

The Vital Role of Medical Librarians in a Time of Information Overload

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In 2010, award-winning author Neil Gaiman was appointed the Honorary Chair of National Library Week. During an interview about the volume of information available in the public realm and the importance of libraries, he said the following about librarians:

“Google will bring you back, you know, 100,000 answers. A librarian will bring you back the right one.”

In the 12 years since he made that comment, the volume of information available online has grown exponentially and a search in Google that generates 100,000 results seems positively small at this point. While Google is a useful tool, it can quickly result in information overload. Moreover, anyone can add content to the global online repository, making it difficult to distinguish between high-quality and low-quality information. In his 2010 interview, Gaiman highlighted 2 important aspects that are essential to a librarian’s professional skill set: understanding the information landscape and accurately retrieving relevant and valid information.

The changing information landscape has only served to transform the role of medical libraries and librarians and to highlight their crucial role in supporting rigorous scientific research. In particular, librarians who specialize in the field of health technology assessment (HTA) have taken on the role of monitoring the evolving landscape of information sources and technological advancements. They have developed advanced searching skills and acquired an in-depth knowledge of current and emerging information sources, including high-powered medical and policy databases. Critically, they are experts in grey literature – the information that is not found in databases and which may be produced outside of traditional publishing channels and peer-review processes. They are increasingly included as full members of the systematic review team and co-authors on resulting publications. Their expertise in systematic search methods helps to minimize bias at the outset of the research process, retrieve as many relevant studies as possible, and ensure all relevant sources of information are included in a review.

With such a large volume of information available, the technical skills of HTA librarians and their advanced methodologies are invaluable. HTA librarians are part content experts and part database hackers, helping to ensure that a literature search is as comprehensive and efficient as possible. Using creative combinations of keywords, controlled vocabulary, and database codes, they capture relevant information and narrow down and exclude as many irrelevant citations as possible. It is a balancing act that benefits from transparency, peer review, and shared methodologies.

Building communities of practice (CoP) among HTA librarians offers opportunities to strengthen skill sets, discuss methodological standards in information retrieval, and nurture broad participation

in these conversations. The CoPs include associations such as the Information Retrieval Group from Health Technology Assessment International (HTAi), EUnetHTA's newly established Information Specialist Network, and Canada's Canadian Health Libraries Association (CHLA/ABSC) Knowledge Synthesis Interest Group, as well as teams such as the information specialists at The Cochrane Library and CADTH. These intentional connections have led to the development of foundational methodological guidance for information retrieval for systematic reviews and HTAs, such as the *Cochrane Handbook for Systematic Reviews of Interventions*,¹ EUnetHTA's *Process of information retrieval for systematic reviews and health technology assessments on clinical effectiveness*,² PRISMA-S: an extension to the PRISMA Statement for Reporting Literature Searches in Systematic Reviews,³ and the PRESS Peer Review of Electronic Search Strategies.^{4,5} Additionally, the Research Information Services team at CADTH has developed [Grey Matters: A Tool for Searching Health-Related Grey Literature](#), the [CADTH Search Filters Database](#), and [COVID-19 grey literature resources](#) and [search strings](#).

This October we celebrate librarians with Canadian Library Month and Medical Librarian's Month in the US. The theme for our Canadian awareness month is "One card, one million possibilities" and in the US it is "Make Better Decisions Faster: Consult Your Health Information Professional." These themes encapsulate the inherent value of libraries and librarians: their ability to help us make sense of millions of possibilities (or multiple sources) and provide expert guidance on trustworthy sources. This month, CADTH celebrates our Research Information Services team and their vital contributions to CADTH's work and the global community of medical librarians.

References

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