Making health literacy real: adult literacy and medical students teach each other*

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INTRODUCTION

This paper reports a pilot project at Harvard Medical School (HMS) that taught medical students the importance of plain language communication by collaborating with adult literacy students. Classes provided students with patient-doctor communication experience and health information. After a lecture on health literacy and cross-cultural care, a librarian taught students where to find high-quality, easy-to-

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read, and non-English health information. Adult learners identified health topics of interest. Medical students then created presentations on these topics and received critical feedback from the adult students. HMS students improved their use of plain language communication and their understanding of health disparities. Everyone expressed a desire to learn more. The project demonstrated that health literacy competencies can be integrated into medical school instruction using a combination of didactic and experiential methods. Medical schools and their librarians are in a unique position to work with future providers to ameliorate the problem of low health literacy.

The profound consequences of poor health literacy have been well documented and indicate that vast amounts of health information are incomprehensible to millions of people [1–4]. People with low functional health literacy have more difficulty navigating the health care system and obtaining services. They are less likely to comprehend the written and oral information given to them by providers. They are also more likely to suffer higher health care costs and disproportionately have poorer health outcomes than those with high levels of health literacy. Older people, nonwhites, immigrants, and low-income people constitute a large segment of people with low health literacy [3]. Issues of culture, language, and learning are interrelated, and to be effective, health information must be provided in both culturally and linguistically appropriate formats to address the increasingly diverse multicultural and multilingual population [4]. The Liaison Committee on Medical Education of the American Association of Medical Colleges (AAMC), the American Medical Association (AMA), and the Institute of Medicine (IOM) all emphasize the need to address these issues in medical education [5–8]. While other medical education efforts focused on health literacy are described in the literature, their methodology relies on role-playing between medical students and faculty [8, 9]. To the authors’ knowledge, this class was different because it offered an opportunity to work with adult literacy students.

The creation and implementation of this educational opportunity by the coauthors, a community service program manager and a librarian, illustrates a novel pathway for medical librarians to share their knowledge of health literacy with both adult learners and medical students. Medical librarians are active in the health literacy movement, participating as both consumer health information specialists and educators for health care professionals. The Medical Library Association’s Health Information Literacy (HIL) web page—with links to projects, presentations, and information sources created by librarians—provides evidence of this involvement [10]. The Countway Library at HMS has hosted displays to raise awareness of health literacy issues both at the library and in the medical education building.

**METHODS**

**The partnership**

In 2007, the authors approached staff at First Literacy, a nonprofit agency that supports literacy efforts for adults in greater Boston who wish to improve their ability to communicate in English and obtain high school credentials. First Literacy’s mission is to open access to basic education for adults so they can achieve their goals as parents, workers, and community members. A partnership began with a combined goal of aiding both HMS students and adults with low health literacy, hereafter referred to as adult learners, in the quest for improved health literacy and communication skills. The first undertaking was an experiential education module. The organizers decided to embed it in an existing service-learning course, “Physician in Community (PIC).”

**The “Physician in Community” service learning course**

Since 2004, the overall goals of PIC have been to help students become community-responsive physicians by learning concepts and skills they can apply in practical settings, creating empathy and understanding for the community served, and providing opportunities for student self-reflection. The curriculum of this six-month course has typically included both skills-based learning (e.g., developing needs assessments and writing proposals) and concepts in community health such as diversity, cross-cultural communication, and social determinants of health and disease. About forty students attend this elective annually.

**The intervention**

In 2008, the partners developed a mutually beneficial pilot project with two goals: (1) to raise awareness among medical students of the need to improve health literacy and to use plain language when speaking with patients and (2) to improve the health literacy of participating adult learners. In addition, the organizers hoped the adult learners would both increase knowledge about the health topics they identified and gain a sense of accomplishment from the chance to critique future doctors.

First Literacy selected three adult education programs to participate. Students in these programs represented diverse communities in Boston, and the programs included students from both English for speakers of other languages (ESOL) and adult basic education (ABE) classes. First Literacy teachers identified adult learners in these programs willing to come to HMS. During class discussion, they asked students to select health topics based on the questions below. Teachers sent the most popular topics to the HMS organizers. In response to “What is the most important health question you would like a health professional to answer?”, adult learners in both groups identified cancer and its occurrence, treat-
ment, and inheritability as their most pressing concern. In a second tier, ESOL learners listed depression and nutrition, while for ABE students, living with diabetes and controlling high blood pressure were important. In response to ‘‘What has caused you problems with understanding health information?’’, both groups said that health professionals did not take the time to explain things fully. Both groups were frustrated with their ability to communicate their health problems. ESOL learners all had encountered interpreters who did not accurately translate their statements. ABE students were frustrated because they could not understand medical terms. When asked, ‘‘What medical issues do you and your family face?’’, the adult learners’ most common response was cancer, followed by high blood pressure, diabetes, depression, and mental illnesses. Other concerns mentioned were infant care, nutrition, fitness, and teen pregnancy.

