

The impact of the clinical librarian: a review

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Abstract

The historical development of clinical librarian roles is outlined. Recent literature on the impact of clinical librarian services is described, the practical difficulties of impact evaluation discussed, and some suggestions of future trends suggested.

Key words: libraries, hospital; librarians; information dissemination; evaluation studies as topic.

Introduction

2015 saw the death of two people to whom the profession-within-a-profession that is clinical librarianship owes a great debt. The first, Gertrude Lamb (1), started one of the first clinical librarian (CL) services in 1973 at the Hartford Hospital, Connecticut, attending rounds with physicians and nurses. Interest in clinical librarianship grew and, outside North America, the first British project was a pilot at Guy's Hospital, London, in 1979. However it was not until the development of the evidence-based healthcare movement in the 1990s, synonymous with the late Dr David Sackett (2), that the second period of clinical librarianship, one of widespread development of CL services, could begin.

Librarianship and librarians owe a great deal to Sackett. He realised that the practice of evidence-based healthcare required quick and easy access to the evidence. Those who, like the author, heard him give the 1995 Bishop-Le Fanu lecture found it to be a professionally and personally transformative experience. In those days he and his firm would manhandle an "evidence cart" onto the wards. Nowadays, with widespread ownership of mobile devices and widespread Internet connectivity, the evidence cart can be carried in a clinician's pocket. Technological factors undoubtedly did much to enable the new CL services being developed at this time.

The number of CL, embedded librarian and informationist posts has grown and an international

conference, sometimes held in conjunction with other conferences in our field, is well established. The International Clinical Librarians Conference was most recently held as a satellite event of the 2015 Edinburgh EAHIL Workshop.

A growing literature

A growing professional literature of the specialism has in recent years focused on the impact of CL roles. Brettle *et al.*'s (3) systematic review is based on a comprehensive survey of the literature and an analysis of the practice of clinical librarianship, describing four models of service, and suggesting that a mixed methods approach would be most suitable for evaluating CL services, that an increased methodological robustness was desirable, that Critical Incident Technique (CIT) could be useful to demonstrate specific instances of impact, and that data should be collected on the usefulness and relevance of CL services, on specific impacts on patient care and how services support organisational objectives.

Writing in the same issue of the *Health Information and Libraries Journal*, Booth (4) cautions against comparing apples, in the time honoured phrase, with oranges, and asks if a methodology to measure impact can ever be sufficiently bias-free to be useful. Booth also draws attention to the methodological bias in critical incident technique which, in the absence of more robust study designs, has become the method of choice for impact studies. He cautions that the considerable heterogeneity

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between different models of clinical librarianship makes evaluation difficult, and draws attention to the dangers of selection bias in the choice of teams to which the CL service might be deployed, the different characteristics of the services delivered by clinical librarians and the difficulties of comparison and measurement of outcomes.

Since then other studies have been published. Esparza (5) and her co-authors use a case-control study to compare two clinical teams, one which included a clinical medical librarian on daily rounds, and one which did not. She finds that patient in the team with a clinical librarian tend to be sicker and to experience higher lengths of stay, costs and readmission rates. They find no difference in clinical outcomes between the two groups. Nevertheless, their study represents the largest-scale study published to date.

Aitken *et al.* (6), also using a case control study design, find that teaching delivered by a CL has a positive effect on medical trainees' ability to locate and evaluate evidence, and suggests that further studies should attempt the economic evaluation of the widespread implementation of CLs.

Deshmukh (7), writing with the present author, reports on a study of the Clinical Librarian service in Brighton which used qualitative rather than quantitative methods to determine the feasibility of a framework which could be used for the evaluation of clinical librarian roles. Deshmukh argued that, while full scale quantitative studies to demonstrate the value and impact of clinical librarian roles might be impossible, nevertheless a framework for the assessment of CLs could be achieved. Her study looks, rather than at direct impact on patient care, on clinical decision making, education or CPD, clinical governance and research. her study uses the perspectives of the users, rather than that of the library. She finds that, though impact could not be measure by exclusively quantitative methods, formative techniques to evaluation were feasible and could contribute to better marketing to the clinical librarian services. Further work on the same CL service conducted by Crook (8) and presented at the 2015 EAHIL Workshop developed Deshmukh's ideas looking at the contribution of the clinical librarian to quantifiable documentary outputs, such as journal articles, guidelines and protocols.

As this article goes to press, we await publication of

further work on impact by Alison Brettle and librarians in the National Health Service, a large-scale study set in the North West of England.

Demonstrating impact

The political and economic crises in which all developed countries find themselves bring with them an increased necessity for library and knowledge services to be able to justify themselves. The possibility that we might be able to demonstrate an impact on patient care, on length of patient stay, or the use of expensive interventions, would allow us to make a solid and compelling case for the CL service.

At the moment, we have work to do to move beyond the project stage of clinical librarianship. Many CLs are still employed on short-term contracts, dependent on precarious sources of funding such as charitable grants, or linked to research grants brought in to the organisations. Clinical librarian services are, by definition, not offered universally to all healthcare teams in an organisation, and the rationale for offering the service to department A and not to Department B needs to be more robust than it currently is; in the author's experience it is often dependent on personal relationships, political and cultural factors.

