

Abstract:

BACKGROUND: In home infusions via tunneled catheter/peripherally inserted central catheter (TC/PICC) the risk of catheter-related bloodstream infection (CRBSI) and complications contribute to rehospitalization and costs. It is unknown if voiceover interactive PowerPoint (VOIPP) via digital video disc education improves clinical outcomes.

MATERIALS AND METHODS: In a quaternary care medical center and using a randomized, controlled, 2-group design, hospitalized patients with TC/PICC received usual care education or usual care (UC) plus VOIPP education prehospital discharge. A multiple-choice 6-item knowledge questionnaire was administered preeducation, immediately posteducation, and 7-10 days postdischarge. At 90 days, patients were assessed for CRBSI incidence rates per 1000 catheter-days, rehospitalization, CRBSI-related hospitalization, non-CRBSI complications and patient calls to the home parenteral nutrition (HPN) clinicians. Analysis of variance, Pearson χ^2 , and Kruskal-Wallis test were used to compare results between groups.

RESULTS: Of 51 patients (UC, n = 27; UC+VOIPP, n = 24), mean \pm SD age was 46.3 ± 14.3 years, 68.6% were female, HPN duration was 2.2 ± 1.01 months, and time to postdischarge test completion was 11.5 ± 5.2 days. There were no baseline differences between groups. Between-group knowledge and changes in knowledge were similar at preeducation, immediate posteducation, and postdischarge (P = .88, 0.30, and 0.37, respectively). There were no differences in CRBSI incidence, rehospitalization, CRBSI-related rehospitalization rates, and non-CRBSI complications between groups. The UC+VOIPP group had more patient calls than did the UC group (21.8 vs 7.7 calls/1000 catheter-days, P < .001).

CONCLUSION: Recorded education led to more patient calls to the HPN clinicians; however, there were no differences between groups in other outcomes.

Reference:

Emery, D., Pearson, A., Lopez, R., Hamilton, C. and Albert, N.M. (2015) Voiceover Interactive PowerPoint Catheter Care Education for Home Parenteral Nutrition. *Nutrition in Clinical Practice*. May 15th. (epub ahead of print).