The Start and the Finish: Abstracts and Citations

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What is an abstract?

- **Summary** of a research project
- Typically takes one of two forms, based on how it will be used:
  - Poster presentations: encapsulating the most relevant points of the research, includes figures and tables
  - Shorter summary used to accompany the article or a database entry about the article (e.g., CINAHL)
What does the abstract do?

- Sells your full article to potential publishers, reviewers, and readers using:
  - Well-defined sections or paragraphs
  - Crisp, grammatically correct language
  - Compelling presentation that exactly follows the (meeting, journal, class, etc.) instructions
  - Text that answers these key questions: who, what, when, where, how, and why
Who is your target?

- Editors
- Peer reviewers
- Conference organizers/judges
- Colleagues
- Anyone you want to read your research
Abstract = Reader's First Impression

Make sure your abstract isn’t your reader’s ONLY impression

How?
“When writing an abstract, select each word as if your paper’s being read depended on it, and jettison verbal clutter ruthlessly.”

Taylor, 2011
Summary =

- Most important points
- Short sentences with action verbs
- Clear presentation of findings
- Succinct statement of why the reader should care about your research
- No figures
- No references
What does it look like?

- **Structured abstracts**
  - Use an Introduction-Methods-Results-Discussion-Conclusions format
  - May also include Objectives or Purpose
  - Want the most important points in each category
  - Not just for research articles

- **Unstructured abstracts**
  - General summary
  - More narrative in form
Structured Abstract Format

Background (or Introduction)

<Objective>

Methods

Results

Conclusions
## Structured Abstract: What Goes Where?

<table>
<thead>
<tr>
<th>Section</th>
<th>Info to Include</th>
</tr>
</thead>
</table>
| **Background**   | • Why did you start the project?  
                  | • What did you hope to learn/discover?                                         |
| (Introduction)   |                                                                                 |
| **<Objective>**  | • What is your scientific hypothesis?                                          |
| **Methods**      | • Who/what was involved?  
                  | • How did you conduct the project?  
                  | • When and where did you do it?                                                |
| **Results**      | • What did you learn/discover?                                                  |
| **Conclusion**   | • Why should anyone care about your study?                                     |
Abstract

Background: Health literacy screening is often not performed in clinical settings. One possible reason is the concern about the time involved in performing such assessments. Our objective was to measure the time required to administer the Newest Vital Sign (NVS) literacy assessment instrument to English-speaking primary care patients.

Methods: The NVS was administered to 78 consecutive English-speaking patients in an outpatient primary care clinic. The length of time to complete the NVS was timed with a stopwatch.

Results: The average time to complete the NVS was 2.9 minutes (95% confidence limit, 2.6–3.1 min).

Conclusion: The NVS is a health literacy screening tool of sufficient brevity to be considered for use in primary care practices.
Unstructured Abstract Format
Here’s what an unstructured abstract might look like

ABSTRACT
End-of-life nursing encompasses many aspects of care: pain and symptom management, culturally sensitive practices, assisting patients and their families through the death and dying process, and ethical decisionmaking. Advocacy has been identified as a key core competency for the professional nurse, yet the literature reveals relevant barriers to acquiring this skill. Challenges exist, such as limitations in nursing school curricula on the death and dying process, particularly in multicultural settings; differing policies and practices in healthcare systems; and various interpretations of end-of-life legal language. Patricia Benner’s conceptual model of advocacy behaviors in end-of-life nursing provides the framework in which nurses can become effective patient advocates. Developing active listening and effective communication skills can enhance the nurse-patient trust relationship and create a healing environment.
How-to Strategies

- Wait until the manuscript is completed
- Bullets are your friend
- Focus on one section of the paper at a time
- Read critically with highlighter(s) in hand
- Imagine that you are describing your research for a layperson
- Consider what you want a reader to take away from your abstract
General Guidelines

► Usually only a page at most, sometimes just a paragraph
► Typically less than 250 words total
► Does not include tables, figures, or references
► Most important:
  ► If submitting to a specific journal or meeting, follow its instructions.
Specific Sections

Title

- Bad title:
  - Health Literacy and Family Medicine

- Good title:
  - Health Literacy Instrument in Family Medicine: The "Newest Vital Sign" Ease of Use and Correlates
Introduce the topic with a broad statement about the overarching issue or problem

Engage the reader’s interest

- Many older athletes take statin medications that are known to potentially have muscular toxicity.
- In many coronary heart disease cohorts, depression, anxiety, and hostility are associated with a worse prognosis.
- Bladder cancer is the fifth most common carcinoma, the second most frequently seen urologic malignancy, and one of the most expensive diseases to treat.
Engage the reader’s interest - OR NOT

- A left ventricular assist device is a mechanical circulatory device that is used to support or replace the pump function of the failing heart.
- All physicians bear the responsibility of minimizing cost while providing care that meets or exceeds national quality benchmarks.
- Primary amenorrhea is an interesting clinical presentation with many etiologies.
Specific Sections
Methods and Materials

- Provide only as much detail as is necessary to understand the experiment
- Include the specific models or approaches used in the study
Specific Sections

Results

- Relate the observations and/or data collected during the experiment without interpreting their meaning.
- Should be concise and informative.
- Only the most important results need be included in the abstract.
- No tables or figures in the abstract.
Specific Sections
Discussion/Conclusion

- Interpret results and relate them back to the objective/hypothesis
- Should answer the question “why does this research matter” or “what is the clinical relevance”
General Pitfalls

- Information that is not in the main text
- Assumptions ("we think/hope/believe")
- Data do not match data in the article
- Does not follow chronological order of article
- Information doesn’t reflect structure of original document – Ex: Intro should not be longer than results or discussion.
- Does not answer who, what, when, where, why, and how
Notes on Grammar #1

- Avoid passive voice
  - NO: Dissection of the aneurysm was carried out carefully by the surgeon.
  - YES: The surgeon dissected the aneurysm carefully.

- NO: A structured curriculum was developed by the committee.
- YES: The committee developed a structured curriculum.
Do not start sentences with solo pronouns

NO: *This* could be a consideration for patients with high-risk cardiac involvement.

YES: *This clinical option* could be a consideration for patients with high-risk cardiac involvement.

NO: *It is important* to use proper medical terminology.

YES: *Using proper medical terminology* reduces the potential for error.
How to Improve

- Edit draft
- Practice, practice, practice
- Have colleague(s) peer review abstract for quality and merit
  - Organization and grammar
  - General flow
    - Readability
    - Logical flow
- Most important points of manuscript included in abstract
Good Ways to Practice

- When you read an article, think about how you would summarize it.
- When you look at an abstract, think about what information it provides and which questions you are still asking.
The abstract does not include citations.

- Two parts: references in the text and citations at the end: the two should have the same content
- Following the journal’s formatting style
- Numbered references use the order in which they are cited
- Provide sources appropriately: “A study said…” requires a reference
- To reprint figures and tables, obtain permission from the copyright holder (exceptions: federal publications)
More About References

- Don’t insert references after every consecutive sentence.
- If 2 chapters from the same book are used, list each reference separately.
- **Cite your sources as you find them and use them!**
Plagiarism and Copyright

- Plagiarism and copyright are different: ethical vs. legal.
- Be sure to paraphrase and summarize your source material.
- Don’t copy and paste text.
- Using a thesaurus to change every other noun is not paraphrasing.
- Credit your sources, whether from text or the Web.
- When writing for publication, you must obtain permission to use images and tables.
Sources