Until recently in the English NHS funding for NHS Library and Knowledge Services (LKS) came mainly through educational funding streams; there remains resistance in some quarters to librarians supporting activities other than purely educational ones, although the *raison d'être* of the hospital is patient care.

As health care moves, in many countries, to delivery more and more in primary care, embedded roles have been developed in other sectors. In the author's service two Clinical Librarians serve five directorates in an acute hospital (Abdominal Surgery and Medicine, Acute Floor, Children's Services, Musculoskeletal, Women's Services) and team members are also embedded in mental health, primary care and public health. Each of these librarians is based within a host organisation, bringing knowledge to bear at the point of use.

It is also clear that, as Brettle argued, multiple models of clinical librarianship exist. In the author's team mentioned above, the CL service adapts to the needs of teams. While attendance at departmental

activities, on and off wards, remains the *sine qua non* of a CL service. Different Department wish to use the CL in different ways; some to support or establish journal clubs, others want presence at, and input into clinical governance, audit and Morbidity and Mortality Review (MMR) meetings, many will want information skills and critical appraisal training, others still look for help with guidelines revision and development, and of course, expert searching services. The CL service has become a menu from which departments may chose the items they find most attractive and nourishing.

The future

As this profession within a profession develops, more attention needs to be given to the education and training of the clinical librarian of the future. While the informationist role proposed by Davidoff and Florance (9) required a graduate in biologic sciences, such graduates remain in short supply and are not always attracted to the profession of librarianship. Dedicated educational programmes delivered either before entry to the profession or “on the job” to equip the CL student and practitioner with the necessary clinical background, as well as the skills from the librarianship domain to which we are accustomed, will become important.

As libraries gather more and more data about their services, so we will be better be able to analyse and understand trends. The KnowledgeShare system, presented by Skinner at EAHIL in 2014 (10), offers current awareness services, but also brings together data on the teaching and searching activities of librarians, including those in embedded roles, across many LKSs in England. Understanding this data will help us steer the line of march of development of CL services.

In the English NHS, a new development framework for NHS Library and Knowledge Services was launched earlier this year, Knowledge for Healthcare (11). One of its ambitions is to increase the proportion of LKSs with clinical or outreach librarians from 58% to 80%. Task and finish groups are now working on how to make the ideas of Knowledge for Healthcare a practical reality.

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REFERENCES

1. Detlefsen EG, Gertrude H. Lamb, 1918-2015, AHIP, FMLA. J Med Libr Assoc [Internet]. 2015 Jul [cited 2015 Nov 12];103(3):121-2. Available from: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=4511050&tool=pmcentrez&rendertype=abstract>
2. Straus SE, Eisinga A, Sackett DL. What drove the evidence cart? Bringing the library to the bedside. JLL Bull Comment Hist Treat Eval [Internet]. 2015; Available from: <http://www.jameslindlibrary.org/articles/what-drove-the-evidence-cart-bringing-the-library-to-the-bedside/>
3. Brettle A, Maden-Jenkins M, Anderson L, McNally R, Pratchett T, Tancock J, et al. Evaluating clinical librarian services: a systematic review. Heal Inf Libr J [Internet]. 2011 Mar 27 [cited 2010 Dec 30];28(1):3-22. Available from: <http://doi.wiley.com/10.1111/j.1471-1842.2010.00925.x>
4. Booth A. Evaluating clinical librarians: mixing apple merchants and orange sellers? Health Info Libr J [Internet]. 2011 Mar [cited 2012 Mar 23];28(1):87-90. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/21314899>
5. Esparza JM, Shi R, Mclarty J, Comegys M, Banks DE. The effect of a clinical medical librarian on in-patient care outcomes. J Med Libr Assoc [Internet]. 2013 Jul;101(3):185-91. Available from: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3738078&tool=pmcentrez&rendertype=abstract>
6. Aitken EM, Powelson SE, Reaume RD, Ghali WA. Involving clinical librarians at the point of care: results of a controlled intervention. Acad Med [Internet]. 2011 Dec [cited 2013 Sep 26];86(12):1508-12. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/22030761>
7. Deshmukh A, Roper T. An investigation into the feasibility of designing a framework for the quantitative evaluation of the Clinical Librarian service at an NHS Trust in Brighton, UK. Health Info Libr J [Internet]. 2014;31(4):314-7. Available from: <http://onlinelibrary.wiley.com/doi/10.1111/hir.12084/abstract>

8. Divall P, Hull LA, Sutton S. Report from the International Clinical Librarian Conference, University of Edinburgh, 10-12 June 2015. JEAHIL [Internet]. 2015 [cited 2015 Nov 16];11(3):39-40. Available from: <http://eahil.eu/wp-content/uploads/2015/09/39-40-Divall.pdf>
9. Davidoff F, Florance V, Plutchak TS. Informationists and librarians. Bull Med Libr Assoc. 2000;88(October):391-2.
10. Skinner B. KnowledgeShare: A web-based tool to connect people with evidence and to connect people with people. JEAHIL. 2014;10(3):4-8.
11. Health Education England. Knowledge for Healthcare: a development framework for NHS library and knowledge services in England 2015-2020 [Internet]. 2015 [cited 2015 Nov 16]. Available from: <http://hee.nhs.uk/wpcontent/blogs.dir/321/files/2014/12/Knowledge-for-healthcare-framework.pdf>