min/1.73m}^2$.

Results: The mean age was 26 \pm 8 years and 38(52%) were males. 66(90%) had HbSS while 7(9.6%) had HbSC. The mean of the weight was 51.2 \pm 7.8kg and Cr 71.8 \pm 29.3 $\mu\text{mol/L}$. The median eGFR by MDRD, was 129.6 (31- 527) ml/min/1.73m² and by CKD-EPI, 126.4 (32.7-213) ml/min/1.73m². Based on MDRD, 19(46.3%) had hyperfiltration while using CKD-EPI, 10(24.45) had hyperfiltration. Thirteen (17.8%) of the patients had proteinuria.

Conclusions: Proteinuria and GHf are very common among patients with SCD. Formulae for eGFR estimation, MDRD and CKD- EPI do not give similar estimates of GHf IN patients with SCD which may have implication for identification of early renal dysfunction and drug dosing in patients with SCD. Further studies with larger sample size is required to confirm these findings.