

2010

The Informationist: Ten Years Later

Mark Aaron Polger
CUNY College of Staten Island

[How does access to this work benefit you? Let us know!](#)

Follow this and additional works at: http://academicworks.cuny.edu/si_pubs

 Part of the [Library and Information Science Commons](#)

Recommended Citation

Polger, M. A. (2010). The informationist: Ten years later. *Journal of Hospital Librarianship*, 10(4), 363-379.

This Article is brought to you for free and open access by the College of Staten Island at CUNY Academic Works. It has been accepted for inclusion in Publications and Research by an authorized administrator of CUNY Academic Works. For more information, please contact AcademicWorks@cuny.edu.

The Informationist: Ten Years Later

MARK AARON POLGER

*College of Staten Island Library, City University of New York,
Staten Island, New York, USA*

The article explores the last 10 years of literature relating to Davidoff and Florance's informationist concept. An informationist provides many of the same services as a medical librarian, is a permanent member of the clinical team, and resides on the clinical floors. The author explores the job functions of the informationist and examines whether this service has come to fruition. The author argues that the informationist service can only be fully realized in large academic health sciences libraries, large teaching hospitals, and medical research organizations such as the National Institutes of Health. To facilitate this argument, a questionnaire was distributed to Health Sciences Library listservs; CANMEDLIB and MEDLIB-L. Three hundred ninety respondents completed the questionnaire. The author concludes that there is an inconsistency in the job functions of the informationist service and their academic background. Lastly, the author argues that informationists provide many of the same duties of the medical librarian.

KEYWORDS *clinical medical librarian, clinical medical librarianship, CML, informationist, marketing, medical libraries, outreach*

INTRODUCTION

The informationist, or information specialist in context (ISIC), was coined in 2000 by Frank Davidoff, MD, and Valerie Florance, PhD, as a “new health

Received 26 April 2010; accepted 3 August 2010.

Address correspondence to Mark Aaron Polger, Instruction/Reference Librarian, College of Staten Island Library, City University of New York, 2800 Victory Boulevard, Building 1L, Staten Island, NY 10314, USA. E-mail: MarkAaron.Polger@csi.cuny.edu

profession" (1). The informationist service merges the knowledge and expertise of a health care professional with the information retrieval skills of a librarian (1). Over the last 10 years, there has been a great deal of literature discussing the roles and responsibilities of this new profession, as well as case studies from academic health sciences libraries and from the National Institutes of Health. Some of the literature has been controversial. It has been argued that the informationist service is none other than a clinical medical librarian (CML) with a new name (2). It has also been argued that the informationist service can be met through retraining the CML. The advantage to having the informationist service is to fully integrate library resources into the clinical setting.

In Health Sciences Librarianship, there is a disconnection between librarians and clinical staff. Clinical staff may not identify with the nature of the librarian's job and they do not perceive librarians as patient care providers. Librarians are often seen as information providers who are tech-savvy, who are bound to the physical confines of the medical library, very often far from the clinical floors. In addition, librarians are perceived to work industriously in the library, performing many tasks with which clinical staff may not be familiar. Health sciences librarians are very often required when clinical staff has a patient care question and they request the searching expertise of the librarian to provide the highest quality information. On some occasions, clinical staff may request the librarian to provide instruction on databases such as UpToDate, CINAHL, DynaMed, Lexi-Comp, and MEDLINE. Clinical staff expects librarians to know the "search tools," the technology, and the methodology, but not necessarily the subject matter.

The literature indicates that physicians and clinical staff do not have the time to search the medical literature and in addition, they may not have the skills to critically evaluate the vast amounts of information (3). Librarians are expected to support this service by selecting the best search tools and providing the most current and credible resources so clinical staff can make the best decisions for patient care (3). Guessferd argues in her article, "the CML has developed specialized information finding skills that even the most library literate physician may not possess. Physicians just don't have the time to research the way librarians do and still care for patients" (3).

The informationist service was proposed in order to provide a connection between the medical librarian and Clinical staff. Informationists were to provide the bridge between the large body of literature and patient care questions from clinical staff. Informationists are part of the clinical care team. They attend patient rounds with other clinical staff, and provide services such as LATCH (Literature Attached to Charts), mediated literature searching, and providing information packets on a variety of diseases or health conditions (4). The informationist plays an active role in the patient care team. Clinical staff no longer needs to visit the library to order materials or request a mediated literature search. The informationist works on the clinical

floors and supplies the information immediately. The literature indicates that informationists do not necessarily work with individuals but with specialized clinical department teams as Oncology or Pediatrics (2).

