

MedicalBiostatistics.com

TIPS FOR THESIS WRITING AND PREPARING RESEARCH PAPERS

Initial parts of a manuscript

- [Choice of TITLE](#)
- [Providing AUTHORSHIP credits](#)
- [Selection of KEY WORDS](#)
- [Structure of the ABSTRACT](#)

Main body of the report

- [Contents of INTRODUCTION](#)
- [Describing the METHODS](#)
- [Stating RESULTS](#)
- [Writing DISCUSSION](#)

End features of a report

- [Ethics of ACKNOWLEDGMENTS](#)
- [Framing KEY MESSAGES](#)
- [Writing REFERENCES](#)
- [Need of a BIBLIOGRAPHY](#)
- [Contents of APPENDIX](#)

For an updated version, see
Basic Methods of Medical Research, Third Edition
by A. Indrayan (<http://indrayan.weebly.com>)
AITBS Publishers, Delhi (Phones: 11-22054798/22549313)
email: aitbsindia@gmail.com, aitbs@bol.net.in

Choice of TITLE

Title is probably the most important component of a report. Although a report is referenced by the name of the authors but its utility in a particular context is evaluated by the title. Thus the title should be carefully worded: specific enough to describe the focus and lively enough to generate interest. It should be concise yet sufficiently informative for a reader to anticipate the contents. The title 'obesity and diabetes' is concise but fails to convey the subject matter. The title 'contribution of obesity to development of diabetes in post-menopausal women' describes the subject matter adequately. Mention of design such as case-control and randomized control trial in the title is helpful to the reader. Long titles are boring, but do not sacrifice accuracy for brevity. Titles beginning with "A study of ..." are wastage of words but do not use abbreviations as much as possible. Avoid overly general title. Sometimes subtitle is a useful adjunct for increasing specificity. Whenever possible, keep key words at the beginning of the title. 'Sex differential in obesity contribution to diabetes' is preferable to 'contribution of obesity

to diabetes in males and females'. Note that the locale of the study almost invariably appears in the title, particularly for an epidemiological study – sometimes even the year of the study is important, particularly when the conclusions are not generalisable to the other years.

Two types of titles are in vogue. First emphasises the investigation and second states the main result. The title 'A case-control study of influence of early life factors on adult morality in country ABC' states what has been investigated and how, without indicating the result. This provokes curiosity. In a question format, this can be stated as 'Do early life factors influence adult morality in country ABC?' In an answer format, this could be worded as 'Childhood obesity in low birth weight babies reduces life expectancy: a case-control study in country ABC'. This is a positive statement and describes the main result of the study. No firm evidence is available to indicate which format makes biggest impact on readers. In our opinion, the last one – the answer format – is most informative and capable of enticing a person to read the article if he is interested in that topic. Choose the format you consider most exciting for the target audience.

The discussion in the preceding paragraph is focused on papers prepared for publication in a scientific journal. Title for post-graduate thesis or a doctoral dissertation is usually decided before the investigation is conducted, and certainly much before the results are available. And it can not be changed at the time of writing. Thus the title for these endeavours can never be in answer format. Precisely because no latitude is available, there is a tendency in some quarters to propose a nonspecific umbrella type of thesis topic that can incorporate variation in the investigation. An example is 'A study of occlusion of left main coronary artery'. Such nonspecification can occur for two reasons. One, to be able to incorporate various facets of the problem that emerge later on, which indeed could be a legitimate reason for a doctoral dissertation, but the second reason could be lack of clarity about the specifics of the proposed investigation. Examiners and other reviewers are smart enough to detect this lapse.