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SHARE: Spreading Health Awareness with Resources and Education -- Librarians' role in patient education, a case study

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INTRODUCTION

The Spreading Health Awareness with Resources and Education (SHARE) program was an outreach effort, funded by National Library of Medicine (NLM), to increase awareness of health information resources in order to maximize their use. The goal of the program was to educate health professionals, patients, and their families about the extent and scope of health information resources and library services available through the Health Sciences libraries at Rutgers University and the National Library of Medicine. This included resources such as: MedlinePlus®(1), NLM drug information resources, and HealthyNJ (2), a community health information resources web portal created and hosted by the Rutgers Health Sciences Libraries.

This article describes the creation, methods, implementation and outcomes of the project and discusses lessons learned for future outreach programs.

BACKGROUND

The George F. Smith Library of the Health Sciences, together with the Robert Wood Johnson Library, serves all the programs, departments, and research facilities of the Rutgers Biomedical and Health Sciences (RBHS) schools, which have a student body of 7,658) and faculty, researchers and staff (3).

Rutgers Health Sciences Libraries aspires to provide the highest quality information resources and education services and engage in collaborations and partnerships to ensure that health care providers and patrons throughout the state have ready access to these resources and services (4). Yet, in evaluating the existing library services, it was found that patient education resources were not sufficiently promoted. Feedback from physicians also indicated that librarians could do more to play an active role in providing consumer health resources and education to physicians, nurses, and patients.

The Pew Internet & American Life Project found that health care professionals are still the source of health information for 86% of all US adults (5). Yet a 2012 NLM study showed that many health professionals are unaware of the availability of various online patient education resources, such as the National Library of Medicine's MedlinePlus (6). Further literature research shows that while the majority of physicians and other health care

providers have not incorporated these resources into their practices, those who do report that the materials

encouraged patient compliance, reduced office time for patient education, and helped explain difficult concepts, procedures, or medication (7).

These studies reiterate health sciences librarians' expertise in the specialty areas of consumer health information and education (8,9). By partnering with other healthcare professionals, librarians are in a position to ensure that consumer health information can be located and understood to ultimately improve health (10). Health sciences librarians can implement outreach efforts to spread awareness of these resources, thereby contributing to a positive healthcare and communications experience between physicians and patients.

METHODS – PROJECT GOALS AND GRANT

The Outreach Evaluation Resource Center (OERC) of the National Network of Libraries of Medicine defines *health information outreach* to be promotional and educational activities designed to enhance community members' abilities to find and use health information (6). Based on this, the overarching goal of the SHARE program was to raise awareness and to improve education of students, faculty, health professionals, patients and their families about the breadth of information resources available. Therefore, a broad target audience was selected to consist of students, faculty, staff, hospital residents, physicians, nurses, patients, and visitors from the Rutgers University and University Hospital community in Newark and New Brunswick, NJ.

A Health Information Awareness grant of \$3,000 was pursued and rewarded from the National Network of Libraries of Medicine's (NN/LM) Middle Atlantic Region (MAR) to support the project expenses. (11). The grant was used for the purchase of a laptop, a folding table, 4 folding chairs, and the printing of posters, information cards, and other handouts.

METHODS – PROJECT IMPLEMENTATION

In order to implement this outreach effort, specific objectives were developed to:

1. increase participants' awareness of key health information resources and services, including NLM MedlinePlus®, NLM drug information resources, and HealthyNJ, and
2. help participants learn how to utilize those resources and services, (e.g. how to access databases and conduct searches).

This was achieved by running information tables and training at scheduled SHARE sessions and community events. Demonstrations and training were performed and informational handouts and materials were distributed in the following formats and settings:

- Weekly three-hour SHARE information table sessions starting August 2015 and slated to end in August 2016 at various locations at the University Hospital, RWJ Hospital, and Rutgers New Jersey Medical School

- Two scheduled training classes at Rutgers - New Jersey Medical School to physicians, nurses, faculty, students, and staff.
- Participation in community events, including the Rutgers SHRP Wellness Awareness Fair, Rutgers Oral Screenings & Health Fair, and Rutgers 250th Anniversary Event (Rutgers 250), to exhibit and demonstrate HealthyNJ, MedlinePlus, and other relevant consumer health resources.