Cunningham and Kronenfeld (5) debate the role of the informationist by discussing some of the issues, namely the inconsistencies in how they are defined. Cunningham is more optimistic and sees the potential in the role, whereas Kronenfeld is more skeptical. Kronenfeld argues that the informationist concept has not reached beyond the Medical Library Association, the National Institutes of Health, and National Library of Medicine and the role is not concretely defined (5). It has been argued that the informationist will have different roles across different work settings. Cunningham argues that this “fuzziness” gives the profession its strength (5).

From the perspective of the library profession, the informationist service is an excellent example of outreach through its partnership with the clinical care team. Similar to the liaison librarian model in academic libraries, informationists embed themselves on the clinical floors and provide instruction, individualized literature searches, participate in clinical rounds, and respond to patient care questions at the bedside. In addition, informationists promote services and resources and as a result, raise the profile and importance of the role of an information expert in a clinical setting. For the clinical care team, they save time and money by using another person’s skills and expertise. Both benefit from this partnership.

After Davidoff and Florance’s short editorial piece in 2000, some responded in defense of librarianship (5, 6). Kronenfeld argued that CMLs were already performing the duties outlined in their proposal. There was a sense that Davidoff and Florance were diminishing the role of the librarian. By retraining them, they would integrate this new professional into the Clinical Care Setting, remove the word “library,” adding the word “information” as a legitimate way of integrating the skills of a librarian into the clinical setting (7).

Some authors who support the informationist service believe that the physical library may not be as important as it was years ago. There is consistent emphasis on the importance of electronic resources in the literature (7–9). However, it is the librarian who is the expert in utilizing and teaching these electronic resources to users. Physicians and clinical staff may not be as familiar with every health or medical database as the librarian.

This article illustrates that the informationist service is an excellent marketing strategy for the library profession. The informationist service is very advantageous for the clinical care team. It is an ideal situation for a librarian to permanently reside on clinical floors to work alongside the clinical team and to respond to patient care needs on site as the demand arises. It allows better communication between the librarian and the clinical care team, as librarians would be accessible resource people at the point of care.

OBSTACLES AND INCONSISTENCIES

Some obstacles and inconsistencies are addressed in this article. They include staffing, funding, and the integration of the informationist into clinical team (5). In the literature, the informationist service is not consistent across all institutions. Some informationist positions are funded through an external grant, whereas some are funded by the institution (9). The literature also presents two different informationist models: the classic model and the emerging/variant model (9).

If librarians become informationists and, as a result, become permanent members of clinical units, does their departure mean a vacancy for the library? Does the library lose the funding for that person? Does the budget get permanently transferred to that clinical unit? Where does the funding come from? Is it "one-time" funds? Does the funding come from large corporations or pharmaceutical companies (5)? Does the institution create a new position for the informationist and save the librarian position? What happens to the physical library during the absence of the librarian? Will the library's hours be reduced? Will it be managed by a volunteer? Who maintains the print collection? Even with a vast collection of electronic resources, the Health Sciences Library remains a physical place where staff, physicians, and medical residents study, research, access resources away from the clinical setting, and relax and unwind (10). These issues are not addressed in the literature.

We can assume that the institution hires a mix of librarians and informationists; librarians who work and manage the medical library, and informationists who work on clinical floors. Can the institution afford to create a new position? Administrators may find it redundant. They may wish to hire one librarian (or informationist) to work in the library and on clinical floors, to save money. This would result in a reduction in library hours and service.

Clinical staff may not understand the nature of the librarian's role in the institution. Besides supporting staff on clinical units, librarians are experts at multitasking; some include mediated literature searching, critical appraisal, and providing library instruction. Librarians also manage the print and electronic collection of book and serials, process interlibrary loans, maintain the circulating collection of books and print journals, and of course manage the physical library space.

It is assumed that because many of our resources are available online, the need for a physical library space is not as crucial as it was 20 years ago. However, the author argues that a physical library is still important for users to study, read, and consult print materials (10).

