Writing Review Articles

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This Session

- Preparing a review article: general points
- Main types of review articles
- Preparing narrative review articles: suggestions and an exercise
- Preparing systematic review articles and meta-analyses: suggestions and an exercise
- An exercise: preparing your review article
- Wrap-up

Preparing a Review Article: General Points

Review Articles

- Review article—an article summarizing and integrating the literature on a topic
- Popularity of review articles with
 - Graduate (postgraduate) students
 - Practitioners
 - People changing research areas
 - Others
- High citation rates of some review articles and review journals

Some Preliminaries

- Identify journals that include review articles.
- See what the journals' instructions to authors say about review articles.
 - An example
 - Another example
- Check beforehand whether an editor might be interested.
- Carefully define the scope of the article.

Searching and Analyzing the Literature

- Search the literature thoroughly and methodically. Keep a record of your search strategy.
- Perhaps obtain help from a librarian.
- Perhaps have criteria for including articles.
- Consider recording information on standardized forms or in a spreadsheet.
- Assess articles analytically and critically.

Writing the Review Article

- Organize the article carefully.
- Stay focused.
- Integrate what you found; do not merely catalogue it.
- Because the audience may be broad, write especially clearly.
- Double-check the text and references for accuracy.

Main Types of Review Articles

Narrative Review Article

- Resembles a book chapter, with different sections on different aspects of the topic
- Well suited for providing a broad overview of a subject
- Can be especially helpful if a topic is new or if knowledge about it has increased rapidly
- For older topics, may start where a previous review article left off

Systematic Review Article

- Focuses on a specific question
- Specifies and follows a protocol for searching and evaluating the literature
- Written in the IMRAD format (Introduction, Methods, Results, and Discussion) or a variant thereof
- Well suited for addressing relatively narrow questions

Meta-Analysis

- Combines quantitative findings from studies comparing the same items with regard to the same outcome
- Uses specialized statistical methods to do so
- Sometimes is combined with a systematic review
- Generally requires specialized training
- Views vary on validity

Different Types/Different Purposes

- Each type of review article can be valuable.
- Different types tend to be suited for different purposes.
 - Narrative reviews: most general
 - Systematic reviews: more specialized
 - Meta-analysis: highly focused

Preparing Narrative Review Articles: Suggestions and an Exercise

Preparing Narrative Review Articles: Some Suggestions

- Organize the article carefully.
- Stay within the planned scope.
- Be selective, e.g. regarding quality of articles.
- However, be balanced about content to include.
- Consider including tables.
- Consider including figures. (See example.)
- Perhaps identify gaps in the literature.
- Edit thoroughly for readability. In doing so, consider flow, parallelism, use of headings, and conciseness.

Preparing Narrative Review Articles: A Small-Group Exercise

- Look at the recent narrative review article that was provided ("Neonatal Abstinence Syndrome") or a narrative review article that you brought.
- Notice and discuss in your small group
 - The structure of the article
 - The references (total number, citation, etc)
 - The wording used
 - The tables and figures, if any
 - Other aspects of the writing
- Be ready to report observations and ask questions.

Preparing Systematic Review Articles and Meta-Analyses: Suggestions and an Exercise

Preparing Systematic Review Articles and Meta-Analyses: Some Suggestions

- Carefully define
 - The question to be addressed
 - The scope of the literature search (databases, search terms, languages, years, etc)
 - Criteria for including studies
 - The method of analysis
- Follow appropriate guidelines, such as <u>PRISMA</u>
 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses).
- Consider obtaining collaboration or instruction.

Preparing Systematic Review Articles: A Small-Group Exercise

- Look at the recent systematic review and metaanalysis that was provided ("Systemic Immunomodulating Therapies . . .") or a systematic review or meta-analysis that you brought.
- Notice and discuss in your small group
 - The structure of the article
 - The references (total number, citation, etc)
 - The tables and figures, if any
 - Other aspects of the writing
- Be ready to report observations and ask questions.

An Exercise: Preparing *Your* Review Article

Small-Group Exercise: Preparing *Your* Review Article

- Consider a review article that you are writing or might write. Based on today's session,
 - What regarding your work (or your plans) has been confirmed as appropriate?
 - What new thoughts do you have about how to proceed?
- Share your observations with your group.
- Make note of how you will apply content from this session.

Wrap-Up

Some Resources

- <u>Tips for writing your first scientific literature review</u>
 <u>article</u>
- Writing a review article for Psychological Bulletin
- I want to do a systematic review
- <u>The PRISMA Statement</u> (PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses)
- NAS Award for Scientific Reviewing (a good way to identify authors of excellent review articles—and thus to find examples of excellent review articles)

Wishing You All the Best!