

## ABSTRACT

Patients with chronic kidney disease undergoing hemodialysis are usually co-morbid with hypertension that contributes to increased cardiovascular morbidity and mortality if not controlled. A number of factors are targeted as influencing agents to uncontrolled hypertension but adherence to treatment is counted as a major factor contributing to poor control of hypertension. In Kenya studies done among chronic kidney disease patients have found high uncontrolled rate of blood pressure in this population, a study done at Kenyatta national hospital found 84.4% uncontrolled blood pressure and another done in Nephrology clinics in Nairobi found uncontrolled rate of 64.7% and adherence rate of 31.8% to antihypertensive medication. There are no studies done neither in other parts of the country nor in private hospitals to compare with these studies. Therefore the current study investigated factors influencing adherence to antihypertensive medication regimen among hemodialysis patients attending Pandya Hospital in Mombasa. Specifically the study assessed patient's adherence to treatment; described the socio-demographic factors affecting patients adherence to antihypertensive medications; established the patient's knowledge about antihypertensive medications; and determined the patient's perception of antihypertensive medications. A cross-sectional study was conducted at the renal unit of Pandya Memorial Hospital amongst a sample size of 144 hypertensive patients aged 18 years and above, respondents were identified using simple random sampling. Data was collected using semi structured questionnaires. Data analysis using Chi square test was applied to establish significant relationships between the dependent variable (adherence) and independent variables (socio-demographic factors, knowledge, perception), logistic regression was used to predict independent variables that influence adherence, and results with  $p$  values  $\leq 0.05$  were considered statistically significant. Adherence was determined using Morisky's Medication Adherence Scale (MMAS-8). Overall, 83(57.6%) of the patients were found to be fully adherent to their antihypertensive medication. Factors that influenced adherence to antihypertensive medication were; age  $p = 0.23$  (OR=1.02, CI=0.98-1.07), female gender had better adherence than males  $p = 0.98$  (OR= 2.58, CI=1.09-6.16), patients with health insurance  $p = 0.92$  (OR=0.35, CI=0.15-0.84), knowledge of side effects of medication  $p = 0.58$  (OR=2.02, CI=0.44-9.27), perception of severity  $p = 0.69$  (OR=3.61, CI=1.02-12.78), perception of benefit  $p = 0.30$  (OR=3.22, CI=1.06-9.79), and perception of barriers  $p = 0.75$  (OR=0.23, CI= 0.08-0.64). The study showed male patients, older patients and patients with no health insurance were associated with adherence to antihypertensive medication to avert morbidities and mortalities healthcare workers should formulate interventions tailored towards scaling up adherence in those subgroups of hypertensive patients. Interventions to increase patient's knowledge on the medications and patient's perception on antihypertensive are critical aspects to ensure an improved adherence level thus controlling blood pressure levels and consequently reduce morbidities and mortalities associated with hypertension in patients with chronic kidney disease undergoing hemodialysis.