The second obstacle, lack of integration, must be addressed if the informationist becomes a permanent member of the clinical team. For many health sciences librarians and CMLs with no formal science or health care

background, the only way they can integrate into the clinical setting is through retraining. This may offer them the credibility and acceptance they require in order to be acknowledged as competent health care professionals. A great deal of the literature focuses on possessing specialized subject knowledge in the sciences, biomedical sciences, or in health care (7–11). The literature is vague as to what type of “specialized subject knowledge” is expected and required (11–13). It appears that different informationists are expected to gain expertise and knowledge in different fields of study based on the research team they are working with.

Many library staff do not have the academic credentials and nor the time or resources to return to school to retrain or obtain further degrees or certification. The literature skims over the issues of acquiring funds to retrain. If librarians are to retrain to become informationists, where does funding come from (3, 7, 9, 12, 13)? Does the institution provide free tuition? Librarians working in a hospital environment may take a medical terminology course but that may not be adequate. Some argue that they have learned everything on the job (3). There is an expectation that the informationist be competent in both library and information science and in the health sciences (2, 9, 12).

The literature also illustrates the inconsistencies of the requirement of informationists. Some informationists are librarians with a scientific, biomedical, or health care background. Some have a social science background, but have “retrained” through taking graduate-level biomedical or medical informatics courses. Some are not required to possess a MLIS degree, but are expected to improve their information seeking skills (3, 7, 11, 14). Davidoff and Florance argue that informationists are professionals but do not necessarily hold a library and information science degree (1). This deprofessionalizes the library profession and argues that all one requires to be a librarian is solid information-seeking skills, without a MLIS degree.

FROM CLINICAL MEDICAL LIBRARIANSHIP TO INFORMATIONISTS

Algermissen gives an overview of how Dr. Gertrude Lamb initiated the first CML program at the University of Missouri–Kansas City School of Medicine in 1971 and then at Hartford Hospital and the University of Connecticut Health Center in 1974 (15). Lamb's goal was to further involve the librarian in the patient care process, to further integrate the librarian into the clinical care team, and to bridge the gap between the health care literature and the requirements of the clinical care team. CMLs spent an average of 3 to 5 hours per week participating in Clinical Rounds (16) and after taking note of some of the current patient care queries, they conducted literature searches and

prepared packages with articles for the clinical care team. Attending rounds further involved the librarian and allowed them to be a part of the clinical care team.

The literature lists similar job functions of the informationist and the CML (2). The significant difference is the informationist's specialized subject expertise (3, 6, 7, 13). Guessferd notes that "CMLs currently pick up much of their clinical familiarity on the job but the informationist would undergo extensive training and require certification to be an integral part of the patient care team" (3).

Both CMLs and informationists participate in clinical rounds, provide mediated literature searching, information appraisal, educate their users, and are considered resource people (3, 7). The literature also emphasizes that CMLs and informationists raise the profile of the library and librarian (3, 12). The literature reveals some inconsistencies when it discusses the importance of specialized subject knowledge. Some are encouraged to go back to school and take a series of biomedical courses, whereas others take graduate courses one course per semester (7). The course work is not constant and each informationist may wish to take different courses, depending on the clinical care team they are working with. Some informationists will not necessarily have the academic credentials of a librarian (the MLIS degree), but they are considered experts in locating information needed by the clinical team (14).

Detlefsen illustrates the education route library school students may wish to explore if they hope to pursue a career as an informationist (2). She lists six universities that offer MLIS degrees with concentrations in health librarianship. As well, she suggests taking medical informatics courses and attending continuing education workshops offered by the Medical Library Association and the National Library of Medicine (2). She also suggests taking courses provided by National Training Center (NTC) for the National Network of Libraries of Medicine (2).

Rankin et al. provide a systematic literature review of informationists. They divide the two models of informationist service into classic and emerging/variant (9). Classic informationists possess four defining characteristics: formal training in information science with subject expertise, a deep understanding of clinical work culture, experience as a team player and/or expert consultant, and critical appraisal and literature synthesis and/or complex data analysis skills (9). Emerging/variant informationists possess additional attributes such as being technology experts, educators, assist in manuscript preparation, grant proposal writing, Web site maintenance, committee members, and project team members (9). It can be argued that this model may downgrade the informationist to a paraprofessional, as some duties listed can be delegated to administrative assistants or support staff.