SHARE was jointly executed by the Access Services Department and the Information & Education (I&E) Departments because of their respective knowledge of library services and faculty instruction. The SHARE grant application team consisted of 3 members: the Head of Access Services (Principal Investigator), an I&E librarian (co-investigator), and an Access Services staff member (co-investigator). Another I&E librarian was invited to join the team during the project implementation stage.

The 4 SHARE team members worked together to develop the materials, coordinate the logistics, and run the sessions to meet the objectives. Demonstrations and on-the-spot ad-hoc training sessions were conducted by health sciences librarians and staff from the Access Services Departments and Information and Education Departments. Instruction librarians were responsible for explaining how to access the resources and for teaching optimal search strategies. Access Services librarians and staff were present to introduce a variety of library services and how to utilize them. Specially designed SHARE Info Cards listing key URLs to NLM and Rutgers Health Sciences Libraries' resources, libraries' contact information, and other helpful information and were distributed to participants. Posters and banners created by SHARE staff were exhibited to showcase health information resources. In addition to this, resource training materials developed by the health sciences librarians as well as MLA/NLM brochures containing health literacy educational materials were also exhibited and made available to all participants.

METHODS – ASSESSMENT AND EVALUATION

Following recommendations from the OERC Outcome-based Outreach Programs as well as OERC recommendations on collecting and analyzing evaluation data, the SHARE team utilized four data collecting tools:

- Activity/Participants Log Sheet
- Evaluation Form
- Comments & suggestions
- Staff observations (12,13).

A Log Sheet was developed and used to collect quantitative data on each participant group for different sessions of activities. De-identified and IRB-approved evaluation forms were used to collect: 1) raw numerical data and 2) raw textual data. Comments, suggestions & staff observations were organized into analytical categories (e.g. positive outcomes, barriers encountered, suggestions to improve, unexpected findings, etc.)

All data were entered into spreadsheets or word documents after each session. Data integrity was evaluated on a monthly basis.

RESULTS

SHARE launched on August 26, 2015 and is slated to end on August 30, 2016. As of the NN/LM MAR grant final report date, May 14, 2016, a total of 1,070 participants attended SHARE information table and training sessions. 981 of them stayed for a brief demo, and 183 joined for group trainings or ad-hoc one-on-one trainings. An additional 596 participants attended the SHARE information table at the community health awareness events that included the Rutgers SHRP Wellness Fair and the Rutgers Oral Screenings & Health Fair. Furthermore, SHARE staff also participated in the Rutgers 250 to promote consumer health information where statistics were not taken due to the multiple simultaneous activities involved.

Of the total 1,070 SHARE table and training session attendees, approximately 92% participated in a demo and 17% stayed for training. Almost 100% of participating nurses, patients, and their family members stayed for demos. (Figure 1)

The majority of respondents agreed or strongly agreed that the training sessions helped them gain confidence in using NLM online resources and Rutgers Libraries' patient education resources. Fifty-three percent of the participants who responded to the evaluation form indicated that prior to the session, they were not aware of MedlinePlus, but after the demo and/or training session, 89% agreed or strongly agreed that the demo and/or training session helped them gain confidence in using the NLM online resources and Rutgers Libraries' patient education resources. Eighty-seven percent stated that MedlinePlus is the number one consumer health resource they will recommend to others. (Figure 2)

These results echo the results of other studies that report the role of librarians' as high satisfaction in raising awareness and patient education in consumer health (14).

