

**Title:**

Assessing Health Literacy Competencies: A Randomized Pilot Comparing Two Teaching Approaches at BSN Level

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**Session Title:**

Poster Presentations

**Slot (superslotted):**

PST: Friday, April 8, 2016: 10:00 AM-10:45 AM

**Slot (superslotted):**

PST: Friday, April 8, 2016: 12:00 PM-1:15 PM

**Slot (superslotted):**

PST: Friday, April 8, 2016: 2:30 PM-3:15 PM

**Slot (superslotted):**

PST: Friday, April 8, 2016: 6:00 PM-7:00 PM

**Slot (superslotted):**

PST: Saturday, April 9, 2016: 7:30 AM-8:30 AM

**Slot (superslotted):**

PST: Saturday, April 9, 2016: 10:00 AM-10:45 AM

**Slot (superslotted):**

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**Keywords:**

ACTS, Health Literacy and Universal Health Literacy Precautions

**References:**

Coleman, C., Hudson, S., & Maine, L.L. (2013). Health literacy practices and educational competencies for health professionals: A consensus study. *Journal of Health Communication: International Perspectives*. 18: suppl 1: 81 – 102. DOI: 10.1080/10810730.2013.839538  
Cornett, S. (2009) "Assessing and Addressing Health Literacy" *OJIN: The Online Journal of Issues in Nursing*. 14:3. Manuscript 2. DOI: 10.3912/OJIN.Vol14No03Man02  
U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. [DHHS, ODPHP]. (2010). National action plan to improve health literacy Washington, DC: Author.

**Abstract Summary:**

Health literacy (HL) competencies assessments were piloted with nine participants randomly assigned to multidimensional or functional literacy cohorts. Online HL knowledge was evaluated by HL- Knowledge Survey. Standardized patients rated pre- and post-teaching interventions with KEECC-A and HLP-NICE instruments during recorded interactions. Recruitment and technology issues factored into intervention feasibility.

**Learning Activity:**

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
Define health literacy and identify the significance of health literacy to patients, health care providers and the health care system	1a. Identify percentage of Americans affected by limited literacy and 2 effects of literacy on health outcomes 1b. Discuss 2 common misperceptions regarding patient literacy levels 1c. Summarize 2 factors that influence

	provider communication ineffectiveness within patient interactions
Discuss 3 teaching strategies to incorporate health literacy knowledge and skills in nursing course and clinical experiences	2a. Summarize correct application of patient learning preference assessment, active listening, Teach 3 Teach-back and Ask Me 3 and open-ended questions in forming a complete communication loop. 2b. Appraise the pros and cons of working with standardized patients, technology-based teaching formats and reflection in the development of health literacy competencies.

### Abstract Text:

Patients with limited health literacy are more likely to have poorer health outcomes, higher emergency room use and hospitalization rates, and greater morbidity and mortality rates than those with adequate literacy levels (Berkman et al., 2011). The risks to health and well-being, the influences on morbidity and mortality markers and economic impact for patients, communities and health systems argue for robust preparation of health providers, including nurses, in evidence-based health literacy competencies. These competencies include promoting shame-free and culturally-sensitive environments, incorporating plain language written and verbal guidelines and consistently verifying patient understanding through teach back techniques as part of a Universal Health Literacy Precautions approach to be used throughout all levels of the health care system (Berkman et al., 2011). The National Health Literacy Action Plan (DHHS/ODPHP, 2010) calls for all health providers to learn and develop these health literacy competencies to promote safe and effective patient interactions.

Health literacy has been defined as “...the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make health decisions” (Nielsen-Bohlman, Panzer, & Kindig, 2004, p. 31-32). This definition has been used to guide past health literacy research, but may not account for the use of health information outside of formal health care settings, or fully explain how people use this knowledge to reach informed decisions or apply this knowledge to promote their health and well-being.

Early health literacy research in the US emphasized patient literacy screenings and intervening for those with low or limited literacy levels. The majority of interventions used in this functional approach focused on written health literacy measures and patient abilities to read text. This approach is the one most commonly used in the US (Barry et al., 2013), yet neglects patient comprehension and the provider's contribution to health-related interactions and explanations. Sheridan and colleagues (2011) systematic review of 38 health literacy interventional studies suggested that isolated or single focused literacy approaches were less effective in ameliorating the effects of limited health literacy when compared to more intensive and multifaceted research strategies.

An alternative approach, multidimensional health literacy, includes patient competencies beyond text literacy, including participation in verbal interactions, cultural beliefs and ways of seeking understanding (Shaw et al., 2012). Incorporating multidimensional health literacy competencies, however, may require the development of health literacy competencies beyond text literacy by providers and institutions (Brach et al., 2012). A recent consensus study proposed health literacy competencies and health literacy-related practices for health professionals (Coleman et al., 2013), which are potentially useful for evaluation of differing theoretical and pedagogical strategies for evidence-based nursing education practice.