Rankin et al. give a detailed analysis of the job functions and characteristics of informationists, focusing on qualifications, practice roles, and

setting. Their article demonstrates several examples of the informationist service at different institutions. All informationist positions listed are in academic health sciences libraries (with medical schools) or in large teaching hospitals affiliated with medical schools. All articles Rankin et al analyzed are case studies and positions were funded by the Medical Library Association, the National Library of Medicine, or by the institution itself (9).

Robison (7) explores the education needed to work as an informationist. Robison is employed at the National Institutes of Health Library, the U.S. government's federal medical research agency. He holds a PhD in biopsychology and an MLIS degree (17). Robison works with a team of 14 informationists who are part of a variety of different medical research teams. He indicates that only half of the informationists do not have a scientific background so it is essential for them to gain additional qualifications in the sciences (7, 13, 17). Robison adds that Vanderbilt University offers specialized courses to train librarians without biology degrees to attain the knowledge needed to work as an informationist (7).

The National Institutes of Health (NIH) and the National Library of Medicine (NLM) support informationists to participate in continuous workshops and courses during work hours (7). NIH informationists are encouraged to take biology and medicine courses offered through the Foundation for Advanced Education in the Sciences (FAES), a nonprofit organization that provides courses for NIH staff and the public (7). They are also expected to participate in professional development activities both in librarianship and in the sciences, in order to be kept abreast in both disciplines (7). Each informationist needs to understand the research team to which they assigned. They are encouraged to attend lectures, conferences, weekly rounds, and lab meetings on a regular basis. Although a permanent member of the clinical team, they do provide library instruction in the library (7).

In Robison's other article (13), he and colleagues explore the impact of the informationist service on the medical research teams at the National Institutes of Health. They explain that each informationist is assigned to a specific research team to support their medical research. Robison et al. interviewed six NIH staff who worked alongside informationists and asked them how the informationist service affected their work. Robison et al. also lists some of the skills attributed to informationists. Informationists were characterized as information portals, literature retrieval experts, trainers, team members, and time savers (13). After reviewing Robison et al.'s characteristics of informationists as well as their job functions, it can be argued that medical librarians possess many of the same characteristics and perform many of the same duties as an informationist (7, 9, 17, 18).

Morley and Buchanan provide a case study of CML program at the University of New Mexico Health Sciences Center. They describe the CML as a librarian who participates in rounds and who provides services in clinical settings (4). They illustrate how CMLs are responders to clinical questions

and that they are physically available on clinical floors to support patient care. Morley and Buchanan's definition of the CML aligns with the roles and responsibilities of the informationist (4).

Brown (12) explores how the CML evolves into an informationist. She makes the distinction between the CML and informationist by illustrating that informationists have medical informatics training as well as specialized subject expertise; however, she is vague as to which subjects (12). She also indicates that clinical care staff can become informationists if they are trained in information-seeking skills. Brown suggests that it is easier to transition from a clinical care worker to informationist than from a CML to informationist. The CML would need to be trained in medical informatics and specific subject areas to support the clinical care groups. The clinical care worker would only need to improve their information seeking skills (12). Brown appears to discredit the value of the library profession. The author argues that if clinical care workers wish to become informationists, they should go to library school and pursue an MLIS degree. Through the rest of her article, Brown uses the CML and informationist concept interchangeably. This may appear as if both professions are more similar than different (12).

Schacher's article examines the evolution of the health sciences librarian from the beginning of the 20th century (14). She discusses how medical librarians used to be the "book keepers" of medical texts, and then they provided medical literature for physicians. By 1971 medical librarians became active members of the health care team through the initiatives of Dr. Gertrude Lamb (14). Lamb's initial reason for proposing this new service model was due to the demand of medical students who wished to familiarize themselves with the medical literature (14). Even after the informationist model was introduced in 2000, some physicians and other members of the health care team are still disinclined to having a librarian join them (14). Schacher cites obstacles such as staffing as a significant difficulty. She argues that there are not enough CMLs or informationists to work on every health care team in a hospital setting (14). She also maintains that there is resistance even in the library field, where some are of the opinion that the informationist model is just another term to describe the current job functions of the CML (5, 14). Plutchak and Schacher (11, 14) discuss funding as a major obstacle in the retraining of librarians into Informationists. Most informationist training programs are offered through medical schools with which the hospitals are affiliated and sometimes these programs are funded 1 year (by the National Library of Medicine, for example), though funding may not be available in subsequent years (14).

