Health Information Outreach: A Survey of U.S. Academic Libraries, Highlighting a Midwestern University's Experience

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Key Messages

Implications for Policy

- Academic libraries should become familiar with national goals to promote campus-community health
- For maximum support and effectiveness of health information outreach (HIO) endeavors, a library should align its mission with its institutional mission

Implications for Practice

- Librarians are encouraged to seek out collaborations with other professionals at their institutions to maximize resources and effectiveness in the delivery of HIO
- Libraries should evaluate their campus constituents' healthcare information needs on a regular basis
- Librarians should consider students as a target group when delivering consumer health information (CHI)

Introduction

Libraries the world over exist to connect users with information, including health information, whether it be to other professionals or to the end user. In American libraries, much like in other countries, health information outreach (HIO) often takes two forms: 1) outreach to health care providers on the use of information resources to support research and practice[1]; and 2) outreach to end users to educate them about consumer health information (CHI) resources as part of health literacy promotion efforts.[2] To illustrate the first type of HIO, at least one international outreach project was identified as providing access to information for non-university affiliated healthcare workers in hard-to-reach areas.[3] In public and hospital library settings, the second type of HIO holds significance for the general community of library patrons and is fairly common throughout the world.[4-5]

As the authors discovered when reviewing the literature, most HIO efforts focus on health science or hospital libraries rather than on general academic libraries. In 2005, Fama, Berryman, Harger and others surveyed 40 medical and health science libraries to uncover successes, problems and trends in outreach.[6] Those authors discovered that most libraries' outreach projects involved traditional modes of service, including training, instruction and research consultations. The most targeted audience for those libraries' outreach projects were faculty and health professionals, followed by consumers and students.[7]

Thus, the trend seems to be one of HIO to healthcare workers and to the general public, including patients.[8-12] The literature does not, however, appear to reveal significant trends specific to HIO in academic libraries and to general campus end users. The authors have chosen to focus on this type of HIO, with an emphasis on students as end users and limited to the United States. Academic librarians, as purveyors of information, are in a central position to point their campus constituencies to reliable resources for CHI. Yet, how many of them are actually doing so?

Library professionals might take for granted the meaning of the term *outreach*. The literature does not provide a consensus for a generic definition as it applies to all libraries; rather, various professional library organizations define this activity in their own way.[13-16] At its most basic level, the purpose of library outreach is universal: to reach as many patrons as possible in an effort to inform them about authoritative resources which may be beyond their awareness or means to access.

HIO and Health Literacy

In order to engage in outreach in a *health information* context, an understanding of health literacy is necessary. The United States Department of Health & Human Services (HHS) outlines a vision for organizations and professionals to take an active role in improving health literacy. Several of its underlying goals seem applicable to libraries, including those in higher education settings. Most pertinent are its goals to disseminate accurate, plain language health information, build partnerships, and implement evidence-based interventions to improve health literacy.[17] The 2004 Institute of Medicine Report noted that "health literacy may be one pathway explaining the well-established link between education and health."[18] Yet, according to the U.S. National Library of Medicine, about a third of the adult population in the United States has limited health literacy.[19]

Over the last two decades, health information has become one of the most frequently sought types of information on the Internet, and it continues to become more available.[20-23] Although a report issued late in 2011 did note a slight decline in the health information-seeking behavior of the general U.S. population over the last several years, the college-aged cohort was less represented in this finding than were older or less educated adults.[24] So, the overall trend since 2001 is still one of increasing numbers of people looking for health information on their own. Within this culture, libraries are primed to play an authoritative, mediative role. The library literature has noted that "outreach is now well recognized as an important dimension of health sciences librarianship."[25]

HIO and the Academic World

Since health is essential to the well-being of the whole person, today's college students could benefit from HIO.[26] The American College Health Association (ACHA) has outlined standards of practice for health promotion on campus. The second of its six published standards, "Collaborative Practice," urges professionals to "support campus and community partnerships" to promote health, with the understanding that health promotion is a shared responsibility and that existing campus resources should be used to maximize its effectiveness.[27]

Reports published by ACHA's National College Health Assessment (ACHA-NCHA) reveal that American college students have significant and predictable health information needs, but that the channels for fulfilling those needs have become increasingly varied and less structured. Perhaps somewhat disconcerting to librarians, as of Fall 2008, the annually published ACHA-NCHA survey no longer asks students specifically how they receive their information.[28] It merely polls them on their health concerns and whether or not they receive information on those concerns from their institutions. Nevertheless, this student response data represents a wealth of information for librarians, and a potential opportunity to help fill an information need.

