The Shortage of Expert Nephrology Nurses and Patient Quality Care Indicators: A Quantitative Cross-Sectional Study

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This quantitative cross-sectional study examined the problem regarding the shortage of expert nephrology nurses and potential consequences or outcomes on patient quality care indicators in the dialysis setting. The research study collected demographic data by survey method from 34 Ohio chronic dialysis units on nursing tenure, nephrology experience, education level, certification status and age. The corresponding Centers for Medicare and Medicaid Services Quality Incentive Program (CMS QIP) aggregate patient data for each unit was obtained for comparison. Chronic dialysis units with higher level of nursing experience and education were compared to chronic dialysis units with less experienced and educated registered nursing staff. A simple linear regression analysis was conducted on the patient quality care indicators and was used to predict outcomes on the shortage of nursing experts on the collected convenience sample. The analyzed data research has three areas of statistical significance; hemoglobin level less than 10.2 g/dl, Kt/V of 1.2 or greater, and facility mortality rate. Units with higher levels of experience had fewer hemodialysis patients with lower percentage of anemia and a higher percentage of patients meeting dialysis adequacy levels. Units with higher level of education had a lower facility mortality rate. This study noted the need to measure the level of experience and education of the expert nephrology and how those aspects affect patient quality care indicators for the renal patient.