The literature reports that informationists are permanent members of a clinical care unit, funded by the designated clinical unit similar to a clinical social worker or clinical pharmacist (12). They are no longer library based but rather clinically based (12). In addition, informationists possess

specialized subject knowledge that the CML or health sciences librarian may not possess (1, 7, 13).

INFORMATIONISTS AND ACADEMIC LIAISON LIBRARIANS

There are many similarities between academic liaison librarians and the informationist. In fact, some academic institutions, like the Welch Medical Library, John Hopkins University, bridge the two together (18). The Academic Liaison Librarian can be defined as a librarian who focuses on a particular subject area and client base (19).

The position brings the duties of Reference, Collection Development, and Instruction and attempts to link them with a specific academic department (20). In addition to collection development, some academic liaison librarians embed themselves by attending departmental meetings, holding office hours in academic departments, and providing library instruction for those departments (19, 21).

However, many academic liaison librarians do not hold subject expertise in the department in which they were assigned to work. For example, an academic liaison librarian responsible for the selection of biology materials may not have an academic background in Biology, but an informationist is expected to hold those academic qualifications (7).

The academic liaison librarian was traditionally responsible for selecting materials for specific academic departments in a college or university (16). That role has been extended to course-specific library instruction, marketing and promotion of library services and resources that would appeal to specific departments and programs, research guides targeting specific courses, and consultations with faculty and staff from those academic departments (16).

An extension of the liaison librarian role may be the embedded librarian (8, 22)—a liaison librarian who actually participates in course-specific classes, may hold office hours in academic departments, attend departmental meetings, participate in Blackboard courses, and immerse themselves into the day-to-day schedule of the academic departments on campus (8, 23).

CMLs and academic liaison librarians both perform similar duties, but in different settings. CMLs and informationists may resemble the embedded librarian model because they immerse their work and job functions outside of the library. It has been argued that the natural progression of a CML is to transition into an informationist.

METHODS

The author believes it is important to explore whether the informationist service has come to fruition across all health care institutions, including community hospitals, partial teaching hospitals, and community health centers.

Despite 10 years of published literature on the topic, he wished to explore the number of hospitals, academic institutions, and other health centers that are employing this service model. He argues that informationists, to large extent, perform duties similar to that of the clinical medical librarian/health sciences librarian. Health sciences librarians anticipate developing successful connections and relationships with their users. In the health care setting, librarians hope to integrate into the clinical (or research) team by embedding themselves. They remove the word “library” from their title and add “informationist.” This new title may appear up-to-the-minute and lend more credibility, as it closely matches other health care specialists like pharmacists, clinical nurse specialists, medical technologists, and hospitalists. The author is mindful of the fact that the questionnaire used was exploratory and not representative of the population of health sciences librarians, CMLs, and informationists.

The author also wished to investigate whether other hospitals and institutions (outside the NIH, large academic institutions, and teaching hospitals) provide the informationist service. He attempted to identify some outreach initiatives that medical/health sciences librarians have already provided that would align themselves with informationists. Such outreach initiatives included library instruction using laptops on movable carts, providing library instruction on the clinical floors, and participating in rounds.

The author developed a questionnaire (Appendix 1) comprising 12 questions requesting subjects to indicate the type of health institution in which respondents worked, if their institutions provided an informationist service, their academic background, their participation in clinical rounds, and if they provided library services on clinical floors. Questions were posed about the provision of library instruction on clinical floors, and the provision of services with a laptop and moveable cart on clinical floors were also asked. The author wished to explore whether librarians providing services similar to the informationist are still identified as medical librarians.

The questionnaire was distributed via two library listservs that focus on Health Sciences Librarianship: CANMEDLIB (in Canada) and MEDLIB-L (in the United States). At the time that this research was done, there were approximately 470 subscribers on CANMEDLIB and approximately 1900 subscribers on MEDLIB-L. From a group of 2370 subscribers, only 390 responded. This constitutes an approximate response rate of 16.5%. It is unknown if respondents completed the questionnaire more than once, since there were several reminders sent out over the course of 1 year. Since this study initiated in June 2009, there could have been more informationist positions that were created, or eliminated.