The ACHA, in accordance with HHS' "Healthy People" initiative has now formed the "National Health Objectives for 2020 Coalition," which has identified as one of its goals "to participate in national, regional, state and local activities that support health objectives related to campus-community health."[29] Meanwhile, the library literature observes that "while faculty, staff, and students think of the library as a resource for academic, professional, or research endeavors, they may not consider using the library when seeking health information for themselves or their families."[30] Clearly, academic environments, including libraries, are positioned to be active in health promotion.

In January 2011, a report was released by the Higher Education Research Institute of the University of California at Los Angeles (UCLA) indicating that college freshmen are experiencing record levels of stress and poor emotional health.[31] Librarians have traditionally taken a lead role in assimilating students to the college environment. This report underscores the need for librarians to strengthen existing partnerships or create new collaborations with other professionals on campus to address this and similar issues. For instance, they might consider engaging in existing student health promotion programs.

A 2008 study of The University of North Carolina (UNC) system conducted by Hallyburton, Kolenbrander and Robertson pointed out the need for librarians to play a major role in helping students seek quality health information.[32] Those authors cited the 2005 ACHA-NCHA data as evidence in which students ranked the Internet second after parents as a source of health information. However, students ranked the Internet as lowest (after television) in terms of believability.[33] This implies that students are using the Internet to access information about health, yet they do not trust it as a reliable resource. The top two sources of believable health information included health educators and health center medical staff. Interestingly, libraries or librarians were not included as answer choices on this part of the survey. The Hallyburton *et al* article highlighted an interesting discrepancy. While roughly three-quarters of academic library respondents in the UNC system reported *not* playing an active role in delivering health information, just over 90 percent nevertheless felt it was their place to do so.[34]

Objectives

The Hallyburton *et al* study took on a special relevance for the authors of this article after they took part in a campus-wide educational health fair at their own institution. This experience inspired the authors to explore the level of involvement of other academic libraries in HIO, particularly for CHI. They conducted a national survey of U.S. general academic and academic health science libraries in order to create a broad picture of patron health information-seeking behavior and any associated HIO activity. Results of the survey are reported below, as well as core patterns and trends that emerged. The authors also share a specific example of HIO put into practice at their institution and reflect about the role of librarians in delivering HIO for CHI needs.

Methodology

Target Population

Since Hallyburton *et al* suggested that further research include a survey of general academic libraries on a national scale, the authors decided to cast the net wide. Using the

Hallyburton *et al* study as a model for their own survey, the authors created a target group consisting of U.S. general academic libraries serving four-year institutions and academic health science libraries (affiliated or unaffiliated with a hospital or medical center). In such a way the target group would most closely match the authors' libraries in size and profile. Both public and private institutions were included in the survey. Two-year colleges were excluded; the authors felt that a future study could examine those.

The authors enlisted the help of several staff members to create a comprehensive mailing list which was derived from several sources: The American Library Directory, the National Network of Libraries of Medicine (NN/LM) Members Directory, and Carnegie Classifications.

