

COMPONENTS OF A RESEARCH ARTICLE

There are five essential components of an original/research article

1. Abstract/Summary
2. Introduction
3. Material & Method
4. Result
5. Discussion.

These can be remembered with the help of the acronym, IMRAD that stands for :

- = I = Introduction,
- = M = Material & Method
- = R = Result,
- = A = And
- = D = Discussion.

Key words are included with structured abstract. Additional components are acknowledgement (which is optional) and the References. Hence the manuscript of all research articles should contain the following sections:-

Essential Components

Title page: The complete title of the manuscript, the name of the authors with their highest qualifications, the department or institution to which they are attached, address for correspondence with telephone numbers and fax number, if possible.

Abstract/Structured: All original articles should have a structured abstract. Usually the limit ranges from one hundred fifty to two hundred fifty words. The abstract should be in structured form and should have headings of objective, design, settings, subjects, interventions (if applicable), main outcome measures results and conclusions.

Key Words: Below the abstract give few key words, which should not more than ten. These key words are used in cross-indexing the article and are usually published with abstract. Use terms from the Medical Subject Headings (MeSH) which are standard medical headings given in the list of index medicus, e.g Glomerulonephritis, Paraplegia, Infertility. If suitable MeSH terms are not yet available for recently introduced terms, present term may be used.

Introduction: This should describe the purpose of the article and the

rationale for the study. It should neither review the subject extensively nor should it have data or conclusions of the study.

Material: Material refers to the subjects and apparatus

- = SUBJECTS: are patients or person on whom study was done their age, sex, mean age, and standard deviation, and other relevant characteristics should be given.
- = APPARATUS: refers to the main device used to measure the observation, this may be a laboratory equipment, surgical procedure, questionnaire, or a clinical method e.g. a laboratory instrument for Hemoglobin estimation, a procedure to remove the stone from bile duct, a questionnaire developed to know the effect of poverty on nutritional status or clinical criteria to assess the severity of pain

Method: METHOD is the procedure of data collection. Mention the study design, place where study was conducted, procedure of data collection. Mention the name of statistical test and software program wherever applied.

- = RESULTS must be presented in the form of text, tables and illustrations. The contents of the tables should not be repeated in the text. Instead, a reference to the table number must be given.
- = DISCUSSION should emphasize the present findings and comparison should be made of variations or similarities with other works done in the field. The detailed data should not be repeated in the discussion. It must be mentioned whether the hypothesis in the article is true, false or no conclusions can be derived.
- = OPTIONAL COMPONENTS are added only whenever applied. These are as follows:
- = ACKNOWLEDGEMENT if desired, it should be included after the discussion and before references.
- = LETTER OF UNDERTAKING signed by the main author must accompany all manuscripts:

Sample Letter of Undertaking

This is to confirm that the original / review Article / case report titled _____ submitted for publication in _____ has not been published in any other journal and if accepted for publication, it will not be published in any other medical journal in Pakistan or overseas.

Name of author (In capital)

Signature