UCSF

Posters

Title

Systematic reviews at UCSF: an evaluation of methodology

Permalink

https://escholarship.org/uc/item/50x6g7hp

Authors

Barr-Walker, Jill Whitaker, Evans Tahir, Peggy et al.

Publication Date

2017-05-01

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at https://creativecommons.org/licenses/by/4.0/

Peer reviewed



Systematic reviews at UCSF: an evaluation of methodology

Jill Barr-Walker, Evans Whitaker, Peggy Tahir, Min-Lin Fang, Julia Kochi

UCSF Library

Background

UCSF user population: health sciences grad programs

UCSF Library & systematic reviews



Research Questions

Do UCSF researchers use Embase for systematic reviews?

Are librarians involved in UCSF SRs?

How is adherence to reporting standards/best practices?

What's the effect of IOM Guidelines?

Can we use this data for targeted outreach?



Literature Review

SR methodological quality in several fields has room for improvement [1-6].

Librarian participation is associated with search reproducibility [7] and meeting search standards [7-9], including number of databases searched [8].



Methods

Searched Pubmed, Embase, Web of Science for UCSF SRs

Title/abstract screening (Covidence)

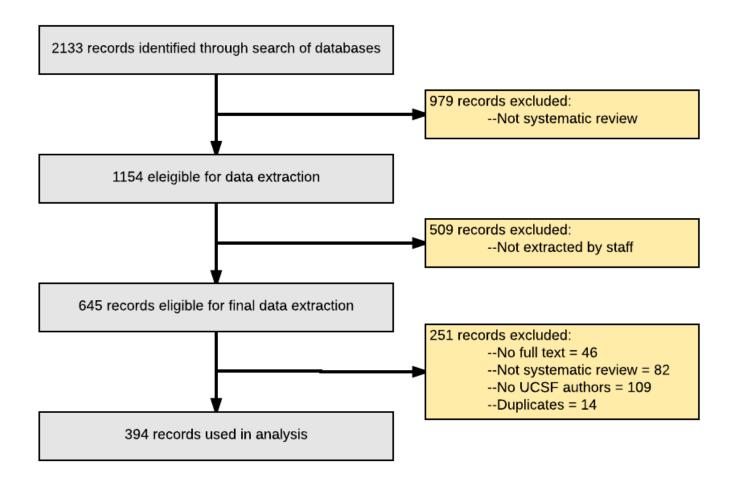
Final screening & Data extraction (AirTable & Excel)

Inclusion criteria: systematic review, UCSF author

Data analysis (Stata)

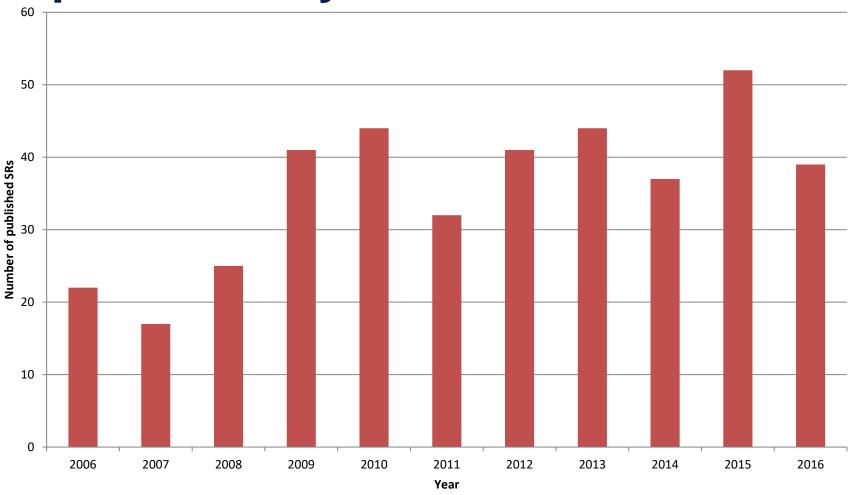


Our data



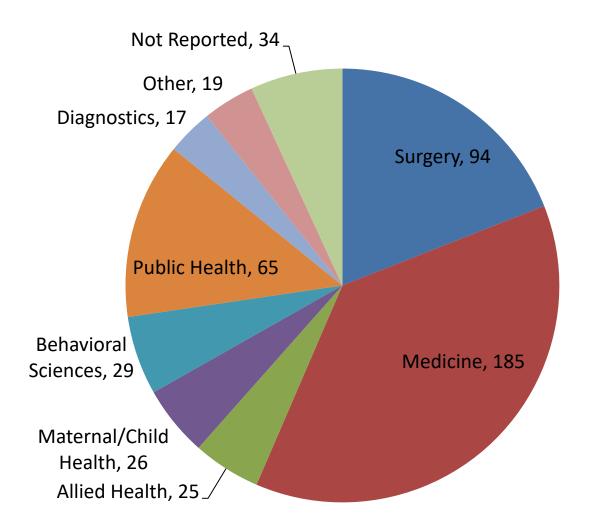


How many systematic reviews are published by UCSF authors?



