

Impact of a Brief Health Literacy-Focused Communication Curriculum on Pre-Clinical Medical Student Communication Skills

Piper Cramer, Peter Vollbrecht, PhD; Laura Bauler, PhD

Department of Biomedical Sciences, Western Michigan University Homer Stryker M.D. School of Medicine, Kalamazoo, MI, USA

INTRODUCTION

- Over 1/3 of U.S. adults have basic or below basic health literacy¹
- Effects of limited health literacy
 - Difficulty navigating the U.S. healthcare system²
 - Worse health outcomes³
 - Increased health disparities⁴
- Impacts of health literacy-specific interventions show inconsistent benefit⁵
- Clear communication by providers has demonstrated patient care benefit
- Universal communication techniques
 - Plain language
 - Confirm patient understanding through “teach-back”
 - Encouraging questions from patients
- Prior health literacy-focused communications curriculum for internal medicine residents increased understanding and use of targeted communication skills in patient encounters⁶
 - Similar education is not common during pre-clinical training
- **Implementation of a health literacy-focused communication curriculum may improve students’ patient-centered communication skills in medical school and beyond**

METHODS

- Curricular workshop
 - Initial peer communication practice sessions, evaluated by partner
 - Students tasked with explaining a specific diagnosis to their partner
 - Intervention regarding health literacy and communication skills, including group practice
 - Second round of peer communication practice
- Survey responses after both peer-led practice sessions
 - Both pre- and post-intervention surveys: rubric evaluation and written feedback of peer, self evaluation (confidence, challenges)
 - Post-intervention survey: event feedback; 5-point Likert scale on understanding of health literacy, perceived event importance
- Quantitative and qualitative analysis of survey responses for evaluation of intervention effectiveness and student satisfaction

RESULTS

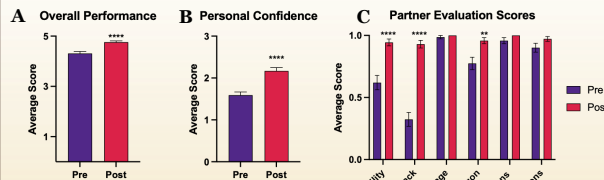
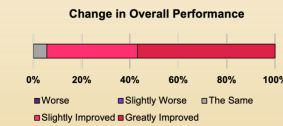


Figure 1: Paired t-test analysis pre- and post-intervention for (A) Partner-rated overall performance, (B) Self-reported communication confidence, and (C) Partner-evaluated performance on use of universal communication techniques.

Figure 2: Partner-rated change in overall performance in communication practice sessions after participating in the intervention.



Survey Responses to Questions Regarding Communications Content and Confidence

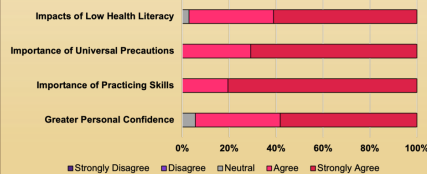


Figure 3: Student agreement with statements regarding their understanding of health literacy and communication, as well as their personal confidence after participating in the intervention.

Themes of Feedback About the Intervention

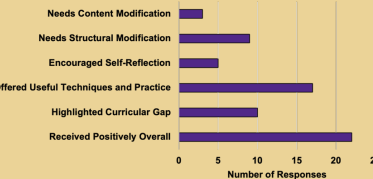


Figure 4: Qualitative analysis of feedback provided by students after the intervention.

CONCLUSION

- Effects of this intervention:
 - Improved pre-clinical patient-centered communication skills
 - Increased self-reported confidence
 - Highlighted a need for increased hands-on education relating to health literacy-focused communication
- Integration of health literacy-focused communication training is valuable, practical, and well-received by students
- Limitation: Long-term effects of the intervention were not assessed with this study design
- Future research should focus on evaluation of long-term impacts of the intervention as they relate to:
 - Health literacy knowledge
 - Use of universal communication skills
 - Attitudes toward the intervention and its importance through medical school, residency, and beyond
- **This intervention’s success at WMed should encourage others to introduce these concepts earlier and more frequently during medical training**

REFERENCES

1. Kutner, M et al. “The Health Literacy of America’s Adults: Results From the 2003 National Assessment of Adult Literacy (NCES 2006–483).” U.S. Department of Education. Washington, DC: National Center for Education Statistics (2006).
2. Berkman, Nancy D et al. “Low health literacy and health outcomes: an updated systematic review.” *Annals of internal medicine* vol. 155,2 (2011): 97-107. doi:10.7326/0003-4819-155-2-201107190-00005
3. Chesser, Amy K et al. “Health Literacy and Older Adults: A Systematic Review.” *Gerontology & geriatric medicine* vol. 2 2333721416630492. 15 Mar. 2016. doi:10.1177/2333721416630492
4. Schillinger, Dean. “Social Determinants, Health Literacy, and Disparities: Intersections and Controversies.” *Health literacy research and practice* vol. 5,3 (2021): e234-e243. doi:10.3928/24748307-20210712-01
5. Hersh, Lauren et al. “Health Literacy in Primary Care Practice.” *American family physician* vol. 92,2 (2015): 118-24.
6. Green, Jamie A et al. “Addressing health literacy through clear health communication: a training program for internal medicine residents.” *Patient education and counseling* vol. 95,1 (2014): 76-82. doi:10.1016/j.pec.2014.01.004