Health Literacy Education for Undergraduate Health Professions Students: A Call to Action

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The responsibility for producing safe and competent health care professionals rests with educators who periodically evaluate and modify curricula to meet program outcomes (Atcherson, Zraick & Hadden, 2017; Coleman, Peterson-Perry, & Bumsted, 2016; Kennard, 2016; Mosley & Taylor, 2017; Toronto & Weatherford, 2015). The association between client safety and effective communication is increasingly recognized in research (Wolf & Bailey, 2009). Communication strategies used to help clients understand and follow health teachings are fundamental to health literacy (HL) education (Agency for Healthcare Research and Quality, 2017). Recently, more health professions educators are integrating necessary HL concepts and evaluating the effectiveness of curricular efforts (Massey et al., 2017). Despite increasing integration of HL concepts into the curricula, teaching strategies and evaluation efforts vary greatly, in part due to the heterogeneity encompassed by the term "health professions education." In the United States, the education continuum spans from the undergraduate (2-year and 4-year college degrees and pre-professional education; Campus Explorer, 2018) to the postgraduate or professional degrees of medicine, pharmacy, dentistry, and others. Because we teach in a 4-year nursing program, we use the

term "undergraduate" to describe students who have not yet completed their baccalaureate degrees.

We realized that our nursing curriculum only tangentially addresses HL via education on best communication strategies, cultural influences on client education, and ways to determine how clients understand discharge teaching. Our desire to integrate HL concepts throughout our undergraduate program informed our search for, and perspective on, a core HL curriculum to adopt.

Scott (2016) examined the influences of accreditation, governmental, and professional standards on the current state of baccalaureate HL curricula in the US and summarized it as follows:

Because there are no guidelines or standards for teaching students about health literacy, nursing programs must decide for themselves what content to cover, how to evaluate student learning, and the number of hours devoted to the topic of health literacy (p. 157).

We contend that more standardization is needed to address this important client-safety issue. We direct this "call to action" to those teaching at the undergraduate level. We advocate for the adoption of a core HL curriculum and the standardization of evaluation criteria. These criteria can then

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Disclosure: The authors have no relevant financial relationships to disclose. Received: January 25, 2018; Accepted: May 8, 2018 doi:10.3928/24748307-20180726-01

TABLE 1
Agreement of Group 1 Health Literacy Practices Among Expert Participants

Mean Rank Order	Group 1 Health Literacy Practice	Number (%) of Participants ($n = 25$) Ranking Item ≥ 7 on Importance
1	Routinely uses a "Teach Back" or "show me" technique to check for understanding and correct misunderstandings in a variety of health care settings, including during the informed consent process	16 (64)
2	Consistently avoids using medical "jargon" in oral and written communication with patients, and defines unavoidable jargon in lay terms	15 (60)
3	Consistently elicits questions from patients through a "patient-centered" approach (e.g., "what questions do you have?" rather than "do you have any questions?")	9 (36)
4	Consistently uses a "universal precautions" approach to oral and written communication with patients	14 (56)
5	Routinely recommends the use of professional medical interpreter services for patients whose preferred language is other than English	12 (48)
6	Consistently negotiates a mutual agenda with patients at the outset of encounters	12 (48)
7	Routinely emphasizes one to three "need-to-know" or "need-to-do" concepts during a given patient encounter	10 (40)
8	Consistently elicits the full list of patient concerns at the outset of encounters	10 (40)

Note. Reproduced from "Prioritized health literacy and clear communication practices for health care professionals," by C. Coleman, S. Hudson, and B. Pederson, 2017, HLRP: Health Literacy Research and Practice, 1(3), p. e96. Copyright 2017 Coleman, Hudson, Pederson; licensee SLACK Incorporated.

guide educators in evaluating curricular strategies as evidenced by student achievement of target behaviors.

CURRENT EVIDENCE

A systematic review of HL education in the health professions (Saunders, Palesy, & Lewis, 2018) summarized the quality of 28 studies that reported evaluations of HL curricular implementation. Studies originated from Australia, Ireland, and the US. These authors reported that the majority of studies "targeted undergraduate students (86%, n = 24)" with 17% (n = 5) targeting nursing and nutrition/dietetic students. Saunders et al. (2018) concluded that the field of health professions education needed greater clarity regarding a core HL curriculum and high-impact teaching strategies.

An integrative review of HL in the curriculum by Toronto and Weatherford (2015) usefully summarized published US studies, yet the authors did not separate the knowledge, skills, and attitudes expected of undergraduate students from those expected of postgraduate students. These authors determined that HL is being integrated into many health professions curricula but more research is needed to determine the most effective teaching approach. They concluded that the research on curricular strategy effectiveness is nascent, and future endeavors should focus on using reliable and valid assessment tools.

Specific to undergraduate nursing HL education, McCleary-Jones (2016) reviewed original research on nurs-

ing student HL knowledge and the impact of HL curricular inclusion. McCleary-Jones (2016) wrote that her review "revealed limited and inconsistent health literacy content in nursing curricula" (p. 96).

DISCUSSION

After reviewing the literature, we concluded that no core HL curriculum exists for the undergraduate-nursing level. Also absent from the literature is a standardized set of evaluation criteria for use with undergraduate HL education.

The given state of HL undergraduate education led us to examine the work done by postgraduate health professions educators. The ongoing work conducted by Coleman, Hudson, and Maine (2013) and Coleman, Hudson, and Peterson (2017) exemplifies a methodological approach to the topic of HL curricular design and evaluation at the postgraduate and continuing-education level. Coleman et al. (2013) published a consensus list of HL practices and educational competencies useful to all health professions educators. They convened an expert panel and charged the panel with ranking 62 HL competency and 32 practice items. One potential limitation to the adoption of this list for undergraduate education is the composition of professionals participating on the expert panel. The authors never specified how many on that panel taught at the undergraduate level. Coleman et al. (2013) concluded that, because most of the available literature focuses specifically on professions in the field of medicine, "more work is needed from other disciplines in health care" (pp. 98-99).

