Writing an Effective Title

Overview

This chapter outlines the considerations in writing a title for your manuscript and provides examples of effective titles.

Purpose of the Title

The purpose of a title is to summarize the essence of the article concisely and definitively in a phrase or sentence so that readers are persuaded to read the entire paper and so that the paper can be easily found in Medline title searches.

In your title, be sure to include information that distinguishes your paper from others in the field. In other words, tell how it contributes to the literature or how it fills the gap in knowledge.

> *"A title is a highly condensed version of the abstract. . . . The title may not tell what the abstract concludes, but it at least conveys what the abstract covers. . . . In preparing the title, the careful author makes sure that the title carries the irreducible number of terms needed to accurately describe the content of the paper."*
>
> —Edward J. Huth, *How to Write and Publish Papers in the Medical Sciences*

Content of the Title

The title of your article should be as informative as possible within any length limits of your target journal. Following the guidelines below will help you write an effective title.

Note: Many of the guidelines that follow include questions to consider about your own title. During the class, your instructor will give you time to quickly answer each question. At the end of the class, you will be asked to write a title for your own article using this information.

1. Name the main factors studied. Use key terms (that is, terms by which the paper should be indexed). The separate list of key terms requested by many journals is not used by the National Library of Medicine; the Medline indexers refer to other components of your article, including your title, to create their own list of indexing terms.

Good: Methotrexate versus Cyclosporine in Moderate to Severe Chronic Plaque Psoriasis

Good: Short-term Recombinant Human Growth Hormone Therapy Does Not Modify Growth Hormone, Thyrotropin, and Prolactin Responses to Thyrotropin-Releasing Hormone in Adult Dialysis Patients

Good: Reduced Gap Junctional Intercellular Communication and Altered Biological Effects in Mouse Osteoblast and Rat Liver Oval Cell Lines Transfected with Dominant-Negative Connexin 43

Ask yourself: What are the main factors or key terms in my study?

2. Name the population (or animal, plant, or cell line) studied.

Good: Nitroprusside in Critically Ill Patients with Aortic Stenosis

Good: Altered Drug Resistance and Recovery from Paralysis in *Drosophila melanogaster* with a Deficient Histamine-Gated Chloride Channel*

Good: Pifithrin-alpha Promotes p53-Mediated Apoptosis in Mouse Epidermal JB6 Cl 41 Cells

Use formal scientific names (genus and species) rather than common or nonstandard names for plants and animals.

Poor: Genetics of the Yellow Body Mutation in a Small Community of Fruit Flies

Better: Genetics of the Yellow Body Mutation in a Small Community of *Drosophila melanogaster**

However, consider using both names in the title, with one name in parentheses, if both are commonly used by researchers.

Good: Two Novel Taxane Diterpenoids from the Needles of the Japanese Yew *(Taxus cuspidata)**

** Retain scientific nomenclature capitalization and italicization in titles.*

Ask yourself: What was my study population?

3. For clinical studies, identify the type of study, such as "randomized controlled trial." This information is useful for researchers doing a meta-analysis.

Good: Phase I Clinical and Pharmacokinetic Study of Irinotecan in Adults with Recurrent Malignant Glioma

Good: Randomized, Double-Blind, Placebo-Controlled Trial of Influenza Vaccination in the Elderly

Ask yourself: What type of study did I conduct? Should I include this information in my title?

4. Consider stating your study's major findings.

Good: Mutation in the Follicle-Stimulating Hormone Receptor as a Cause of Gestational Spontaneous Ovarian Hyperstimulation Syndrome

Good: Acute Increase in Intracranial Pressure Revealed by Transcranial Doppler Sonography

Sometimes a complete (declarative) sentence is the best way to state your study's findings:

Good: Low Molecular Weight Isoforms of Cyclin E Deregulate the Cell Cycle of Mammary Epithelial Cells

Ask yourself: What are the major findings of my study?

5. Make your title specific. If it is too general, readers may expect your study and findings to be more widely applicable than they are.

Poor: Expression of Retinoic Acid Receptors in Cancer

Better: Methylation and Regulation of the Expression of Retinoic Acid Receptor Beta Isoforms in Human Colon Cancer

Ask yourself: What key words can I use in my title that will keep the focus narrow?

6. Start the title with a word or term that represents the most important aspect of the study.

Good: Rabies Eradicated in Southern Belgium with Recombinant Vaccinia–Rabies Vaccine

Good: Indanocine Selectively Induces Apoptosis in Multidrug-Resistant Cancer Cells

Ask yourself: What is the most important aspect of my study?

7. Avoid uninformative phrases such as "A Study of," "A Report of," "The Treatment of," "The Role of," or "The Effects of" in the title and in the subtitle. The first 2 provide no additional information beyond what the rest of the title says; the latter 3 leave the reader wondering what treatment, role, or effects you will be reporting.

Poor: A Study of Genetic Susceptibility in Hypersensitivity Pneumonitis

Better: Genetic Susceptibility in Hypersensitivity Pneumonitis

Poor: Effects of Concomitant Cisplatin and Radiotherapy on Inoperable Non–Small-Cell Lung Cancer

Better: Concomitant Cisplatin with Radiotherapy for Inoperable Non–Small-Cell Lung Cancer Improves Rates of Survival and Control of Local Disease

8. Use subtitles sparingly. Do not make the subtitle a continuation of the main title or a substitute for a concise and specific main title; in other words, write the main title so that it can stand alone.

