Assessing health literacy competencies: A randomized pilot comparing two teaching approaches at the BSN level

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INTRODUCTION

- Patients with limited literacy have poorer health outcomes, higher emergency room use & hospitalization rates and higher illness rates than those with adequate literacy (Berkmann et al., 2011).
- Universal Health Literacy Precautions approach recommended using evidence-based communication practices with all patients, regardless of literacy level (DHHS-ODPHP, 2010)
- Nurses should be prepared during their education to intervene with patients at all literacy levels to promote patient-centered collaborations (Coleman et al. 2012; Zarcadoolas, Pleasant & Greer, 2006)

AIMS, PARTICIPANTS, STUDY FLOW

Two phase, two group experimental pilot study aiming to:
- Compare theoretical HL teaching strategies
  - Functional: Pt. & material literacy screening, Written material simplification
  - Multidimensional (MDM): Pt. preferences, Plain talk, Active listening, Teach Back
- Create HL competencies tool
- Evaluate tool reliability and validity trends with expert & stakeholder feedback, ratings and instrument validity comparisons
- 9 Participants recruited after IRB approval, Systematic randomization to 2 groups
  - 3 recent BSN graduates, 6 nursing faculty
  - 22.8% Black/African-American, 77.2% White; all female
- Work experience: 0 – 45 years
- Nursing degrees: BSN to DSN/EdD

METHODS

- Pre-intervention HL experiences: Health Literacy Experiences Survey (HLE-S; Cormier & Kotrlik, 2009); 9 Likert scaled item (1-4): rarely = 1 to always = 4
- Pre-and post-intervention HL knowledge levels: Health Literacy Knowledge Survey (HLK-S; Cormier & Kotrlik, 2009); 29 multiple choice items: % correct (0 – 100)
- Pre-and post-intervention Communication ratings Kalamazoo Essential Elements Communication Competencies-Adapted (KEECC-A; Rider & Nawotniak, 2010); 7 Likert-scaled items (1-5): poor=1 to excellent=5
- Pre-and post-intervention HL related behavior ratings: Health Literacy Patient-Nurse Interaction Competencies Evaluation (HLP-NICE), 20 Likert-scaled items (0 – 4); 0 = not observed to 4 = excellent+ N/A

RESULTS

- Participant recall of past HL Experiences: pt. literacy screening, material evaluations or teach back use occurred “rarely” to “sometimes” (M=1.889, 1.44 – 2.67) with no association noted between HL experiences & HL knowledge gains (r=.072, p=.427)
- HL Knowledge did not significantly change (W SR, p= .312). HL Knowledge incr. for 5 of the 9 participants (55.56%). MDM grp knowledge incr. more than Functional (U=2,000, p=.032)
- Communication and HL competencies incr. for all participants (W SR, p= .008). No sig. differences were noted between HL-related competences of both grps (U=6,000, p=.183), but Functional grp did incr more in communication competencies (U=.500, p=0.016).

CONCLUSIONS

- Recall of HL-related clinical experiences is similar to past reports (Cormier & Kotrlik, 2009) suggesting inconsistent and limited use of HL evidence in clinical practice
- HL-related behaviors can be improved short-term without over-focusing on HL knowledge gains
- Strengths: Experimental design, innovative & diverse teaching strategies (online module, Assess-Compare-Teach-Survey framework, standardized patients at non-medical center academic site)
- Limitations: Restricted generalizability due to small size and homogeneous sample

Evaluating HL in nurse clinical practice regardless of literacy level (DHHS

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REFERENCES