Coleman et al. (2017) further developed their ranking of the 32 practices by prioritizing them using a consensus Q-sort method. Their study resulted in eight top-priority practices. As their eight priority practices (**Table 1**) were intended for all health care professionals, we believe their list provides a framework for undergraduate curricular design and evaluation.

A POSSIBLE SOLUTION

We advocate that health professions educators use the eight priority practices developed by Coleman et al. (2017) as the core HL curriculum for undergraduates. Adopting this discrete list of HL practices allows educators to concentrate on the work of integrating the target behaviors into the curriculum and developing evaluation tools.

The other 24 practices as prioritized by Coleman et al. (2017) may be selected depending on the specific health professions discipline and client situation. Coleman et al. (2013) suggested health professions educators focus their HL teaching on the areas most pertinent to their discipline. For example, nurses new to their discipline would be expected to use a "universal precautions" approach when orally communicating (**Table 1**; mean rank order 4) but not expected to write discharge instructions at a 5th grade level (mean rank order 28; Coleman et al., 2017). Just as this example is specific to nursing, each discipline should identify and prioritize those other practices mentioned in the publication by Coleman et al. (2017).

Once these practices by Coleman et al. (2017) are adopted as core HL curriculum, we advocate standardizing how best to measure student achievement. In education, verbs such as uses, avoids, elicits, and recommends require a predetermined threshold when measured. For example, in the fourth mean-rank-ordered practice (**Table 1**), the phrase "consistently uses" might indicate a behavior observed in anywhere from 51% to 100% of encounters. If the threshold or level of proficiency is not specified, an educator cannot objectively and accurately evaluate the student's skill. Additionally, standardization allows for reliable and valid research comparisons "of the impact of health literacy training" (Saunders et al., 2018, p.15).

SUMMARY

In closing, it is our perspective that using prioritization of HL practices by Coleman et al. (2017) gives undergraduate educators a core HL curriculum. If educators adopt these eight priority practices as the curricular student-learning

outcomes, they can then develop teaching approaches, determine reliable evaluation of student achievement, and finally standardize the evaluation of HL target behaviors. Educators new to the role of HL curricular design may find the prioritization work by Coleman et al. (2017) supportive as they seek administrative help to integrate HL in their undergraduate health professions curriculum.

REFERENCES

- Agency for Healthcare Research and Quality. (2017). AHRQ health literacy universal precautions toolkit. Retrieved from http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/tools/literacy-toolkit/index.html
- Atcherson, S. R., Zraick, R. I., & Hadden, K. (2017). A need for health literacy curriculum: Knowledge of health literacy among US audiologists and speech-language pathologists in Arkansas. *Education* for Health, 26(2), 85-88. doi:10.4103/1357-6283.120699
- Campus Explorer. (2018). What are pre-professional majors? Retrieved from https://www.campusexplorer.com/college-advice-tips/2510D7FF/What-are-Pre-Professional-Majors/
- Coleman, C. A., Hudson, S., & Maine, L. L. (2013). Health literacy practices and educational competencies for health professions: A consensus study. *Journal of Health Communication*, 18, 82-102. doi:10.1080/10810730.2013.829538
- Coleman, C., Hudson, S., & Pederson, B. (2017). Prioritized health literacy and clear communication practices for health care professionals. HLRP: Health Literacy Research and Practice, 1(3), e90-e99. doi:10.3928/24748307-20170503-01
- Coleman, C. A., Peterson-Perry, S., & Bumsted, T. (2016). Long-term effects of a health literacy curriculum for medical students. Family Medicine, 48(1), 49-53.
- Kennard, D. K. (2016). Health literacy concepts in nursing education. Nursing Education Perspectives, 37(2), 118-119. doi:10.5480/14-1350
- Massey, P. M., Kim, M.C., Dalrymple, P. W., Rogers, M. L., Hawthorne, K. H., & Manganello, J. A. (2017). Visualizing patterns and trends of 25 years of published health literacy research. HLRP: Health Literacy Research and Practice, 1(4), e182-e191. doi:10.3928/24748307-20170829-01
- McCleary-Jones, V. (2016). A systematic review of the literature on health literacy in nursing education. *Nurse Educator*, 41(2), 93-97. doi:10.1097/NNE.0000000000000204.
- Mosley, C. M., & Taylor, B. J. (2017). Integration of health literacy content into nursing curriculum utilizing the health literacy expanded model. *Teaching and Learning in Nursing*, 12, 109-116. doi:10.1016/j. teln.2016.12.005
- Saunders, C., Palesy, D., & Lewis, J. (2018). Systematic review and conceptual framework for health literacy training in health professions education. *Health Professions Education*. Advance online publication. doi:10.1016/j.hpe.2018.03.003
- Scott, S. A. (2016). Health literacy education in baccalaureate nursing programs in the United States. *Nursing Education Perspectives*, 37(3), 153-158.
- Toronto, C., & Weatherford, B. (2015). Health literacy education in health professions schools: An integrative review. *Journal of Nursing Education*, 64, 669-676. doi:10.3928/01484834-20151110-02
- Wolf, M. S., & Bailey, S. C. (2009). The role of health literacy in patient safety. Retrieved from Patient Safety Network website: https://psnet. ahrq.gov/perspectives/perspective/72/the-role-of-health-literacyin-patient-safety