

Boiling Down Your Data: Tips for Preparing the Meeting Abstract

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The Meeting Abstract: A Definition

- Selective summary of novel research findings to be presented in either oral or poster format to a meeting of one's scientific peers



The Meeting Abstract: Purpose

- To boil down novel research findings into a clear, compact, orderly summary that one's scientific peers can readily devour and easily digest.



The Meeting Abstract: Content

- Question that was asked
- What was done to answer the question
- What was found that answers the question
- Answer to the question



Content ~ IMRAD

Content

- Question
- What was done
- What was found
- Answer

- *Note:* the content of the meeting abstract often mirrors the IMRAD format of the traditional research paper.

IMRAD

- Introduction
- Materials & Methods
- Results
- Discussion



Common Problems Encountered in Preparing the Meeting Abstract

- Unclear message
- Poor organization
- Lack of coherence (flow)
- Excessive detail



Unclear Message: Problems

- Question omitted
- Question vaguely stated
- Answer not stated (implication stated instead)



Unclear Message: Solutions

- Question omitted: state the question outright



Unclear Message: Solutions

- Question vaguely stated: specify both independent and dependent study variables (e.g., not “We studied plasma cholesterol metabolism,” but “We examined whether cigarette smoking causes abnormal metabolism of plasma cholesterol in young men.”)



Unclear Message: Solutions

- Answer not stated: first, answer the question specifically and directly; then, state the implication if any (e.g., not “This could partly explain the high incidence of atherosclerosis in older male smokers”, but “Our data indicate that cigarette smoking causes abnormal metabolism of plasma cholesterol in young men, which could partly explain . . .”



Poor Organization: Problems

- No clear ordering of content
- No clear ordering of methods or results
- Mixing of content



Poor Organization: Solutions

- No clear ordering of content: arrange content in the following order: “question, what was done, what was found, answer”
- *Note*: this order mirrors the IMRAD format of the traditional research paper)



Poor Organization: Solutions

- No clear ordering of methods or results: arrange methods or results in a logical order (e.g., by chronology; by relative importance [least important to most important or vice versa]; by treatment versus control)
- *Note:* results often follow order of methods



Poor Organization: Solutions

- Mixing of content: begin by stating the question, not by answering it; keep methods and results separate; avoid stating an implication immediately after a result is given (e.g., Blood pressure increased 30%, suggesting that . . .); answer question and, if necessary, state implications only at the end



Lack of Continuity (Flow): Problems

- Unclear signaling
- Abbreviation overuse
- Inconsistent terminology



Lack of Continuity (Flow): Solutions

- Unclear signaling: signal the parts of the abstract visually by using headings (e.g., Background, Methods, Results, Conclusions) or verbally by starting new sentences (e.g., signal the *question* with “To determine X, we . . .,” the *results* with “We found that. . .,” and the *answer* with “We conclude that . . .”)



Lack of Continuity (Flow): Solutions

- Abbreviation overuse: avoid abbreviations whenever possible; once an abbreviation is defined, use it consistently
- *Rule of thumb*: up to three abbreviations is okay; each additional abbreviation makes the reader's job more difficult



Lack of Continuity (Flow): Solutions

- Inconsistent terminology: once a term is established, use it throughout the abstract (e.g., if you begin by using the term “treatment group,” do not switch to “study group,” “LVAS group,” etc., later)



Excessive Detail: Solutions

- Omit almost all detail: report data for only most important results; give % change instead of exact data; omit *P* values or give only once; omit the term “significantly”; use “mean \pm SD” only once; omit references; avoid detailed descriptions of well-known or established techniques

