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

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INTRODUCTION

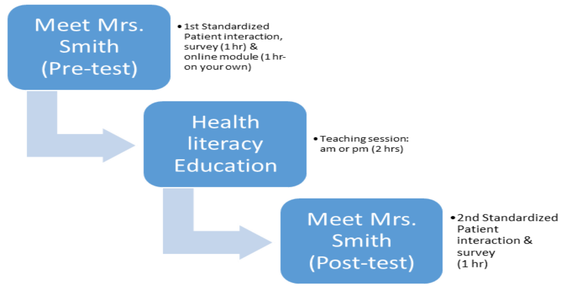
- Patients with limited literacy have poorer health outcomes, higher emergency room use & hospitalization rates and higher illness rates than those with adequate literacy (Berkman et al., 2011).
- **Universal Health Literacy Precautions** approach recommended using evidence-based communication practices 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: HL 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_s -,072, p = .427)
- HL **Knowledge** did not significantly change (WSR, 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 (WSR, 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
- Educating nurses in HL competencies is feasible, cost effective and timely, with ongoing research needed to implement Universal Health Literacy Precautions (USDHHS- ODPHP, 2010) recommendations.

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