SHARE received overwhelming support. Handouts and bookmarks from the information tables were in high demand and constantly ran out as physicians and nurses took large quantities to distribute to patients in their offices, and participants across the board took them to share with friends, family members, neighbors, and even church members. Positive feedback from enthusiastic supporters ranged from suggestions that SHARE materials be made available in multiple languages to proactive offers to help with the SHARE effort. Visitors suggest the program be promoted via the university hospital's digital signage and social media channels, and the mini-med program organizers invited librarians to talk about consumer health education to mini-med students, opening up additional potential channels for the librarians' outreach efforts. The examples of SHARE success not only directly benefited physicians, nurses, and other participants, but also encouraged the SHARE librarians to further develop and promote SHARE in a positive feedback loop.

This indicated that the outreach objectives were achieved. SHARE efforts demonstrated that librarians can play a strong leadership role in patient education and in bridging the gap between physicians and patients by providing health literacy resources and education (15).

As planned, SHARE will continue its regular weekly table sessions at the University Hospital and RWJ Hospital through August 2016. After completion, SHARE staff will continue to seek out opportunities to raise awareness of health literacy resources at health fairs and other community events. The Rutgers University Health Sciences libraries administration has expressed full support of health awareness outreach activities.

DISCUSSION

One of the primary drivers of this project was feedback from physicians that librarians could do more to play an active role in providing consumer health resources and education to physicians and nurses. Because of this, it was expected that hospital physicians would have a overwhelming higher percentage than other groups in staying for training sessions.. Results showed, however, that only 22% of participating physicians stayed for training, but 75% were willing to stay for a brief resources demo. These findings indicate that the time constraints of busy physicians make it a challenge for them to participate in ad-hoc training at the information table and that brief demos are more appropriate for this group.

Similar findings also apply to the nurse group, but with a higher rate for training – approximately 46% of participating nurses stayed for training, but 98% of them stayed for a short demo. This is despite the fact that at a previously scheduled training class for nurses, almost all 30 participants showed great interest in learning MedlinePlus and other consumer health resources. These findings confirmed the hypothesis that physicians and nurses are the primary groups that welcome our outreach program, but due to their busy schedules, pre-scheduled training classes are more effective than at-the-table ad-hoc training.

Low participation by patients and patient families was another unexpected result. Information tables were set up at the University Hospital Cafeteria and the School of Dental Medicine Clinics, but participation by patients and their family members was only a little over 6% of the participant total. Their low participation may indicate low levels of interest, which may potentially be a consequence of being at the hospital (e.g. patients and families are focused on their health and have limited interest in engaging in other activities). On the other hand, at the Rutgers Oral Screenings & Health Fair, when participants were not concerned with immediate health issues, participants reached 500 in a single day.

CHALLENGES AND FUTURE RECOMMENDATIONS

Although SHARE received overwhelming positive feedback, the team did encounter challenges and limitations from grant application to project implementation to data collecting. For others considering applying for similar program opportunities in their regions, the authors have the following recommendations:

- Prepare to understand Institution Review Board (IRB) procedures and/or requirements early on in the grant application preparation stage. Acquiring IRB approval can be a lengthy process that may result in significant project delays.
- Review and analyze collected data on an ongoing basis to enable dynamic shifts in strategies and plans. By analyzing data trends and their causes throughout the

process, the team can make changes and revisions to their plans to better achieve objectives.

- Consider how best to target different audiences based on their circumstances (i.e. choosing location/times best suited for each group).
- Consider planning a one-day event with well-known speakers on consumer health.

CONCLUSION

As a result of SHARE, awareness and usage of consumer health information resources was significantly increased among the health professionals and patient community. SHARE efforts additionally demonstrate that librarians can play a strong leadership role in patient education and in bridging the gap between physicians and patients by providing health literacy resources and education. The project has raised the visibility of NLM and Rutgers Health Sciences Libraries' consumer health resources, contributing to the vision of the Rutgers University Libraries to

... engage in collaboration and partnerships to ensure that our health care providers (faculty, students, and staff) and consumers throughout the state have ready access to the highest quality health information, resources, and expertise (4).

Given respondents' feedback, utilization of the above resources has increased, and health sciences librarians have proven their value in providing patient and consumer health resources and education.

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Figure 1.
Number of Attendees by Type

Figure 2.
Number of Responses to Evaluation Questions