Survey Instrument

In May 2010, after gaining approval from The University of Toledo's Institutional Review Board, the authors sent an unsolicited invitational email containing a survey link to one librarian per institution derived from their master list. The authors specifically contacted those librarians responsible for liaison duties in a health-related field, individuals with outreach roles, or heads of reference or instruction. In some cases, if the library was very small, the director was contacted. The authors generated the online survey using SurveyMonkey and emailed the link to 1681 libraries. The survey was not launched until nearly the end of the spring semester. It quickly became apparent that better timing might have yielded more completed responses, as a number of potential respondents turned out to be unavailable or on vacation. While 403 libraries initiated the survey, 362 actually completed it, resulting in a usable response rate of 21.5%. For the purpose of data analysis a handful of "other" libraries (.04%, n=16) were excluded from the survey results presented below; their number was considered insignificant and they did not match the institutional profiles the authors were interested in studying. Errant responses, for example, from a veterinary library and from a library in an outlying U.S. territory, were discarded. This resulted in a final distribution of respondents as follows: 271 general academic libraries (GL), 42 health science libraries affiliated with a hospital (HLh), and 33 health science libraries unaffiliated with a hospital (HLu) (total n=346). The survey consisted of twenty-five questions including opportunities for open-ended comments. This part of the survey design was done in response to a suggestion by the Hallyburton, *et al* study to allow for more qualitative data. Not every library answered every question. (see Appendix for survey instrument)

Results

Health Information-Seeking Patterns

In order to gauge the broad usage patterns of the libraries surveyed, the authors asked a series of questions about health information-seeking, both for research-related purposes and consumer/personal health reasons. Answers to these questions revealed some patterns among different patron groups (Table 1). Perhaps not surprisingly, 96% (n=333) of respondents in the aggregate stated that students seek health information to complete "*class assignments*." As expected, the survey indicated that faculty were most likely to seek health information as "*support for classroom and/or clinical teaching*." Interestingly, campus staff were perceived to seek health information for personal reasons nearly as much as the public (the vast majority of libraries surveyed indicated some level of public access to their resources). Not surprisingly,

"*research for publication*" ranked first or second, across all respondents, as a reason faculty seek health information. A significant finding of the survey was that "*personal health concern*" ranked second as a perceived reason that students across all three library types seek health information, with GL making up 76 percent (n=120) of the responses for this finding.

When asked to elaborate further about how *often* patrons are perceived to seek information for personal health reasons, the largest response for all patron types fell under the category of "don't know." Such uncertainty suggests there is room to assess a potential need for consumer HIO in campus communities, depending of course on individual institutional missions. As to the types of personal health information patrons as a whole are perceived to seek, survey results indicated that the main categories of information sought were "diseases" (62%, n=213), "drugs" (54%, n=186), and "treatments" (58%, n=199) followed by a variety of other categories related to wellness, including alternative and complementary medicine, diet/nutrition, and fitness/exercise. These types of information needs reflect some of the most common student health issues as identified by the ACHA-NCHA reports, for example: stress, depression, anxiety, STDs, and substance abuse.[35] The authors would like to suggest that these issues and related topics hold great potential for HIO in all academic libraries.

Library Involvement in HIO

Understandably, the need for HIO differs among libraries. When asked about the perceived need for librarians at their library to deliver HIO, respondents (n=345) answered slightly differently depending on the type of library. Almost half (45%, n=122) of GL perceived *Little Need* for HIO while nearly another third (31%, n=84) indicated a *Moderate* to *High Need* for HIO. Those ratios were roughly reversed for HLh and HLu, with HLh perceiving the highest overall need for HIO (Table 2).

Perceiving a need for HIO and actually participating in HIO are two different things entirely. When asked whether librarians at their library actually participate in HIO, over half of *all* survey respondents for this question stated *No* with some differences per library type as shown. It may not be surprising that HLu participated in twice as much HIO activity as GL with HLh showing three times the HIO activity as GL (Fig. 1).

Overall, the authors' survey results revealed that over three-quarters of *all* librarians perceived at least some need for HIO at their library, while under half were actually fulfilling that need by delivering HIO. Echoing the results of the Hallyburton *et al* study, there does appear to be a gap between what libraries perceive they need to do, and what they are actually doing to administer HIO.

Many of the open-ended comments from the survey provide candid insight regarding why libraries are not participating in HIO. The comments seemed to fall into a few common categories.

Staffing limitations

"Resources and staff shortages make outreach to the public almost unthinkable."

"Being understaffed, I/we am/are reluctant to take on any new initiatives without some support from administration."

Budgetary restrictions

"small library w/ reduced budget…"

"Budget cuts mean that we have to focus on our MAIN MISSION which is coursework for students and staff..."

"We have severe budget cuts, lack of staff, furloughs. At this point, I don't think there would be any interest or need."