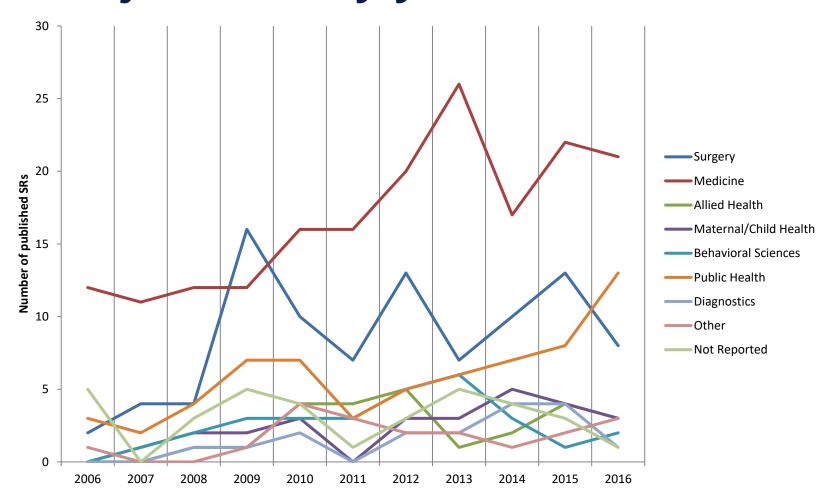


How many by subject area?



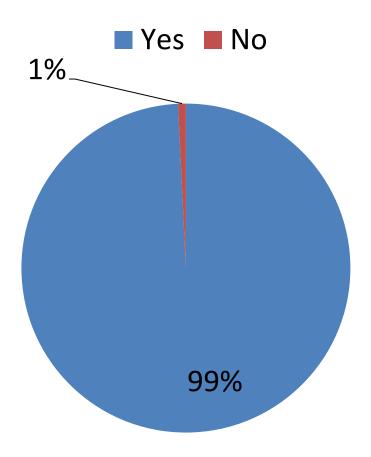


How many are published by each subject area by year?



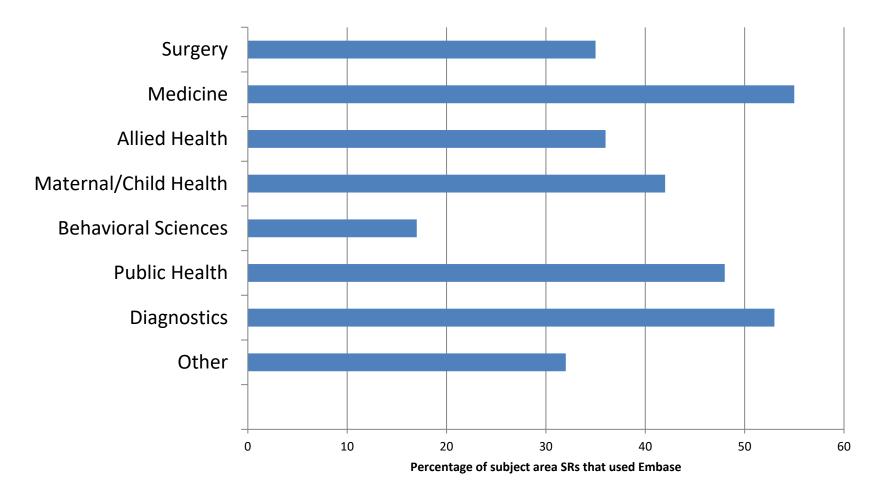


Did UCSF authors use PubMed?





How many used Embase by subject area?





Which databases were used?

Embase (47%)
Web of Science (21%)
PsycINFO (17%)
Other databases (21%)

No significant differences before & after IOM Guidelines



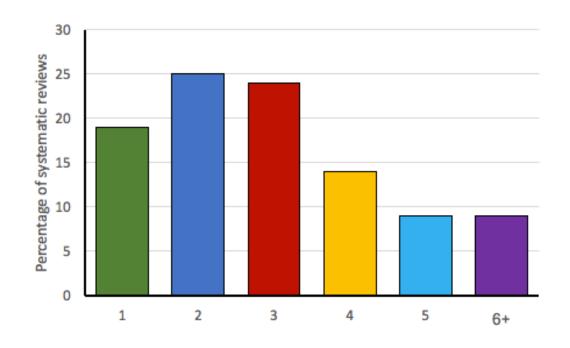
How many databases were used?