Questions were developed to measure how many health sciences librarians were hired as informationists and how many performed the duties characterized by informationists such as working on the clinical floors, teaching and providing services on clinical floors, and participating in

TABLE 1 Countries Identified

Country	% of respondents
Canada	18%
United States	77%
Other (United Kingdom, Hong Kong, Australia, Saudi Arabia, Europe)	5%

TABLE 2 Respondents by Position

Position	% of respondents
Librarians	69%
Library directors	14%
Library managers	17%

rounds. Further, the author wished to explore their academic background of librarians who responded.

The author used convenience sampling and was aware that it would generate respondents who were subscribers of the two listservs. He was aware that he would not garner all responses from all informationists in Health Sciences Librarianship. The author wished to investigate whether health sciences librarians/CMLs, who did not identify as informationists, performed some of the same duties as informationists. It can be argued that informationists perform the same duties as librarians; however, they have specialized subject expertise, work outside of the library, and are funded by clinical departments.

Survey Monkey was used as the online survey management tool. I.P. addresses were masked and the questionnaire was made anonymous. There was no method to connect the data received to the identity or workplace of the respondent. The breakdown of responses is given in Tables 1 and 2.

The higher proportion of respondents from the United States can be explained by the fact that the MEDLIB-L listserv has four times as many subscribers as CANMEDLIB. This corresponds to the fact there are almost four times as many responses to the questionnaire.

RESULTS AND DISCUSSION

Over 370 respondents completed the questionnaire over a 10-month period spanning from June 2009 to April 2010. The data received was gathered from two Health Sciences Library listservs: CANMEDLIB (in Canada) and MEDLIB-L (in the United States). Table 3 shows a more detailed breakdown of responses.

TABLE 3 Detailed Breakdown of Responses to the Questionnaire

Type of institution	
Teaching hospital	50%
Community hospital	26%
Academic institution	13%
Other	11%
Do you have an academic background in health care?	
Academic background in health care	15%
No background in health care	85%
Do you have an academic background in the sciences?	
Academic background in the sciences	23%
No background in the sciences	77%
Does your institution participate in an informationist service?	
Yes	5%
No	78%
Hybrid	12%
Some characteristics	7%
Do you participate in patient rounds?	
Yes	22%
No	78%
If you participate in rounds, how much time per week is spent (on rounds)?	
Once per week	8%
Twice per week	8%
Three times per week	3%
Once a month	3%
Where do you provide library instruction? (subjects may select more than one)	
Clinical floors	55%
Classrooms outside library, not clinical floors	71%
In library, "one on one"	63%
What is your most popular method of communication with your users? (subjects may select more than one)	
E-mail	95%
Phone	51%
In person	85%
Do you provide services using a laptop and moveable cart?	
Laptop, PDA, Smartphone	35%
Laptop and moveable cart combination	12%
Do not provide these services	55%

The small percentage of respondents who possessed a science or health care background (23% and 15%, respectively) did not indicate what their academic background was.

Seventy-eight percent of all respondents indicated that they do not employ the informationist service model; 5% indicated that they do provide this service model, whereas 12% indicated that they provide a "hybrid" service. Seven percent of respondents indicated that they attend patient rounds or morning reports; however, primarily they work in the library and not on clinical floors.

It is interesting to note that more medical librarians have a background in the sciences (23%) but not in health care (15%). Nineteen percent of respondents worked on clinical floors (informationist model) and 28% of respondents participate in patient rounds. This illustrates that there are 10% of medical librarians who do not identify as informationists but possess the same characteristics in terms of job function. Approximately 5% of respondents acknowledged that they work as informationists, whereas 12% identified as working both in the library and on clinical floors.

The data support the literature that clinical staff are reliant on electronic resources to access information and services.

The data suggest that many medical librarians are participating in informationist-like activities such as participating in rounds, providing services on the clinical floors, and responding to common patient care concerns by providing information packets and illustrates that based on staffing, medical librarians are providing services outside of the library some of the time, but are still based in the library.

LIMITATIONS AND CONCLUSION

For the purpose of this study, convenience sampling was employed to ensure that we reached many librarians in the Health Sciences Discipline. The author decided to reach respondents by focusing on Health Sciences Library listservs only in Canada and the United States. There is some literature on informationists in Australia (20, 24), as well as the Middle East (25), and the United Kingdom (22, 26, 27), but the author decided to focus on Canada and the United States. It should be mentioned that there may have been some informationist listservs that the author missed. He decided to recruit participants from CANMEDLIB and MEDLIB-L because both listservs have subscribers from hospital libraries as well as academic and government health institutions.