Details of the classes

Two classes and a tutorial session combining both didactic and experiential components were planned and implemented. In the first class, a community-based physician discussed the theoretical foundations of cultural competence, interspersing clinical examples from her practice in an ethnically diverse community health center. Then the medical librarian presented background information on the importance of health literacy followed by a description of sources of authoritative patient information written either in an easy-to-read style or for speakers of other languages. A web page of Easy-to-Read & Health Literacy Information was created to support this class \( \text{https://www.countway.harvard.edu/easytoread/} \). An existing library web page provided sources of consumer health information in Spanish and other languages \( \text{https://www.countway.harvard.edu/multilingual/} \).

The thirty adult literacy students arrived with six of their teachers for the second, longer class. An HMS faculty expert in health literacy and medical interpretation expanded on the need for increased health literacy and showed segments of the AMA video, Health Literacy and Patient Safety: Help Patients Understand [11]. HMS students and faculty, adult learners, First Literacy staff, and ESOL/ABE teachers divided into eleven small groups of ten people each; one was led by the librarian, others by ten faculty tutors from the PIC course. At the end of the previous class, students had been assigned one of the pre-identified health topics and were asked to prepare a short presentation. During this session, three or four medical students delivered their plain language presentations to the adult learners, limiting their presentations to ten minutes each. Handouts were encouraged, using the recommended resources provided by the librarian in the previous class.

An informal dinner allowed for further interaction among all participants. Adult learners received certificates of appreciation and a small honorarium to acknowledge their contribution and compensate them for time away from work and family.

RESULTS

At the end of the small group sessions, a questionnaire with four open-ended queries was distributed to all participants asking:
1. The best part of this program was...
2. The one thing I think would improve this program in the future is...
3. The one thing I will take away from this program is...
4. Other comments or thoughts...

Ninety-two surveys were distributed, and 58 surveys (51%) were returned at the end of the second class. Eighteen of 30 adult learners responded and 40 of 45 medical students (Table 1). Adult learners rated learning about a health topic as their most important

| Themes | % of adult learners | % of medical students |
|--------|---------------------|-----------------------|
| Learned about a specific health topic | 44% | 3% |
| Learned about the importance of health literacy and the difficulty of speaking in plain language | 11% | 45% |
| Medical students can improve by: | | |
| ■ using basic words and body language | 44% | 5% |
| ■ using more examples | | |
| ■ making handouts | | |
| ■ using pictures | | |
| Learned how to improve physician/patient communication; related subtopics: | 44% | 88% |
| ■ interacting with adult learners | | |
| ■ practicing health communication | | |
| ■ practicing plain language | | |
| Improve the program by having more time for this activity | 16% | 17% |
| Improve the program by having fewer students or smaller groups working together | | 2% |
| Do this more; do it again and do it longer | 1% | |
| Allow more time to practice plain language; give medical students examples | 25% | |

* Different questions often produced similar responses, and some respondents did not answer all questions. The four questions were: (1) The best part of this program was... (2) The one thing I think would improve this program in the future is... (3) The one thing I will take away from this program is... (4) Other comments or thoughts... Fifty-eight of 92 surveys were returned, 18 from adult learners and 40 from medical school students.
outcome. Providing an opportunity for verbal feedback on the session might increase the response rate from adult learners. Medical students felt the most valuable outcomes were learning about the importance of health literacy and the difficulties of communicating in plain language. Different questions often produced similar responses, and some respondents did not answer all questions.

DISCUSSION

The enthusiastic responses from medical students, adult literacy students, and faculty from both the literacy program and medical school energized the organizers. Buoyed by this positive experience, HMS and First Literacy hope to teach an elective course for 2009. A syllabus has been developed for an elective that builds on the lessons learned. The ultimate goal is to integrate instruction and experience with health literacy issues across the medical school curriculum and to create an enduring community partnership with First Literacy. The organizers hope to improve the feedback and assessment process with the medical students by videotaping their presentations and giving adult learners more time to view them. This should allow the literacy students to more easily move past their interest in the content to the point where they can critique its understandability. Another goal is to contribute copies of the final, fine-tuned videotapes to the Countway Library for viewing by a wider audience.

CONCLUSIONS

The challenges of this project centered on issues of time. The medical librarian and HMS faculty wanted to present more of the complexity of health literacy issues and to foster more discussion. Medical students wanted more than a week to practice and deliver their presentations. Adult learners needed more time to provide critical feedback and have questions answered. Finally, the question of how to fit health literacy into an already crowded medical school curriculum needs to be addressed.

The positive feedback far outweighed the project’s challenges. HMS students said the project raised their awareness of patient literacy needs, challenges of using plain language, and sources for quality patient education materials. Students gained increased understanding of the need for clear communication. The medical students enjoyed the experiential nature of the class and asked for more. They also got a better understanding of health disparities through learning about health literacy. Adult learners gained knowledge about their chosen health topics. An ongoing community-campus partnership was developed with an emphasis on the community served and the possibility of ongoing community placements for HMS students. One medical student said, “The thought of overcoming health disparities is excellent. The model of pairing medical students with the community is very helpful for both.”

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