Factors Associated with Hemodialysis Adequacy among ESRD Patients in Rwanda

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Introduction: Hemodialysis substitutes the natural work of the kidney and helps ESRD patients to increase quantity and quality of life. Inadequate dialysis treatment leading to poor patient survival, increase cost and mortality rate has been observed among ESRD patients in Rwanda.

Aim of the Study: The aim of this study was to assess the factors associated with hemodialysis adequacy in ESRD patients in Rwanda.

Methodology: A descriptive cross-sectional design was conducted. A sample size of 66 hemodialysis patients was selected using purposive sampling strategy. An interview scheduled guide was used to collect data. Dialysis adequacy was calculated using kt/v Daugirdas & Schneditz formula. Descriptive and inferential statistics were used to analyze the data.

Results: Most participants (62%) had optimal hemodialysis adequacy of equal or greater than 1.2 kt/v, 19(29%) had near optimal hemodialysis adequacy (0.8 - 1.2 kt/v) whilst 6 (9%) had less than optimal hemodialysis adequacy (kt/v <0.8). Factors associated with hemodialysis adequacy were name of hospital (p = .010), age (p = .007), BMI (p =.004), blood pressure level (p = .018), mode of transport (p = 0.032) and type of drinking water (p = .030).

Conclusions: The level of hemodialysis adequacy was low among ESRD patients with associated factors predominantly demographic characteristics. There is need for formulation of the interventions that are tailored to personal attributes of ESRD patients to promote hemodialysis adequacy. Moreover, further research inquiry to establish other factors associated with hemodialysis adequacy.

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