DURATION OF TEMPORARY HEMODIALYSIS CATHETERS AMONG CHRONIC KIDNEY DISEASES PATIENTS ATTENDED AT SELECTED RENAL UNITS IN DAR ES SALAAM, TANZANIA

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ABSTRACT

Background: Most international bodies of nephrologists recommend that Arterio-Venous Fistula/Arterio-Venous Graft be the initial vascular access in hemodialysis for end stage chronic kidney disease with temporary hemodialysis catheter recommended mainly for emergency use in Acute Kidney Injury or while waiting for Arterio-Venous Fistula or Arterio-Venous Graft maturation. However, most of the renal units In Tanzania use temporary hemodialysis catheters as the initial vascular access in chronic kidney disease patient.

Objective: To assess the median duration of use and its associated clinical characteristics for temporary dialysis catheters among patients with chronic kidney disease on hemodialysis in Dar es Salaam, Tanzania between April-July 2019. Methods: a descriptive cross-sectional hospital based study conducted at selected renal units in Dar es Salaam involving Chronic Renal Disease (CKD) patients on hemodialysis services. A pre-designed clinical sheet was used as a main tool for data collection. Demographics, site of catheter insertion as well as complications after catheter insertion were the main queries. Data were recorded in Microsoft Excel file and then transferred to Epi info-7 statistical software for analysis. A verbal informed consent was sought from each participant prior to Inclusion into the study.

Results: The study followed up 194 CKD patients. The median age was 55.5 (IQR: 43-64) years with a male: female=2.1: l. All except one (n=193, 99.5%) patients had temporary hemodialysis catheters. Median duration of temporary hemodialysis catheters was 60 (IQR: 30-90) days. The prevalence of all complications was 48.97% with infection, thrombosis and bleeding as the commonest complications reported. Delays within the dialysis units was the commonest reported reason (n=43, 41%) associated with delays in creation of permanent vascular access among study participants. Right internal jugular vein was the commonest (n=175,91.2%) anatomic site for insertion of temporary hemodialysis catheters observed.

Conclusion: Almost all CKD patients attended in Dar es Salaam facilities had temporary hemodialysis catheters as initial vascular access. Most CKD patients stay with temporary hemodialysis catheters for a longer period than standard recommended time. Nearly half of all CKD patients In Dar es Salaam facilities suffered complications associated with

hemodialysis. Recommendations: Consideration should be made to invest in human resources for health in view of the burden of CKD patients in need of hemodialysis services. Intervention studies on efficacy of arterio venous fistula and arterio-venous graft placement are needed in view of the burden of complications associated with prolonged use of temporary hemodialysis catheter seen in this study population.