Tips on writing abstracts for scientific manuscripts

The importance of writing a good abstract

The abstract is the most visible part of your scientific manuscript. The abstract is used to invite readers who must decide whether they wish to read the manuscript on the basis of the abstract's content alone. In fact, more people will read the abstract than the whole article. Thus, it is important to catch the reader's attention by making the abstract as concise, accurate, and readable as possible.

Most people now rely on electronic search engines to find articles. Usually they search through databases that contain only the title and abstract of articles, excluding any keywords attached to the article by its authors. This is the case, for example, for the National Library of Medicine's databases, including Medline and PubMed. It is therefore important to include in the abstract the words that potential readers of the article are likely to use during a search.

If you want to make sure that your article is found as a "Related Article" in PubMed searches, the algorithm used for this functionality gives more weight to less common terms, more weight to words used more frequently within a document, and more weight to terms in the title.

Selecting the most important information

After the manuscript is written, the authors should develop the abstract. The contents of the abstract must agree with the contents of the manuscript to be submitted to a journal.

The abstract must outline the most important aspects of the study while providing only a limited amount of detail on its background, methodology and results. Authors need to critically assess the different aspects of the manuscript and choose those that are sufficiently important to deserve inclusion in the abstract.

Once the abstract is ready it can be helpful to ask a colleague who is not involved in the research to go through it to ensure that the descriptions are clear.

Structure

The abstract structure varies between journals and between types of article. Authors should check that the abstract of their manuscript is consistent with the requirements of the article type and journal to which the manuscript will be submitted. For further details on the requirements of any particular journal, check the relevant 'Instructions for Authors' information online.

Usually abstracts have a structured format, which serves several purposes: it helps authors summarize different aspects of their work; it makes the abstract more immediately clear; and it helps peer reviewers and readers assess the contents of the manuscript.

A common structure of abstracts of research manuscripts submitted to journals is as follows:

- **Background**: This should place the study into the context of the current knowledge in its field and list the relevance of the work and the objectives of the study.
- **Methods**: This should mention study design, time, study population and data collection, and include details of statistical analysis.
- **Results**: This section should describe the main findings of the study.
- **Conclusions**: A brief summary of the interpretation of the results, implications of the results, and recommendations related to policy or practice or future research.

Some tips on writing abstracts

- Write the abstract after the draft manuscript has been reviewed by all co-authors and all changes have been made. Make sure the abstract only reflects those points covered in the manuscript.
- Check the abstract length: abstracts usually should not exceed 250 300 words. Abstracts that
 are too long lose their function as summaries of the full article.
- Use simple word order and past tense, except for noting future policy or practice implications or recommendations.
- Include synonyms for words and concepts that are in the title: for example, if referring to 'stillbirths' in the title mention 'perinatal deaths' in the abstract
- Minimize the use of abbreviations
- Do not cite references