SUMMARY

The prevalence of hepatitis C virus infection in patients with chronic kidney disease is high because of exposure of these individuals to multiple risk factors such as blood transfusion and haemodialysis procedure in addition to other risk factors found in the general population. Unfortunately information on the prevalence of HCV is sparse in Nigeria and the relationship between HCV infection and Haematocrit have not been investigated locally.

This prospective study was designed to determine the prevalence of HCV infection in haemodialysis requiring CKD patients in Maiduguri and to explore the relationship between HCV infection and haematocrit.

One hundred consecutive haemodialysis requiring CKD patients aged between 15 and 74 years (mean ± SD, 39.90 ± 13.58) comprising of 68 males and 32 females were studied. They had sociodemographic, clinical and laboratory investigations done. Then serum chemistry, haemogram and HCV abs screening was carried out and results collated.

The aetiology of CKD was hypertension in 35%, chronic glomerulonephritis in 28%, and diabetes mellitus in 12% of the study population. In 18% of these patients, the cause of CKD could not be ascertained, thus we term unclassified.

Eighty-five percent of the study population were negative for HCV abs, while the remaining 15% were positive. We did not find age or sex predilection of HCV infection.
It was established that blood transfusion was a major risk for HCV infection, and the risk increases with increase in the number of units of blood transfused. It was also established that haemodialysis was a significant risk factor for HCV infection and the risk increases with duration on haemodialysis.

We have found a significant relationship between degree of renal dysfunction and haematocrit in our study population. This study also shows that HCV infection in patients with CKD is associated with increased haematocrit compared with HCV negative controls.

This study showed that HCV infection is common in patients with CKD in Maiduguri, and that HCV infected individuals had relatively higher haematocrits than the non-infected controls. There is need for further studies to determine the pathophysiology of this association.