

## *Dialysis outcomes and practice patterns among chronic kidney disease patients receiving hemodialysis at a private dialysis centre in Nairobi, Kenya between May 2016 and July 2016*

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### Abstract

**Background:** Chronic Kidney Disease is a long-term condition caused by damage to both kidneys. It has become a major public health concern worldwide in the past decade and its prevalence is projected to rise in the coming years. Owing to its irreversible nature, renal transplantation has been proven to be the most effective renal replacement therapy. However, it is limited by its high cost and low availability of donor kidneys. Hemodialysis has therefore been adopted widely in Kenya as an alternative therapy for those with End Stage Renal Disease. This has led to an exponential increase in the number of dialysis units in Kenya over the past few years. This therefore raises a concern on the quality of hemodialysis delivered to patients around the country.

**Objective:** To determine dialysis outcomes and practice patterns for Chronic Kidney Disease patients receiving hemodialysis at a private centre in Nairobi, Kenya.

**Methodology:** This was a retrospective study. Records of 43 patients who received dialysis at the centre for more than six months were reviewed and the mid-year results for different parameters obtained.

**Results:** 62.8% were male, 51.2% were Africans with the rest being Asian. The mean age of the patients was 63 years ( $\pm 16$ ) 79.1% were married. 60.5% had both hypertension and diabetes. Arteriovenous Fistula (81.4%) and Tunneled catheter (18.6%) were the only routes used for vascular access. Majority of the patients (72.1%) received dialysis twice weekly. 93.0% and 97.7% were on iron and erythropoietin supplementation respectively. Most patients (39.53%) had hemoglobin of 10-10.99g/dl. 56.34% of the patients had Parathyroid hormone levels of 150 – 450pg/ml; 73.18% had calcium levels of 2.0 – 2.4mmol/L; 65% had phosphate levels of 1.0 – 1.8mmol/L

**Conclusion:** Majority of hemodialysis patients were males, aged above 60 years; Coexistence of diabetes and hypertension was the most common comorbidity among ESRD patients; Majority (67.44%) of the patients had hemoglobin level of 10-12g/dl.; 83% of patients achieved adequate dialysis based on the Urea Reduction Ratio.