

HISTORICAL NOTES

Clinical librarianship

Some thirty years ago, Gertrude Lamb identified a gap between what medicine as a discipline knew about good patient care and the knowledge that was actually applied to the care of patients [1]. Seeing an opportunity for medical librarians to help make the connection, she pioneered the concept of librarians who participated on clinical rounds to identify and meet information needs related to current cases. Lamb established the first clinical medical librarian (CML) program at the University of Missouri-Kansas City (UMKC) School of Medicine in 1971 and continued her efforts at Hartford Hospital and the University of Connecticut Health Center in 1974 [2, 3].

Defining a role

As the early programs were described,

a medical librarian is assigned to an inpatient service and attends rounds and conferences with the patient-care team. The clinical librarian searches current medical literature for answers to questions relating to patient care and management and provides the clinicians on her assigned hospital service with relevant articles. The review of the actual journal article for its appropriateness sets the clinical librarian apart from a library service that provides a bibliography or a list of citations in response to a question. [4]

Cimpl summarized the reasons clinical library services were offered: "to provide information quickly to physicians and other members of the health care team; to influence the information-seeking behavior of clinicians and improve their library skills; and to establish the medical librarian's role as a valid member of the health care team" [5].

An article in 1978 attempted to

answer the question of what these new clinical medical librarians do and why.

When medical librarians get together the title and role of the "clinical medical librarian" . . . prompt curiosity and controversy. . . . [W]e are basically reference librarians in a medical school-hospital setting. There are, however, two differences between traditional library-based reference work and the work of the CML: (1) We "take the library to the user" on the hospital ward, in the out-patient clinic, and in the medical school teaching areas; (2) We anticipate our users' questions and often provide information before they have asked for it. . . . Because we are literally at the elbows of our users it is easy for them to make direct requests for information about specific diagnostic and treatment problems. More often we anticipate questions simply by listening to the discussion and identifying matters dealt with in recent papers that will contribute to students' and residents' learning and, indirectly, improve patient care. [6]

Other pioneers in the movement, inspired by Lamb's presentation at a Medical Library Association (MLA) annual meeting, included both hospital and medical school libraries. Cedars-Sinai Medical Center in Los Angeles [7], University of Washington in Seattle [8], Cook County Hospital in Chicago [9], and Washington University School of Medicine in St. Louis [10] began clinical library services in 1973 and 1974. In 1985, a selective chronology described twenty-three programs [11], and a 1993 article counted twenty-nine programs reported in the literature [12].

Communicating the concept

The literature has reflected the evolution of the clinical medical librarian, or clinical librarian. As numer-

ous libraries started programs, publication on the subject increased; the later decline corresponded with pressures to discontinue the service. A search of library and medical literature showed nine articles in the startup period of 1971 to 1977 and thirty-nine articles from 1978 to 1987 during expansion of the concept. A journal, *Clinical Library Quarterly*, was published from 1982 to 1986, and an MLA continuing-education course was developed in 1981. Since 1987, only thirteen articles and editorials have appeared, although several recent ones have indicated a renewed interest in the concept. A more comprehensive bibliography maintained by UMKC indicated a similar publication bulge from the mid-1970s to mid-1980s [13].

A news item in the 1974 *Journal of the American Medical Association* announced a grant to support clinical librarians.

The only person remotely resembling a librarian in hospital wards used to be the volunteer wheeling the book cart. Now, that may change. For at least the next two years, librarians will accompany teaching physicians and medical students on rounds in the hospitals linked with the University of Connecticut Health Center, Farmington. [14]

Articles about clinical librarianship appear in both the library and medical literature, often authored jointly by librarians and physicians. This illustrates the nature of the partnership required for programs, as well as the political strategy of the library community to gain visibility for clinical librarianship among potential users and supporters.

Several valuable reviews of clinical librarianship are available. Cimpl documented the develop-

ment and literature of clinical medical librarianship and the related Literature Attached to the Chart (LATCH) service before 1985 [15]. Stoddart and McCloskey examined clinical librarianship as part of their introduction to outreach programs [16]. Makowski covered the literature in the decade after Cimpl's review to discuss potential roles for the clinical librarian [17].

Studies that evaluate clinical library programs are prominent in the literature. Several factors may account for this. The original programs were supported by grant funding from the National Library of Medicine, and the proposals included hypotheses to be tested. The introduction of a new library service affords the opportunity to evaluate it from the beginning. Also, such a labor-intensive program calls for the justification of resources devoted to it.