Mission limitations/ambiguity

"If we had a larger medical program, we would probably do a lot more in this area."

"not part of our mission"

"need for outreach not identified"

Librarians Who Participate in HIO

The authors found some commonalities regarding the types of librarians who most often participate in HIO. Among the survey respondents whose libraries did participate in HIO, 82% (n=152) indicated that librarians in Reference/Public Services were most active followed by Instruction (52%, n=79) and Outreach Services (26%, n=40). These groups of librarians do play more of a direct educational role which is a natural fit for any type of library outreach.

According to the survey, most of the respondents who did participate in HIO across all three types of libraries (n=154) indicated "training on the use of quality consumer/patient health information" (62%, n=96) and "publicizing resources via blog or website" (59%, n=91) as the two most popular choices among types of outreach provided at their library. Displays or exhibits and on-campus health fairs followed in third place (40%, n=62).

Any good library outreach program sets out to target specific populations or groups. When asked which groups librarians at their library target for HIO, survey respondents indicated slight differences depending on their type of library. As might be expected, GL and HLu respondents indicated that they focus first and foremost on students and faculty while HLh focus almost equally on providing services to the public and to health care professionals (Fig. 2).

Collaboration can facilitate the delivery of effective and innovative HIO programs. Both GL and HLu respondents indicated working most often with "academic departments"(GL: 64%, n=66; HLu: 75%, n=12) to provide HIO, while HLh most often collaborate with "off-campus or community organizations" (74%, n=26). However, HLh respondents also rated academic department collaboration (66%, n=23) nearly as high as that with local health care facilities (63%, n=22). All of the above findings seem to support common perceptions of outreach services, target audiences, and modes of delivery of health information in these types of libraries.

Librarians Who Participate in Health Fairs

Over half of *all* survey respondents for this question indicated that their libraries *Never* participate in health fairs/events (Fig. 3), with GL showing the least activity in this area. When compared to results of perceived need (Table 2), this could be considered an untapped opportunity for general academic librarians.

However, the data gathered from libraries that did participate in health fairs or events was generally positive. The majority of overall respondents (n=145) indicated the success of their library's involvement as *Average* or *Above average*. Only a small number indicated a poor response to their participation in health fairs. It was encouraging to notice that the vast majority (75%, n=109) indicated that they would participate again. Comments included:

> "The library participates in helping make any event like this on campus a successful event."

> "Our institution is committed to promote via events and displays community relevant events, including health."

For those libraries that did not want to participate in future health fairs, the authors asked a follow-up open-ended question to explain their reasons. The overarching theme of their responses seemed to indicate a concern over lack of return on investment for the time, energy and/or money devoted to the event.

> "We do not have the administrative support or interest to make these the success we envision."

> "Staff ... are spread very thin, but there is a great need to do more."

The authors were also curious to see if there was any interest in health fairs from libraries that had *never* participated in one before. Nearly half of the respondents who had never participated in a health fair (n=244) were undecided (48%, n=117) as to whether they would like to participate. However, nearly a third (29%, n=71) indicated *Yes*, that they would like to participate. These respondents left some positive comments including:

> "Good food for thought, you've got my wheels turning!"

> "I think this is a good idea, and will bring it up to the other librarians."

> "Great way to develop partnerships."

Discussion

A significant finding of the survey was that "*personal health concern*" ranked second as a perceived reason that students across all three library types (GL, HLh, HLu) seek health information, with GL making up about three-quarters of the responses for this finding. However, more often than not, librarians *do not know* how often patrons seek health information. Such uncertainty suggests there is room to assess a potential need for consumer HIO in campus communities. Inside the U.S., the professional literature on academic library outreach in the area of health information, particularly for consumers, appears to be increasing. Still, delivering CHI specifically in the general academic library environment seems to be a relative rarity. However, as the ACHA-NCHA reports mentioned above indicate, there does seem to be a captive audience and a logical need for it.

Survey results imply that there is a potential role for academic librarians to provide CHI to campus constituents, especially students. Perhaps the most interesting discovery of this survey was that over three-quarters of respondents perceived at least some need for HIO at their library, while under half of respondents were actually fulfilling that need. This roughly echoes the discrepancy found in the smaller Hallyburton *et al* study.

