Abstract:

Purpose: To explore the level of RNs knowledge of managing vascular access devices (VADs)-peripherally inserted central catheters (PICCs) and midline catheters, and to determine if nurse characteristics are associated with knowledge level.

Background: Education of nursing staff about VAD management can improve quality of care and assure standards of practice are maintained.

Review of Literature: Minimal research is available on nurses’ knowledge of managing VAD catheters.

Methods: Nurses working on a colo-rectal unit who frequently manage VADs in a large tertiary-care medical center voluntarily completed one anonymous, validated, 10-item survey of VAD management themes. Analysis included descriptive and correlational statistics.

Results: Of 36 nurses, (97% female, 53% full time), mean VAD knowledge score was 8.1 ± 1.4 (81% mean sum score). Perceived general level of comfort in flushing PICCs (r=.35, P=0.04), using Alteplase with PICCs (r=.36, P=0.03) and changing dressings (r=.38; P=0.03) were associated with higher knowledge scores. Of 10 items, 4 resulted in scores below 80%: how fast a Midline can be used after insertion, first step in managing a PICC upon admission, steps in dealing with a withdrawal occlusion, and steps post interventional radiology PICC insertion; however, nurse characteristics were not associated with scores above or below 80%.

Conclusions: Nurses working in the colo-rectal unit that frequently treat patients with VADs were generally knowledgeable about their management. Perceived nurse comfort in flushing a PICC, using Alteplase, and changing dressings were associated with higher knowledge.

Implications for Practice: Nurses’ impressions of comfort with VAD management should be regularly assessed by nurse managers to assure optimal knowledge.