Clinical librarians in the Hartford Hospital program recorded, in diaries, their observation of critical incidents related to acceptance of the librarian, changes in information-seeking behavior, and impact on patient care [18]. Examples of evaluations based on the views of health professionals receiving the service include Scura and Davidoff who found that house officers reported that medical literature supplied by clinical librarians affected patient management in 20% of the cases [19]. Marshall and Neufeld conducted a randomized trial and detected differences in information-seeking behavior between settings with experimental clinical librarian service and control settings [20]. Demas and Ludwig studied differences in attitudes toward clinical medical library programs between clinical department heads and health sciences library directors in medical schools without CML service [21]. In the most recent of these examples of evaluations, Kuller analyzed the similarity between selection of relevant clinical articles by librarians and physicians and

found no significant difference in utility [22].

Environmental influences

Clinical library programs vary according to the unique circumstances of each institution. Modifications are made to accommodate library staff size and financial resources. The targeted user populations also differ; for example, the McMaster University Medical Centre project emphasizes use of the service by nonphysician members of the team and has instituted an information service for patients and their families [23]. In addition, the advent of end-user searching has caused a re-examination of the role of clinical librarians, with more emphasis on instructional and consultative aspects. Many articles have begun to address this issue.

Yet CML programs are more than rapid-delivery search and photocopy services. Rather than threatening the existence of CML programs, teaching computerized searching and bibliographic skills can make it possible for librarians to expand existing programs and enhance the role of the CML by adding a variety of educational experiences to CML services and creating a more worthwhile relationship with the clinical staff. [24]

Ultimately, budget concerns have impacted the movement the most. Despite its success, its viability has been questioned. The pressure to reduce health care costs and the climate for library budgets make it difficult to sustain programs requiring a great amount of library staff time and providing personalized service to a limited number of departments.

Importance today

Despite this pressure, recent calls in the literature have renewed attention to the role of clinical librarianship. Giuse warns against re-

treating into safe, traditional territory.

Of all the activities in which librarians engage, CML programs may have the highest potential for demonstrating to clinicians that librarians are capable of managing information needs in a manner that cannot be duplicated or replaced by any other source. If we forego activities that increase our visibility and importance to the medical center's mission, the library will almost certainly fall into the category of a "luxury" and perhaps even become obsolete. I believe we have *no choice* but to migrate into the clinical setting; to avoid doing so is to deny our future in the information age. [25]

Davidoff and Florance, in a 2000 *Annals of Internal Medicine* editorial, see the same literature-practice gap today as that identified by Lamb in the early 1970s, despite an emphasis on evidence-based medicine and developments in technology and information sources.

[T]he medical profession falls far short in its efforts to make the critical link between the huge body of information hidden away in the medical literature and the information needed at the point of care. This failure means not only that many opportunities for improved patient care and continued learning are missed but also that much of the effort, creativity, and money that go into biomedical research is simply wasted. [26]

They propose a national program, modeled on the experience of clinical librarianship, to train, credential, and pay for a new profession of "informationists," educated in both clinical and information disciplines, with the potential to improve the quality of care as well as its cost-effectiveness [27]. Giuse echoes the need for clinical librarians to develop "a high level of clinical knowledge that supports their ability to interact on rounds, to search effectively, and—crucially—to *interpret* the medical literature" [28].

Clinical librarianship has perhaps been one of the most innovative concepts to be introduced into health sciences libraries. The ideas behind it continue to inspire health sciences librarians and to guide priorities. It moves the hospital librarian beyond the support and service role toward a more direct role in patient care [29]. The level of involvement by librarians in facilitating use of clinical information has developed out of past programs. The evidence-based medicine process—with its emphasis on a question arising from a patient and selecting, appraising, and applying evidence to practice—parallels the clinical librarianship process and affords opportunities for librarians to participate as members of the health care team. Efforts to integrate knowledge resources with medical record systems recall the LATCH efforts to augment the patient chart with patient-related literature. The overall goal in librarianship, to make information available at the point of need, has been strengthened by the philosophy and programs of clinical librarianship.

Acknowledgments

Thanks to Taneya Koonce and Joanne Gard Marshall for their contributions to this column.