Range 1-19 Average 3

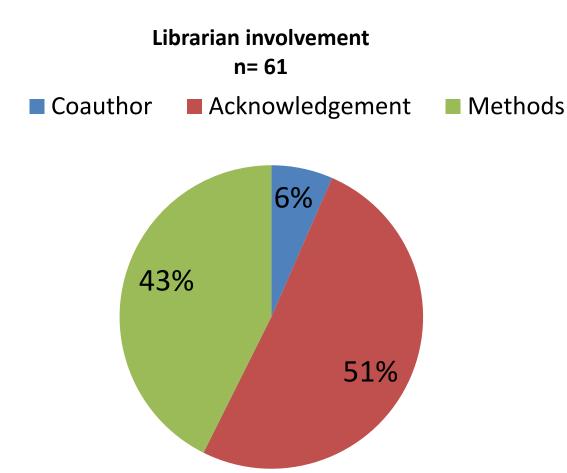
5 reviews used 10 or more databases:

- Medicine
- Surgery
- Public Health

How many databases per systematic review

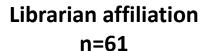


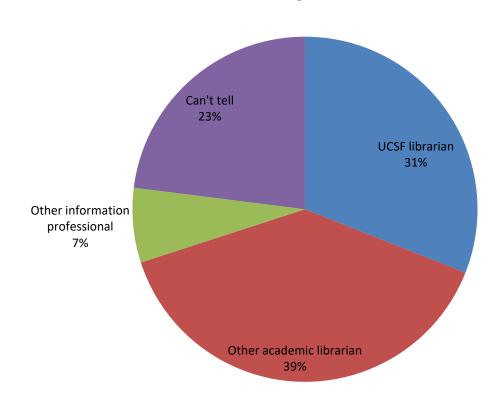
How many had librarian involvement?





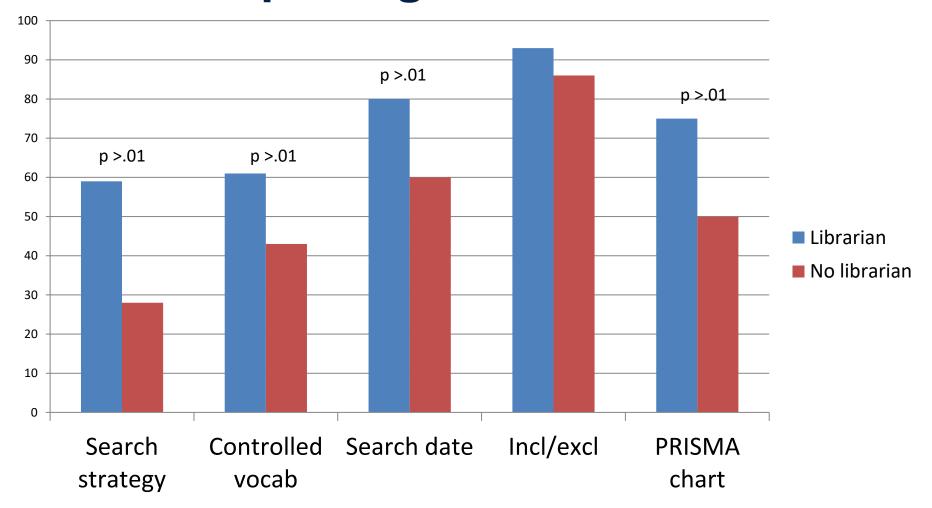
Where were librarians affiliated?





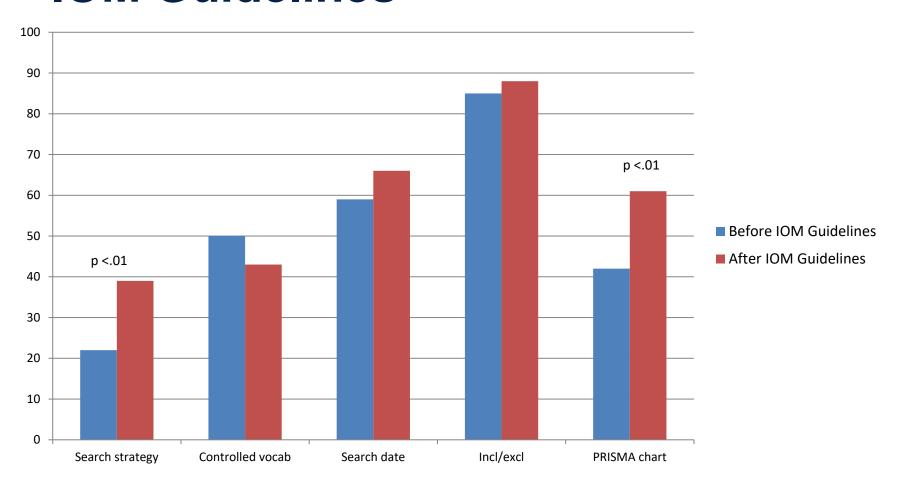


How does librarian involvement affect reporting standards?