It is evident that the data could be distorted because the sample comprised of participants who subscribed to CANMEDLIB and MEDLIB-L. Some informationists may not be members of those listservs. The author did not sample all 2300 plus members from the listservs but asked subjects to participate. There was a 16.5% response rate, which was fair but the data are not representative of the entire population of health sciences librarians, CMLs, and informationists.

In the future, it would be interesting to perform an additional study on the differences between informationists in other countries besides Canada and the United States. It would also be helpful to study physicians' perceptions of the informationist versus the CML. Is there truly a difference? Does removing the word "library" and replacing it with "informationist" really

add credibility and legitimacy? The literature illustrates that the major differences between the CML and the informationist is that the informationist is a permanent member of the clinical care team, they are no longer “library based,” they possess specialized subject knowledge in sciences or health sciences. The literature on job duties indicates that both CML and informationist perform similar functions (9).

Also, a study could be done determining the percentage of time CMLs spend in the library and on the clinical floors, and to compare this with informationists, who primarily work on clinical floors (6, 13). We could also investigate the specific “subject expertise” that is recommended and required for informationists. As well, it would be beneficial to study the different academic backgrounds of informationists. Are informationists with science backgrounds more adjusted than informationists with a social science background?

The research data, though not representative of the population, suggest that informationists are few and far between and are mostly represented in large teaching hospitals affiliated with academic institutions (medical schools) and the National Institutes of Health (NIH). Since the NIH is a medical research institution under the umbrella of the U.S. Department of Health and Human services, its purpose and mission is to conduct research and make important medical discoveries (28). It can be assumed that there is sufficient funding made available for the maintenance and continued training of informationists at the NIH. As for community and teaching hospitals, the literature and data suggest that medical librarians are in fact performing many of the same duties as informationists, and conserving their “library” identities.

REFERENCES

1. Davidoff F, Florence V. The informationist: a new health profession? *Ann Intern Med.* 2000;132:996–998.
2. Detlefsen EG. The education of Informationists, from the perspective of a library and information sciences educator. *J Med Libr Assoc.* 2002;90:59–67.
3. Guessferd M. The clinical librarian/informationist: past, present, future. *J Hosp Libr.* 2006;6:65–73.
4. Morley SK, Buchanan HS. Clinical medical librarians: extending library resources to the clinical setting. *J Hosp Libr.* 2001;1:15–30.
5. Cunningham DJ, Kronrnfeld MR. The informationist: a debate. *J Hosp Libr.* 2004;4:1–15.
6. Kronenfeld M. The informationist: a new health profession? So what are we? Chopped liver? *Natl Netw.* 2000;25:1–15.
7. Robison, RR. Informationist education. *Med Ref Serv Q.* 2008;27:339–347.
8. Freiburger G, Kramer S. Embedded librarians: one library’s model for decentralized service. *J Med Libr Assoc.* 2009;97:139–142.