*Carolyn E. Lipscomb
History Editor
Chevy Chase, Maryland*

References

- ACARI R, LAMB G. The librarian in clinical care. *Hosp Med Staf* 1977 Dec; 6(12):18–23.
- ALGERMISSEN V. Biomedical librarians in a patient care setting at the University of Missouri–Kansas City School of Medicine. *Bull Med Libr Assoc* 1974 Oct;62(4):354–8.
- LAMB G, JEFFERSON A, WHITE C. And now, clinical librarians on rounds. *Hartford Hosp Bull* 1975 Jun;30(2):77–86.
- ACARI, op. cit., 18.
- CIMPL K. Clinical medical librarianship: a review of the literature. *Bull Med Libr Assoc* 1985 Jan;73(1):21–8.
- CLAMAN GG. Clinical medical librarians: what they do and why. *Bull Med Libr Assoc* 1978 Oct;66(4):454–6.
- COLAIANNI LA. Clinical medical librarians in a private teaching-hospital setting. *Bull Med Libr Assoc* 1975 Oct; 63(4):410–1.
- SCHNALL JG, WILSON JW. Evaluation of a clinical medical librarianship program at a university health sciences library. *Bull Med Libr Assoc* 1976 Jul; 64(3):278–81.
- ROACH AA, ADDINGTON WW. The effects of an information specialist on patient care and medical education. *J Med Educ* 1975 Feb;50(2):176–80.
- STAUDT C, HALBROOK B, BRODMAN E. A clinical librarians' program—an attempt at evaluation. *Bull Med Libr Assoc* 1976 Apr;64(2):236–8.
- CIMPL, op. cit., 22.
- ROYAL M, GRIZZLE WE, ALGERMISSEN V, MOWRY RW. The success of a clinical librarian program in an academic autopsy pathology service. *Am J Clin Pathol* 1993 May;99(5):576–81.
- PFANNENSTIEL BR. Clinical medicine librarian bibliography. [Web document]. Kansas City: University of Missouri–Kansas City, 1998. [rev. May 1998; cited 14 Jun 2000]. <<http://research.med.umkc.edu/teams/cml/CMLbib.html>>.
- And now, clinical librarians on rounds. *JAMA* 1974 Oct 28;230(4):521.
- CIMPL, op. cit.
- STODDART JM, MCCLOSKEY KM. Specialized types of reference and information services. In: Wood MS, ed. *Reference and information services in health sciences libraries*. Metuchen, NJ: Medical Library Association and Scarecrow Press, 1994:245–97. (Current practice in health sciences librarianship, v.1).
- MAKOWSKI G. Clinical medical librarianship: a role for the future. *Bibl Medica Canadiana* 1994;16(1):7–13.
- LAMB G. A decade of clinical librarianship. *Clin Libr Q* 1982 Sep;1(1): 2–4.
- SCURA G, DAVIDOFF F. Case-related use of the medical literature: clinical librarian services for improving patient care. *JAMA* 1981 Jan 2;245(1):50–2.
- MARSHALL JG, NEUFELD VR. A randomized trial of librarian educational participation in clinical settings. *J Med Educ* 1981 May;56(5):409–16.
- DEMAS JM, LUDWIG LT. Clinical medical librarianship: the last unicorn? *Bull Med Libr Assoc* 1991 Jan;79(1):17–27.
- KULLER AB, WESSEL CB, GINN DS, MARTIN TP. Quality filtering of the clinical literature by librarians and physicians. *Bull Med Libr Assoc* 1993 Jan; 81(1):38–43.
- MARSHALL JG, HAMILTON JD. The clinical librarian and the patient: report of a project at McMaster University Medical Centre. *Bull Med Libr Assoc* 1978 Oct;66(4):420–5.
- HALSTED DD, WARD DH, NEELEY DM. The evolving role of clinical medical librarians. *Bull Med Libr Assoc* 1989 Jul;7(3):299–301.
- GIUSE NB. Advancing the practice of clinical medical librarianship [editorial]. *Bull Med Libr Assoc* 1997 Oct; 85(4):437–8.
- DAVIDOFF F, FLORANCE V. The informationist: a new health profession? [editorial]. *Ann Intern Med* 2000 Jun 20;132(12):996–8.
- IBID., 997–8.
- GIUSE NB, KAFANTARIS SR, MILLER MD, WILDER KS, MARTIN SL, SATHE NA, CAMPBELL JD. Clinical medical librarianship: the Vanderbilt experience. *Bull Med Libr Assoc* 1998 Jul;86(3): 412–6.
- MARSHALL JG. Issues in clinical information delivery. *Libr Trends* 1993 Summer;42(1):83–107.