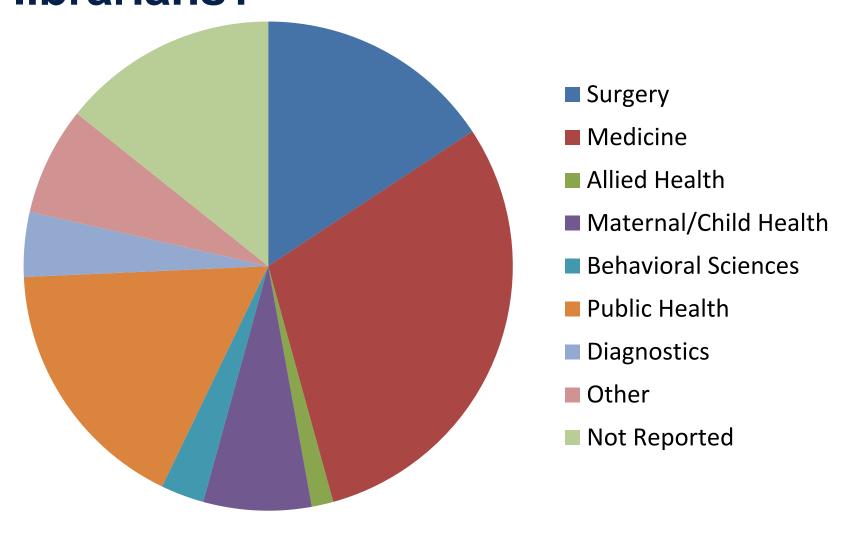


Reporting standards before & after IOM Guidelines





Which subject areas used librarians?





Limitations & Lessons Learned

Potential lack of inter-rater reliability Consider: quality check for all reviewers

Potential selection bias Consider: assess level of commitment to project

Data collection: think about which & how

Designated project leader needed



Conclusions

Do UCSF researchers use Embase for systematic reviews? about half

Are librarians involved in UCSF SRs? no

How is adherence to reporting standards/best practices? better with librarian

What's the effect of IOM Guidelines? slim to none

Can we use this data for targeted outreach? ...



Next steps

Continue data collection

Embase & librarian trends (2016-)

Targeted outreach

Compare data with other institutions?



References

- 1. Campbell JM, Kavanagh S, Kurmis R, Munn Z. Systematic Reviews in Burns Care: Poor Quality and Getting Worse. J.Burn Care.Res. 2017 Mar/Apr;38(2):e552-e567 https://www.ncbi.nlm.nih.gov/pubmed/28253213
- 2. Page, M et al. Epidemiology and Reporting Characteristics of Systematic Reviews of Biomedical Research: A Cross-Sectional Study. PLoS Med. 2016 May; 13(5). http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4878797/
- 3. Shamliyan T, Kane RL, Jansen S. Quality of systematic reviews of observational nontherapeutic studies. Prev.Chronic Dis. 2010 Nov;7(6):A133 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2995597/
- 4. Vassar M, Yerokhin V, Sinnett PM, Weiher M, Muckelrath H, Carr B, et al. Database selection in systematic reviews: an insight through clinical neurology. Health.Info Libr.J. 2017 Apr 6. https://www.ncbi.nlm.nih.gov/pubmed/28383159
- 5. Windsor, B et al. Methodological quality of systematic reviews in subfertility: a comparison of Cochrane and non-Cochrane systematic reviews in assisted reproductive technologies. Hum Reprod. 2012 Dec; 27(12): 3460-6. http://www.ncbi.nlm.nih.gov/pubmed/23034152
- 6. Wood H, Arber M, Glanville JM. Systematic Reviews of Economic Evaluations: how Extensive are their Searches? Int.J.Technol.Assess.Health Care 2017 Mar 27:1-7 https://www.ncbi.nlm.nih.gov/pubmed/28343452



References

7. Rethlefsen, M, et al. Librarian co-authors correlated with higher quality reported search strategies in general internal medicine systematic reviews. J Clin Epidemiol. 2015 Jun 68(6):617-26.

https://www.ncbi.nlm.nih.gov/pubmed/25766056

8. Meert, D, et al. Impact of librarians on reporting of the literature searching component of pediatric systematic reviews. J Med Libr Assoc. 2016 Oct; 104(4): 267–277.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5079487/

9. Koffel, J. Use of Recommended Search Strategies in Systematic Reviews and the Impact of Librarian Involvement: A Cross-Sectional Survey of Recent Authors. PLoS One. 2015; 10(5): e0125931.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4418838/



UCSF Library

Questions?

