Librarians as members of mental disorders systematic review project teams

Len Levin, MS LIS, MA, AHIP
Catherine Carr, MLIS, AHIP
Systematic Reviews with Mental Health Focus

- What are Systematic Reviews? And variations?
- Librarian involvement
- Nuts & bolts
- Apply to mental health field
What is a Systematic Review?

“A systematic review attempts to collate all empirical evidence that fits pre-specified eligibility criteria to answer a specific research question. It uses explicit, systematic methods that are selected with a view to minimizing bias, thus providing reliable findings from which conclusions can be drawn and decisions made.”

And in other words

Systematic reviews are review articles that use rigorous pre-specified methods to minimize bias found in traditional reviews.

They attempt to identify, appraise, and synthesize all literature that meets inclusion criteria.
Why?

- “Gold Standard” of Evidence-based Literature
- Reliable source of evidence to guide clinical practice
- Can be quantitative or qualitative
- Provides an unbiased review
Key Features

- A clear question with explicit inclusion and exclusion criteria
- A search that rigorously and systematically attempts to identify all relevant studies in published and unpublished literature
- Transparent methods: Reproducible and updateable
- Critical appraisal of all included studies
- Presentation of characteristics and findings of the included studies
Variations of Reviews

- Systematic Reviews
- Meta-Analyses/Meta-Syntheses
- Mixed Methods
- Narrative Reviews
- Scoping/Mapping Reviews
- Realist Reviews & Evaluations
- Integrative Reviews
- Rapid Reviews
- Umbrella Reviews
- Practice Guidelines
Scoping Review

Systematic Review
Which Review Type?

- **FUNCTION** - What problem does it solve?
- **CHARACTERISTICS** - What is the methodology or process?
  - Currently popular among researchers
  - Primary or secondary research?
What impact can we as information professionals make in the systematic review process?
How are Librarians Involved?

Institute of Medicine (IOM) STANDARD 3.1
Conduct a comprehensive systematic search for evidence

3.1.1 Work with a librarian or other information specialist trained in performing systematic reviews to plan the search strategy
3.1.2 Design the search strategy to address each key research question
3.1.3 Use an independent librarian or other information specialist to peer review the search strategy

How are Librarians Involved?

- Provide Expertise, Support
  - *We can be here*

- Author and Team Member
  - *We WANT to be here*
  - *WHY?*
Librarians Can

✓ Design and manage complex searches in multiple databases
✓ Use citation management software to organize search results
✓ Set up and manage review process using Systematic Review software/apps
✓ Report the search process according to current standards and guidelines
✓ Write a narrative of the search methodology
✓ Offer support and answer questions
✓ Embed in Systematic Review classes
The “Nuts & Bolts” of a Systematic Review
Steps to creating a Systematic Review

1. Make sure you are asking the right question
2. Develop a protocol
3. Build the search
4. Review search results
5. Write the review
6. Submit the review
7. Celebrate when it gets published!
**Components of a Systematic Review / Meta-Analysis**

- **Thorough literature search**
  - e.g., journal articles, conference proceedings, current trials, etc.

- **Explicit criteria for including/excluding studies**

- **Critical appraisal of individual studies (RCTs)**

- **Statistical techniques combine study outcome data**

- **Structured format for presentation of results**

**Include**

**Exclude**

**Meta-Analysis:** Quantitative Systematic Review
- Often expressed as forest plots
Meta Analysis: Vitamin D on Falls 400-800 IU per day
Und was is different about systematic reviews within the discipline of mental health?

And who says I can’t smoke my cigar in the Berkeley City Club??!!