Poor: An Unusual Type of Pemphigus: Combining Features of Lupus Erythematosus

Better: Pemphigus with Features of Lupus Erythematosus

A subtitle is appropriate for identifying a collaborative group responsible for a study:

Good: Lowering Dietary Intake of Fat and Cholesterol in Children with Elevated Low-Density Lipoprotein Cholesterol Levels: The Dietary Intervention Study in Children

Good: Long-term Results of Treatments for Childhood Acute Lymphoblastic Leukemia: Pediatric Oncology Group Studies from 1986 to 1994

Note: Subtitles are common, but most could be incorporated into the main title for a stronger title overall.

9. Use approved generic or common nonproprietary names rather than trade names or chemical names for drugs and chemicals.

Poor: Fludarabine plus Cytoxan for Advanced Chronic Lymphocytic Leukemia

Better: Fludarabine plus Cyclophosphamide for Advanced Chronic Lymphocytic Leukemia

Use the brand name (trade name) only if your study is comparing brands or you are reporting something about a specific brand.

Good: Cardizem SR versus Dilacor XR for Moderate Hypertension

Format of the Title

The following guidelines are helpful in formatting your title.

1. Always check the author instructions of the target journal for specific guidelines on titles. Study examples of titles in a recent issue to determine whether the journal uses phrases or sentences for titles, whether subtitles are used, how long titles can be, and what style of capitalization is followed.

> *The New England Journal of Medicine:* "Titles should be concise and descriptive (not declarative). We discourage subtitles."
>
> *Cancer Letters:* "Titles should be informative and preferably not exceed 185 characters, including spaces. Extraneous words such as 'Study,' 'Investigation,' etc., should be avoided."

2. Avoid using abbreviations and acronyms.

Poor: Myelodysplastic Syndrome after Treatment of CLL with 2-CdA

Better: Myelodysplastic Syndrome after Treatment of Chronic Lymphocytic Leukemia with Cladribine

3. Keep punctuation to a minimum. Use colons to join the main title and subtitle; use commas to separate elements in a series.

4. Avoid using questions for titles. Questions are more appropriate for opinion pieces than for original research articles.

Poor: Does Supplementation with Phytoestrogen Alter Serum Lipid Concentration?

Better: Supplementation with Phytoestrogen Alters Serum Lipid Concentration

Acceptable for an Editorial: Primary Angioplasty for Acute Myocardial Infarction: Is It Worth the Wait?

Activity 1

Drafting a Title

Write a draft title for your paper. Refer to the notes you made during this class and the guidelines in the chapter to make your title as concise and effective as you can. Some of these draft titles will be discussed in class. If yours is not but you would like to have it reviewed, please put your name on it and give it to an instructor before you leave.

References

Some of the information and examples in this chapter are from the following sources.

Huth EJ. *How to Write and Publish Papers in the Medical Sciences*. 2nd edition. p. 89. Baltimore, Williams & Wilkins, 1990.

Huth EJ et al., eds. *Scientific Style and Format: The CBE Manual for Authors, Editors, and Publishers.* 6th edition. pp. 581–582. New York, Cambridge University Press, 1994.

Iverson C et al. *American Medical Association Manual of Style: A Guide for Authors and Editors.* 9th edition. pp. 8–10. Baltimore, Williams & Wilkins, 1998.

Patrias K. Computer-compatible writing and editing. Presented at the Annual Meeting of the Council of Science Editors, Pittsburgh, Pennsylvania, May 5, 2003.

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Tips

1. Name the main factors studied; ask yourself what they are and write them here.

2. Name the population (or animal, plant, or cell line) you studied.

3. For clinical studies, identify the type of study, such as "randomized controlled trial." Then consider whether you should include this information in the title.

4. Consider stating your study's major findings.

5. Make your title specific. (If it's too general, readers may expect your findings to be more widely applicable than they are.) Ask yourself what key words or phrases should be in the title to narrow the focus; write them here.

6. Start the title with a word or term that represents the most important aspect of your study.

7. Avoid uninformative phrases such as "A Study of," "A Report of," "The treatment of," or "The Effects of." They tell you nothing about the content of the paper.

8. Use subtitles sparingly; write your main title so it can stand alone. (However, a subtitle is appropriate for identifying a collaborative group responsible for a study.)

9. Use approved generic or common nonproprietary names rather than trade names of chemical names for drugs and chemicals. (However, use the trade name if your study is comparing brands or you are reporting something about a specific brand.)

Format

1. Check the journal's instructions for authors for specific guidelines about phrases vs. sentences, length limits (word count or character count, including spaces), and capitalization style.

2. Avoid using abbreviations and acronyms.

3. Keep punctuation to a minimum. Use a colon to separate the main title from the subtitle and commas if necessary.

4. Avoid using questions for titles.

Summary: an Effective Title

1. Is informative and descriptive

2. Persuades readers to read your whole article (ie, it "sells" your paper).

3. Concisely summarizes the article's content.

4. Distinguishes your study from others in your field.

5. Complies with the journal's style (read those instructions!).

Exercise: Drafting a Title

Please use this space to draft a title for a paper you're writing now or will begin writing soon. (If you're not ready to write because you're still doing experiments, think about what you might want to call the future paper, if you can.) Refer to your notes, the guidelines given in the lecture, and Chapter 7 in the notebook.

Make your title as concise and effective as you can.