

RESULTS OF TRAINING ON DIGITAL HEALTH LITERACY FOR GENETIC COUNSELING TRAINING PROGRAMS

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BACKGROUND

The authors developed a pilot training for genetic counseling students outlining factors that affect patients' digital health literacy, including personal context, social determinants of health and the digital health landscape. The training consisted of a presentation, activities, and small group discussions, and described tools to improve students' communication skills and help their future patients improve their individual health literacy. The training highlighted eXamining Relevance of Articles for You (XRAY)*, a Facing Our Risk of Cancer Empowered (FORCE) program as a tool designed to help patients understand media reports about cancer research and discuss them with their healthcare team.

METHODS

Between January 21, 2021 and September 29, 2022 we conducted 15 separate pilot training workshops for 14 genetic counselor training programs. Each workshop ranged between 80 to 120 minutes depending on the program's schedule. A total of 191 students attended the workshops and 132 students completed evaluation surveys. Training program directors participated in interviews about their perceptions of the training.

RESULTS

Students' survey responses indicate that the training achieved its objectives and that students planned to apply what they had learned in practice, including using XRAY resources. Open-ended responses emphasized that students appreciated learning about the availability of tools that support critically analyzing media reports on breast cancer. Students also reported that experiential learning activities were valuable.

Question	Number who agreed or strongly agreed	%
The training provided new information that I will be able to use in practice.	126	95.5
The training provided a clear definition of digital health literacy.	129	97.7
The training helped me understand how social determinants of health may affect digital health literacy.	127	96.2
The training will help me better communicate with patients about their needs.	125	94.7
The training will help me better communicate with patients about options for their care.	117	88.6
The training helped me understand the challenges that patients face in evaluating health information in the media.	131	99.2
I plan to use the XRAY program to help patients understand health information in the media.	112	84.8
The training provided me with useful tools to help patients evaluate health information reported in the media.	129	97.7
The content was clear.	132	100.0
The presentation kept my attention.	122	92.4
The presentation met the stated objectives.	128	97.0

*The XRAY program can be found at: www.FacingOurRisk.org/XRAY.

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All training program directors said they would be interested in adopting the material presented into their curriculum, with one responding, "Absolutely, no question." Several instructors reported that their faculty did not have expertise on digital health literacy, and that the training would be a useful addition to their curricula.

Students and directors recommended retaining the content, flow and presentation approach, activities and discussions, appealing graphics, and emphasis on the practical implications of material presented. Suggestions for improving the training included: dividing the training into modules, minimizing potential for self-consciousness about making mistakes, providing clear explanations about how implementing recommended practices could improve health communication, offering descriptions of how students could apply the information in their future practice, and ensuring adequate time for discussion.

The image displays five example slides from a workshop. The first slide, 'Scientific report', shows a snippet from Nature about asparagine bioavailability and breast cancer metastasis. The second slide, 'Media report', shows a Global Business Today article titled 'Bunk this veggie: This green causes cancer cells to spread'. The third slide, 'XRAY summary and relevance scores', provides a summary of the study and includes a 'Clinical relevance score' and 'Strength of Science' metrics. The fourth slide, 'Health literacy affects access to care', defines personal and organizational health literacy. The fifth slide, 'Social determinants of health & digital health literacy', features a circular diagram of social determinants and the FORCE logo.

Example slides from workshop

"I found it interesting to discuss the impact of the social domains on health literacy with my peers as they offered perspectives that I would not have otherwise considered,"

"I really liked the brainstorming small group sessions, it kept things fresh and engaging,"

"What great resources FORCE and XRAY are. I will definitely share them with patients who might benefit from these resources."

Student quotes from survey

DISCUSSION

Results indicate that both students and faculty found training on digital health literacy to be informative, relevant, and engaging. Genetic counseling training programs could benefit from in-person or recorded training on this critical topic that may not be offered elsewhere in their curricula. In addition to learning information and skills related to digital health literacy, students and faculty agreed that XRAY is a useful tool for helping patients to understand media health reports.