Evidence Summary

Medical Librarians may be Underutilised in EBM Training within Pediatric Resident Programs

A Review of:
Boykan, R., & Jacobson, R. M. (2017). The role of librarians in teaching evidence-based medicine to pediatric residents. *Journal of the Medical Library Association*, 105(4), 355-360. [https://doi.org/10.5195/jmla.2017.178](https://doi.org/10.5195/jmla.2017.178)

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Abstract

**Objective** – To identify the use and role of medical librarians in pediatric residency training, specifically in the teaching of evidence-based medicine (EBM) to medical residents. This research also aims to describe current strategies used for teaching evidence-based medicine in pediatric residency training programs.

**Design** – Web-based survey.

**Setting** – Pediatric residency programs within the United States of America.

**Subjects** – 200 members of the Association of Pediatric Program Directors (APPD).

**Methods** – The 13-question, web-based survey used multiple choice and short answer questions to ask how pediatric residency programs used medical librarians. The survey collected demographic information such as program name, geographic region, and program size. Where respondents indicated their programs utilised librarians, the survey asked about their specific role, including involvement in EBM curricula. For respondents who indicated their programs did not use librarians, the survey asked about their...
reasons for not doing so, and to describe their EBM curricula. Researchers used SPSS software to analyse the quantitative data.

**Main Results** – Overall 91 (46%) APPD-member program directors responded to the online survey. Of these, 76% of program directors indicated a formal EBM curriculum in their residency programs. Medical librarians were responsible for teaching EBM in 37% of responding pediatric programs. However, only 17% of responding program directors stated that medical librarians were involved in teaching EBM on a regular basis. The EBM skills most commonly taught within the pediatric residency programs included framing questions using PICO (population, intervention, comparator, outcome), searching for relevant research literature, and critical appraisal of studies. The strategies reported as most effective for teaching EBM in pediatric residency training programs were journal clubs, regular EBM conferences or seminars, and ‘morning reports.

**Conclusion** – The study concluded that medical librarians may be important in the teaching of EBM in pediatric residency programs, but are likely underutilised. The librarian might not be seen has having a significant role in forums such as journal clubs, despite these being a predominant venue for EBM teaching. The authors recommend that program directors and faculty work together to better integrate medical librarians’ expertise into clinical teaching of EBM.

**Commentary**

There have been several investigations in different types of residency program into EBM curricula and their effectiveness over the last two decades (Burneo, Jenkins, & Bussière, 2006; Green, 2000; Kuhn, Wyer, Cordell, & Rowe, 2005). However, only more recently has an understanding of the role of the medical librarian in EBM teaching emerged. Zeblisky, Birr, and Sjursen Guerrero (2015) demonstrated positive improvements to the learning experience where medical librarians have been involved in improving an EBM curriculum by being a part of an EBM sub-committee. The authors of this study further highlight the opportunity to involve medical librarians in the design and implementation of EBM teaching and to understand librarians’ role in pediatric residency programs.

An appraisal of the article using Glynn’s (2006) critical appraisal checklist identified areas of concern about the study’s validity, specifically around population bias and the methods used. The study presents only one perspective related to the topic: that of program directors. The authors do not discuss how the study’s design limits or eliminates bias, nor how alternative populations are considered. However, the authors do acknowledge possible reporter bias in the responses. The authors acknowledge the use of a non-validated survey tool, though its development involved various stakeholders. The survey tool was not published with the article.

This study acknowledges a role for medical librarians’ involvement in teaching EBM curriculum in pediatric residency programs. By doing so, the authors identify a potential gap (and opportunity) for medical librarians to assist program directors to enhance the teaching and learning experience. The study also provides an update on EBM teaching methods and the skills taught in pediatric residency programs. Although the survey had a 46% response rate, the population sample did represent a spread of varying program sizes, based on the number of residents.

The main finding of this study was that medical librarians are likely underutilised in EBM training. What is significant about this study is that it provides evidence of the skills most commonly taught in pediatric residency programs, and venues perceived by program directors to be most effective in teaching EBM. These skills and venues show where medical librarians can further develop their expertise and knowledge and become involved in EBM teaching in residency programs.
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