Over half of *all* survey respondents indicated that they had never participated in a health fair or event, with GL reporting the least activity. When compared to the perceived need for this type of outreach, health fairs (and other innovative outreach activities) could be considered an opportunity for librarians. In fact, health fairs are described in the literature as "an excellent avenue of awareness for outreach services as well as provision of access to health information resources for students, health care professionals and consumers."[36] Duesing elaborates that outreach activities at health fairs may include providing handouts, flyers about CHI resources, as well as library information and searching techniques.[37]

Health fairs are not the only avenue for providing HIO. Libraries can provide HIO in a variety of simple yet equally effective formats. Several articles have detailed simple but creative ways that health science libraries in particular provide outreach services to their patrons. Keene states the importance of thinking "outside the stacks" and describes a campus-wide "weigh-in" hosted by her library.[38] Other authors mention staffing an information table in the hospital cafeteria[39] or using a blog to disseminate information to consumers and professionals alike.[40] Among the advantages to participating in outreach are "opportunities to increase library visibility, enhance value to the library's parent organization ... improve community health awareness and education, [and] promote the library profession ..."[41]

Collaboration is key for delivering effective HIO. Most HLh respondents confirmed that they collaborate with community organizations, while most GL and HLu respondents indicated collaboration with academic departments. Indeed, a few articles confirm the importance of librarians in such potential outreach roles. Spatz states that "librarians must be health advocates in their respective communities by partnering with like-minded agencies and organizations."[42] Librarians are encouraged to examine their professional research and organizational skills, doing such things as identifying best practices, sharing health news and research results relevant to their communities and using their skills to compile health and other statistical data.[43] Libraries are also already natural partners with others on campus, such as wellness centers. According to Spatz, librarians should consider expanding their traditional roles by partnering up with campus departments to deliver effective HIO programming.[44] As Duesing has suggested, and as the authors of this article have illustrated, library participation in a campus-wide health fair is one specific way to become more centrally involved in HIO. Importantly, librarians should be aware of best practices before attempting any outreach efforts, as recommended by Spatz.

Limitations of the Study

Several open-ended survey comments remarked on the vague nature of the term "health information outreach." Whether this was a shortcoming of the survey, or whether there needs to be further research to look at standardizing the definition of HIO within the library profession, is not clear. Perhaps the survey should have offered a definition or polled the respondents for a definition of HIO; however, such an action might have skewed the responses. In fact, the ambiguous nature of the term "health information outreach," was perhaps a notable discovery in itself. It was the authors' original intention to survey those libraries with institutional profiles

roughly similar to those of their own libraries. No distinction was drawn between public and private institutions' activities; this may be reserved for a future analysis. A more narrowly focused target group and shorter questionnaire launched at a more ideal time during the academic year might have produced a better response rate. It should also be noted that the survey was not intended to sample the population. Although it was reviewed by a colleague, the survey was not otherwise tested prior to deployment. A pilot of the survey might have helped identify any shortcomings. Future studies examining the needs and usage patterns of patrons themselves would potentially yield more conclusive data about HIO on college campuses.

Recommendations for Academic Library Involvement in HIO

The following recommendations are based on the professional literature, survey responses, and the authors' own experiences. Librarians should:

- become familiar with national and local expectations for health promotion
- ensure that their mission is in alignment with their institutional mission or strategic plan in order to maximize opportunity for budgetary support
- directly assess patron needs for health information
- partner with campus departments to share staffing responsibilities for outreach
- assess HIO activities for future program development
- view outreach as an opportunity to increase visibility

The authors themselves have had a chance to put a few of these recommendations into practice, as the experience below illustrates.

The University of Toledo Libraries and HIO

External forces often present opportunities for collaboration. In Toledo, Ohio, a unique opportunity occurred when two urban academic institutions merged. On July 1, 2006 the former Medical University of Ohio (MUO) officially merged with The University of Toledo (UT) to become one publicly-supported institution with a teaching hospital, now employing over 6,500 faculty and staff and serving approximately 23,000 students at both the undergraduate and graduate level. Upon merging, both campuses remained in their original locations and assumed the new designations of "Main Campus" (MC) and "Health Science Campus" (HSC).

