Development of Public Health Abstracts for Acceptance at Scientific Conferences

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Importance

- First Impression
  - Format is your appearance
  - Style is your fresh breath
  - Content is your mind
  - Conclusion is your soul
- Only thing the reviewer reads
- Might influence reader to attend your presentation or visit your poster
- Must include enough key information

Challenges

- Present complex information
- Be clear and concise
- Balance art versus science
- Tell a coherent story

General Concepts

- Follow format requirements
- Choose simple ways to explain complicated ideas
- Structure logically
- Provide accurate picture of your presentation
- Try to include enough information but not too much
- Give yourself enough time
- Pay attention to deadlines for submission

Things to Avoid

- Frequent acronyms and abbreviations
- Jargon
- Categorical and eccentric statements
- Historical or lengthy background
- References
- Elliptical (i.e. ending with …)
- Incomplete sentences
- Tables, charts, illustrations, or figures
- Citations

Formal Characteristics

- Stand alone document
- Structured versus unstructured
- Tense
  - Usually past tense for objectives, methods, and results
  - Sometimes present tense for introduction and discussion
- Person
  - Third person (he, she, it) was standard
  - First person (I, we) now more accepted
- Active voice when possible
- Review conference abstracts and editorial policies

Examples of Voice

- **Passive voice**
  - Fifteen patients with asthma were studied
  - An outbreak of salmonella was investigated
- **Active voice**
  - We studied 15 patients with asthma
  - We investigated an outbreak of salmonella

Title

- Concise
- Grabs your attention
- Summarizes the content of the abstract
- Conveys context and aims of study
- Most effective when refers to SOCO
- Scope, study design, and goal
- Usually capitalize first letter of each word

Common Mistakes—Title

- States results or conclusions
- Difficult to understand
- Contains jargon or unfamiliar acronyms
- Contains nonspecific phrases "a study of…" "an investigation into"
- Contains plays on words or deliberately provocative expressions
  - Might catch readers attention
  - Might appear to trivialize the work being reported

Examples — Title

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Content Areas

- Background/ Introduction (2–3 sentences)
- Methods
- Results
- Discussion/ Conclusion (1–2 sentences)

Content Areas

- Why did you do it?Why did you start?
- What did you do? How did you do it?
- What did you find?
- What does it mean? Why is it important?

Background

- Why did you do it? Why did you start?
- Background or motivation (1 sentence)
- Significance to public health (1 sentence)
- Objectives (1 sentence)
  - Simple, clear, direct statement
- Scope
  - If complex or complicated
  - Let reader know you are limiting your scope

Example Background

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- Nearly two thirds of public health abstracts are rejected each year.
- As a result, communication of important public health findings is delayed.
- We investigated the predictors of abstract rejection in adults attending an abstract writing workshop.

Common Mistakes — Background

- No clear statement of objectives
- Unclear why you did the study
- Unclear why the study is important
- Contains methods, results, or conclusions

Methods

- What did you do? How did you do it?
- Study design
- Data were collected
  - Where
  - When (dates)
  - How
  - What
- Subjects were selected
  - Who
  - How

Methods

- Case definition (if applicable)
- Other definitions
  - Exposure
  - Outcome
  - All other unfamiliar terms
- Statistical analyses or tests performed

Common Mistakes — Methods

- Unclear what you did
- Unclear how you did it
- Methods are non-specific
  - "We collected data"
  - "We sampled the population"
  - "We performed statistical analyses"
  - "Cases were identified"
- No statistical methods provided
- Methods missing for results presented

Results

- What did you find?
- Logical flow from descriptive to analytic
- Numbers
- Observations
- Accomplishments
- Measures of association
- *P* values or confidence intervals
- Results that pertain to objectives
- Data to support your conclusions

Common Mistakes — Results

- Results lack numbers
  - "The findings will be presented"
  - "We found treatment A to be superior to B"
- Results do not pertain to objectives
- Results presented as almost significant
- Statistical analysis inadequate or missing
- Results missing for methods
- Not enough results provided
- No results to support conclusions
- Results contain conclusions or interpretation

Conclusion

- So what?
- Why are the results important?
- What do you think they mean?
- Did you accomplish your objectives?
- Are the results consistent with expectations?
- Why should anyone be excited or interested?
- Should be supported by your results

Common Mistakes — Conclusion

- Unclear why it's important
- No interpretation of findings
- Relate to method used rather than results
- Based upon literature rather than results
- "More research is needed"
- Conclusions generalized beyond study restrictions
- Not supported by the findings of your study

Steps in Abstract Writing

- **Step 1: Do good science**
  - Start with a study that has clear purpose
  - Don't go on a "fishing expedition"
  - Work with your coauthors and supervisors to understand the purpose and objectives

- **Step 2: Read the instructions**
  - Follow abstract guidelines/ instructions for authors
  - Pay attention to length and structure

Steps in Abstract Writing

- **Step 3: Think carefully about your Single Overriding Communication Objectives (SOCOs)**
  - Consider your audience
  - Provide data to support your SOCO
- **Step 4: Write a first draft**
  - Don't worry about word count at this stage
  - Make sure to give a clear idea of what you did
  - Include all information you think is important

Steps in Abstract Writing

- **Step 5: Give it to your supervisor or coauthors**
  - Expect a lot of changes
  - Focus in further on key concepts
- **Step 6: Check it for length**
  - If >30 words over, remove entire concepts
  - If 15–30 words over, remove sentences
  - If <15 words over, try rewording, removing unnecessary phrases, and piling on adjectives
  - Make sure to preserve key concepts

Examples of Rewording

- "In order to develop an intervention, we performed a survey of adults regarding their attitudes about seat belt use. The survey was conducted by telephone using random digit dialing techniques." (30 words)

Examples of Rewording

- "In order to develop an intervention, we performed a survey of adults regarding their attitudes about seat belt use. The survey was conducted by telephone using random digit dialing techniques." (30 words)

- "To develop an intervention, we performed a random-digit–dialing telephone survey of adult seat belt use attitudes." (16 words)

Rewording of Phrases

- In close proximity to
- The predominant number of
- In a large number of cases
- On a previous occasion
- In the absence of
- With regard to
- At some future time
- Due to the fact that
- Serves the function of being

Steps in Abstract Writing

- Step 7: Give back to supervisor and coauthors
- Step 8: If for a general meeting, have a colleague in a different field review
  - What you did
  - Why you did it
  - Why it's important

Steps in Abstract Writing

- **Step 9: Final checks**
  - Errors call into question quality of science
  - Spell check
  - Grammatically correct
  - Avoid unclear or unconventional abbreviations
  - Rate your own abstract

Example Abstract Evaluation Criteria

- Background and rationale for the study
- Appropriateness of the methods
- Presentation of results
- Interpretation of results and conclusions
- Significance to public health
- Overall clarity

Avoiding Rejection

- Usually not because of quality of science
- Most commonly unclear
  - Why you did study in the first place
  - What you did
  - Why the results are important
- Make sure you
  - Have clearly defined hypotheses/ objectives
  - Think carefully about the SOCOs
  - Communicate clearly in your background and conclusions

Keys to Success

- **Why did you do the study**
  - Lots of cases
  - Rising incidence
  - Emerging problem
  - Increased public concern
- **Provide good conclusions**
  - Avoid more research is needed
  - What do your results mean?
  - Why are your findings important?
  - What can you conclude/ recommend based on your results?

How does writing a manuscript differ from writing an abstract?

What are some additional things to consider when writing a manuscript?

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