Nurses and other allied health professionals begin professional practice after completing undergraduate educational studies, and may receive only minimal health literacy exposure throughout their curriculum,

course content or clinical assignments (Coleman, 2011; Coleman et al., 2013, Cornett, 2010). Health literacy definitions and measurement are of relatively recent origin, which creates additional barriers reducing the quantity and quality of health literacy evidence integrated in provider education and practice. Reaching consensus concerning the need for additional health literacy content in nursing education may be challenging given competing curricular priorities (Coleman, 2011) and nursing curriculum demands, course content and external pressures regarding NCLEX testing (Forbes and Hickey, 2009).

Nursing education research has focused more on traditional functional literacy skills such as assessing nurse health literacy knowledge levels (Cormier & Kotrlík, 2009; Jukkala, Deupree & Graham, 2008; McCleary-Jones, 2012; Scheckel, Emery & Nosek, 2010), evaluating written materials (Shieh & Hosei, 2008) or conducting patient health literacy screenings (Sand-Jecklin et al., 2010). The majority of nursing education research used lower level descriptive designs such as surveys (Cormier & Kotrlík, 2009; Jukkala et al., 2008) or single site case studies (McCleary-Jones, 2012; Sand-Jecklin et al., 2010, Scheckel et al., 2010; Shieh & Hosei, 2008, Shieh et al. 2013, Weekes & Wyatt, 2013). Short-term student knowledge gains occurred after brief learning interventions (McCleary-Jones, 2012; Sand-Jecklin et al., 2010; Shieh & Hosei, 2008, Weekes & Wyatt, 2013) but sustained learning retention or direct observation of health literacy practices in patient-student interactions was not evaluated. Factors affecting reported outcomes include limited reliability and absence of validity testing (Jukkala et al., 2009; McCleary-Jones, 2012; Sand-Jecklin et al., 2010; Shieh & Hosei, 2008), researcher selection bias (Scheckel et al., 2010) and an overdependence on self-reporting without corroboration from additional sources (Cormier & Kotrlík, 2009; Scheckel et al., 2010, Shieh et al., 2013, Zanchetta et al., 2013). These previous studies were limited through lack of an identified theoretical frameworks, tests of long-term knowledge retention or evaluations of the impact of student learning on observed nurse-patient outcomes. This pilot study of health literacy in nursing education was one of the first to assess the effects of differing health literacy approaches on the quantity and quality of health literacy practices directly observed in nurse-patient interactions.

After consent was obtained, participants completed demographic information and both sections of the HL-Knowledge and Experiences Survey or HL-KES (Cormier & Kotrlík, 2009). The use of the HL-KES in this pilot study provided a reliable and validated benchmark for cognitive knowledge changes, and allowed further exploration of the effects of health literacy knowledge in the development of health literacy competencies. Participants were then randomly assigned to their cohort, and recorded in a semi-structured standardized patient (SP) interaction using a congestive heart failure simulation activity at the nursing clinical lab. The pre- and post-intervention interaction were scored by the SP's using the KEECC-A medical communication and HLP-NICE observational checklists. The validated KEECC-A (Rider & Nawotniak, 2010) provided a comparison for communication competency changes. The researcher-created HLP-NICE observational checklist added further insights into the impact of targeted health literacy-related behaviors in nursing communication and health literacy competencies.

Health literacy knowledge was delivered using an online health literacy module based on an interactive unfolding case study. The face-to-face teaching interactions incorporated HL knowledge from the case study, and involved practice of health literacy skills and reflective learning to promote the development of evidence-based health literacy competencies. After completing the online module and their specific instructional sessions, both cohorts completed the post-intervention interaction and repeated the HL-Knowledge section of the HL-KES. These same strategies, rating instruments and core content could be adapted for use at different nursing levels and with post-licensure nursing, allied health and medical continuing educational programs to hone the health literacy competencies of practicing health professionals.

Concerns exist about current nursing educational preparation to effectively develop outcome-based competencies for increasingly complex and diverse health care environments (Benner et al, 2010). Patients need understandable and actionable health information if they are to follow health instructions, use health resources effectively, avoid preventable safety errors and reduce costly readmissions. Incorporating Universal Health Literacy Precautions successfully will take providers who are educated in

evidence-based multifaceted health literacy strategies and are sensitive to life contexts beyond formal health care environments. This study addressed some of these concerns through use of a more robust research design and innovative instructional strategies to prepare nurses to consistently perform HL competencies. The research also supported The National Health Literacy Action Plan goals for health professional education through evaluations of a standardized instrument designed to benchmark core HL competencies (US DHHS, ODHD, 2010). These same strategies and core content could be adapted for use at different nursing levels and with post-licensure nursing, allied health and medical continuing educational programs to hone the health literacy competencies of practicing health professionals.