MEASURING THE IMPACT OF A SYSTEMATIC REVIEW SERVICE

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BACKGROUND AND OBJECTIVES

In 2010, a systematic review service was launched at Hardin Library to support improvement of adherence to standards. This service, though popular and in continual development, has not been formally evaluated. Goals of this project are as follows:

1. To determine the degree of impact our service has had on librarian acknowledgement or authorship
2. To evaluate the impact of our service on the quality of search methods and reporting
3. To gain knowledge about issues with reporting standards by department to allow focused outreach efforts

METHODS

CINAHL, Embase, Scopus, and PubMed searches were conducted for the past 10 years. Records were screened to ensure capture of systematic reviews or meta-analyses with a University of Iowa health sciences author.

RESULTS

As detailed by the charts, adherence to standards is less than desired and varies by department. Examples of common search methodology problems noted during data extraction include errors that compromise reproducibility, errors in selection of terms and syntax, incorrect terminology in database reporting (e.g., EBSCO, NLM, Google Scholar), use of pre-set filters, and use of only keywords. Interestingly, we observed a few researchers who collaborated with Hardin librarians to produce papers that correctly followed guidelines but later produced lower quality systematic reviews without librarian assistance.

CONCLUSIONS

The number of papers published in the past 10 years at our institution far exceeds our capacity to provide individual support on all projects. Efforts to expand our program by training additional librarians are underway but may not be sufficient. We see a need to emphasize education and outreach in various forms to improve systematic review quality.

We will target highly productive departments and faculty with messaging that emphasizes methodological standards and highlights common errors found in this study. We will also use workshops and a LibGuide to accomplish this task for all faculty. One particular goal will be to initiate conversations with influential faculty who have produced systematic reviews with varying levels of search quality to communicate the importance of improving scientific rigor and mentoring through better adherence to standards.

Full text analyzed for the following:
- Department of affiliated author
- Hardin librarian author or acknowledgement
- Inclusion of the PRISMA flowchart
- Replicability of the search strategies
- Indicators of a systematic search:
  - Subject headings and keywords
  - Three or more databases searched

Exclusion categories:
- Guidelines
- Consensus statements
- Meta-analyses without a comprehensive search
- Other types of reviews (umbrella, scoping, etc.)
- Conference abstracts
- Letters and commentaries
- No affiliated authors

2,547 total records
1,252 records after duplicates removed
901 excluded