9. Rankin JA, Grefsheim SF, Canto CC. The emerging informationist specialty: a systematic review of the literature. *J Med Libr Assoc.* 2008;96:194–206.
10. Freeman GT. The library as place: changes in learning patterns, collections, technology, and use. In: Smith K, editor. *Library as Place: Rethinking Roles, Rethinking Space.* Washington, DC: Council on Library and Information Resources; 2005.
11. Plutchak TS. Informationists and librarians. *Bull Med Libr Assoc.* 2000;88:391–392.
12. Brown HA. Clinical medical librarian to clinical informationist. *Ref Serv Rev.* 2004;32:45–49.
13. Robison RR, Ryan ME, Cooper ID. Inquiring informationists: a qualitative exploration of our role. *Evid Based Libr Inf Pract.* 2009;4:4–16.
14. Schacher LF. Clinical librarianship: its value in medical care. *Ann Int Med* 2001;134:717–720.
15. Algermissen V. Biomedical librarians in a patient care setting at the University of Missouri–Kansas City School of Medicine. *Bull Med Libr Assoc.* 1974;62:354–358.
16. Feree N, Schaeffer N, Butson LC, Tennant MR. Liaison librarian tiers: levels of service. *J Med Libr Assoc.* 2009;97:145–148.
17. National Institutes of Health Library. (2010). Informationists. <http://nihlibrary.nih.gov/LibraryServices/Pages/Informationists.aspx> (5 Apr 2010).
18. Welch Medical Library. (n.d.). Informationist Services for Selected User Groups. <http://www.welch.jhu.edu/liaison/index.html> (5 Apr 2010).
19. Tennant MR, Tobin T, Sherwill-Navarro P, Jesano R. Evaluation of a liaison librarian program: client and liaison perspectives. *J Med Libr Assoc.* 2006; 94: 402–409, e201–e204.
20. Sladek RM, Pinnock C, Phillips PA. The informationist: a prospective uncontrolled study. *Int J Qual Health Care.* 2004;16:509–515.
21. University of Waterloo. (n.d.). Department of Sociology—Liaison Librarian. <http://sociology.uwaterloo.ca/liaison.html> (5 Apr 2010).
22. Winning MA, Beverley CA. Clinical Librarianship: a systematic review of the literature. *Health Inf Libr J.* 2003;20(Suppl 1):10–21.
23. Shumaker D. Who let the librarians out? *Ref User Serv Q.* 2009;48:239–242.
24. Sladek RM, Pinnock C, Phillips PA. The informationist in Australia: a feasibility study. *Health Inf Libr J.* 2004;21:94–101.
25. Gavvani VZ. Evidence-based medical librarianship in Iran: an introduction. *Webology.* 2009;6:1–10.
26. Harrison J, Sargeant SJE. Clinical librarianship in the UK: temporary trend or permanent profession? Part II: present challenges and future opportunities. *Health Inf Libr J.* 2004;21:220–226.
27. Swinglehurst DA. Information needs of United Kingdom primary care clinicians. *Health Inf Libr J.* 2005;22:196–204.
28. National Institutes of Health. (2010). About NIH. <http://www.nih.gov/about> (5 Apr 2010).

APPENDIX 1: SAMPLE QUESTIONNAIRE

1. Where is your hospital library located?
 - Canada
 - United States
 - Other (please specify)
2. What type of health institution?
 - Community hospital
 - Teaching hospital
 - Academic institution
 - Partial Teaching hospital
 - Rural hospital
 - Geriatric hospital
 - General hospital
 - Specialized hospital
 - Children's hospital
 - Mental Health
 - Other (please specify)
3. Do you have an academic background in health care?
 - Yes
 - No
4. Do you have an academic background in the Sciences?
 - Yes
 - No
5. What is your job title?
 - Director
 - Manager
 - Coordinator
 - Librarian
 - Library Technician/Library Assistant
 - Other (please specify)
6. How are library services delivered (excluding library instruction)? (you may check more than once response)
 - Patrons come to the library
 - Library staff deliver materials to staff
 - Library staff consult with staff/physicians in their offices
 - Library staff work on clinical floors (informationist model)
 - Library staff make "rounds" with clinical staff
 - Hybrid model (mix of both)
 - Other (please specify)
7. An informationist is a specialized type of Clinical Medical Librarian who works on clinical floors, has specialized training and works "in a clinical context". Does your library follow that model?
 - Yes

- No
Some library staff work on clinical floors, but we also have library staff working in the library
Other (please specify)
8. Do you participate in patient rounds with members of the health care team?
Yes, I participate in patient rounds
No, I do not participate in patient rounds
9. If you participate in patient rounds, how many times per week?
N/A—I do not participate in patient rounds
Once per week
Twice per week
Three times per week
More than three times per week
1–3 times per month
10. How is Library Instruction delivered? (you may check more than one response)
Classrooms in the library
Classrooms outside the library
Delivered in the library, but not in a classroom
We do not offer Library instruction
We do not have any classrooms
Delivered on clinical floors and in users' offices
Other (please specify)
11. How do you communicate with your patrons/users? (select 2 most popular)
Face to face
E-mail
Telephone
Fax
Other (please specify)
12. Do you have a “mobile” library service (laptop on a truck?)
Yes, we have our own laptop and truck that we bring to clinical floors
No, we only provide our services in the library
We share our laptop and truck with other departments in the hospital
Other (please specify)

Copyright of Journal of Hospital Librarianship is the property of Taylor & Francis Ltd and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.