

Abstract

Inadequate knowledge of intravenous fluid therapy among health care workers is a leading cause of errors resulting in increased morbidity and mortality in hospitalized patients. Because nurses are the cornerstone of infusion therapy, their knowledge of this subject is critical. This study assessed nurses' knowledge of intravenous fluid therapy and examined relationships between their knowledge and the nurses' demographic and training characteristics. Methods A cross-sectional survey of 52 staff nurses working in medical and surgical wards was carried out at a County teaching hospital in Kenya. A validated 10-item survey questionnaire was used to measure nurses' knowledge of basic aspects of intravenous fluids, including classification, ionic composition, indications, administration, monitoring, and related complications. The data were entered and analyzed by SPSS version 21. Results Overall, the mean knowledge score on intravenous fluid therapy among nurses was 57.4% (SD = ± 28.55), depicting moderately adequate knowledge. Adequate knowledge regarding intravenous fluid therapy was present in only 12% of the nurses, whereas 23% had inadequate knowledge. Knowledge deficiencies were highest regarding the ionic composition of intravenous fluids. A positive correlation was observed between nurses' intravenous fluid therapy knowledge and previous further training on intravenous fluids ($p < 0.001$), level of education ($p < 0.001$), and ward ($p = 0.03$). Conclusion Nurses' knowledge of intravenous fluid therapy is moderately adequate. Continuous education and training of nurses on IV fluid therapy should be conducted regularly to improve their knowledge and consequently, the quality of patient care. Further research involving direct observation of nurses during intravenous fluid therapy is needed for validation of competency.