As part of the merger, The Mulford Health Science Library of the former MUO joined UT's Carlson Library (and other smaller units) to become one administrative entity known as University Libraries (UL). Strategic planning was one of the first priorities following the merger. Out of this came a new mission statement[45] which incorporated a phrase from UT's institutional mission statement: "the improvement of the human condition."

Soon after the merger, MC and HSC librarians began seeking out opportunities to collaborate and expand library services and resources. UT's strategic plan, currently in progress ("Directions 2011"), has as one of its overarching goals, "Healthcare Access and Delivery." The UL, in its own draft strategic plan, intends to meet that goal in part by its objective to "explore opportunities for partnerships with the Medical Center, Employee Health, Student Health, and other units to connect people with quality health information." One such form of successful collaboration for HIO has already been demonstrated by library involvement in the annual "Welloween" – a Halloween-themed campus health fair.

"Welloween"

On UT's Main Campus (MC), a health fair known as "Welloween" has been held on or around Halloween Day since 2000. Welloween is a free event open to students, faculty, staff and their families. Held in the university's Student Recreation Center, it features dozens of educational and interactive booths from a variety of campus departments and community organizations, as well as health screenings and fitness demonstrations. Its program goals include "increasing the health and well being of our students, faculty and staff," "providing a campus wide event where the success depends on collaborative efforts," and "giving university and community organizations an opportunity to promote their programs and services." [46]

In 2006, the newly re-organized UL set out to participate in this informative and educational event for the first time. Library faculty and staff from both MC and HSC formed a committee, reserved a booth at the event, and presented an informational slideshow and poster highlighting library resources and services. They also provided interactive quizzes, prizes, and promotional materials with librarian contact information. Obviously librarians need to exercise care in delivering health information. Since that initial event, and as of this writing, the Libraries have participated in the fair five times. At each event, library personnel clearly display a legal disclaimer as a reminder that they are not healthcare professionals. With as many as 1,000 people attending in a given year, this event has been a great opportunity to increase the UL's visibility.

In 2011, for the first time, the UL invited staff from the MC student medical center (a walk-in clinic) to collaborate on the Welloween planning committee. Several librarians and one physician co-hosted a table at the event. They provided information on library consumer health resources as well as brochures on hot topics obtained from the student medical center (a walk-in clinic separate from the hospital). They even distributed colorful prophylactics alongside the usual candy treats. Roughly 65 to 70 people visited the table. As in past years, the committee determined, at least anecdotally, that the event was a success. Future committees plan to develop more formal assessment measures.

Conclusion

The largest single personal consumer information need in the United States – seeking health information – has grown due to both increasingly accessible internet resources and a shift toward a do-it-yourself culture. While this puts libraries in the precarious position of being bypassed, they are, in fact, in a prime position. This would seem to be particularly true on academic campuses which are home to discrete communities with significant and predictable health information needs. National-level organizations such as ACHA have set goals for healthier American college students by 2020. The ACHA-NCHA reports indicate that students demonstrate a need for reliable health information resources. As the literature reveals, and as the authors' survey results document, college students are a viable target audience for HIO within a CHI context. However, as Dennis *et al* pointed out, campus users might not immediately think of their academic library as a resource for CHI.

The authors' survey results reveal that while most librarians have voiced at least some need for HIO, over half do not actually participate, which echoes earlier findings by Hallyburton *et al*. Thus, there is a gap between what librarians perceive they need to do and what they are actually doing. This gap can be attributed to various reasons, including budgetary limitations,

staffing issues, and mission ambiguity. The potential exists for librarians to become more involved in HIO, but they must first overcome barriers that prevent them from doing so. Although many academic librarians are unable to participate in HIO because of budget, staffing or mission limitations, most are undoubtedly already in relationships with other campus departments or in community partnerships which could be developed. The delivery of HIO, even in tight staffing and budget situations, can be facilitated by creative campus collaboration, alignment with institutional mission and professional organization standards, as well as a supportive administration. In such a way, academic libraries have the opportunity to not only address national goals for better health, but to improve their own visibility and evolve to meet changing information needs.

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