

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

# Training Workshop on Scientific Report Writing

## Institutional Quality Assurance Cell (IQAC)

BAU, Mymensingh

**TOPIC: Writing**



**ABSTRACT**



**SUMMARY**



**CONCLUSIONS**

Prof. Dr. Md. Abdus Samad  
Department of Medicine  
BAU, Mymensingh



# What is research?

from an old French word,

*“sercher”*

prefix *“re”* –

**Research**



It is defined as **“intensive search with the purpose of becoming certain”**.

It is a **systematic investigation** into reality to gain knowledge.



# What is Research?

- ① The word 'research' is derived from the Middle French 'RE-CHER-CHE' which means 'to go about seeking'
- ② The term itself being derived from the old French term 'RE-CER-CHIER' a compound word from 'RE- + CERCHIER' OR 'SERCHER' meaning 'search'
- ☺ A researcher seeks exhaustively for three reasons:
  - A. FOR MORE EXPLANATIONS
  - B. FOR VERIFIABLE TRUTH
  - C. TO MAKE DISCOVERIES

# What is Research?

The word Research is composed of two syllables:

**‘RE’ and ‘SEARCH’**

- ☪ Syllable- **‘RE’** is a prefix meaning **‘again’** new or over again.
- ☪ Syllable- **‘SEARCH’** is a verb meaning to examine closely and carefully, to test and try or to probe.
- Together they form a noun **‘research’** describing a careful, systematic patient study and investigation in some field of knowledge undertaken to establish facts or principles

# Why do you need to learn how to write a research paper?

**Essential aspect of academic and research learning because:**

① Sources of research information











② Facilitate the learning process

③ The 'proof' or 'evidence' of research

④ Research data sources for the learners

⑤ If you wish to become an expert in your field you are going to have to learn how to do research and writing process is just a vessel of the learning experience

# Reasons to Publish Articles

-  **To increase human knowledge**
-  **Writing is improved**
-  **Sense of completion**
-  **Have something important to say**
-  **To change practice**
-  **To promote thought or debate**
-  **Examination of your work**
-  **Work is promoted**
-  **Money?**
-  **Career advancement**

# Types of Research Articles

-  **Original research article: Experimental**
-  **Original research article: Clinical**
-  **Review article**
-  **Case studies**
-  **General (Popular) articles**
-  **Editorial**
-  **Leadership**
-  **Letter to Editor**
-  **Short communication**
-  **Research note**

# Structure of a Research Article



small business insights



# Structure of a Research Paper

## #structure of a research paper

*Main parts of  
a composition:*

- ☐ Introduction
- ☐ Body
- ☐ Conclusion



- Abstract
- Introduction/ thesis statement
- Literature Review
- Methodology
- Results
- Discussion
- Conclusion
- Reference
- Appendices



# Roles of Different Structures of Article

- **Title**
- **Abstract**
- **Keywords**

- **Allowing the article to be easily found**
- **Easily indexed**
- **Advertised to potential readers**

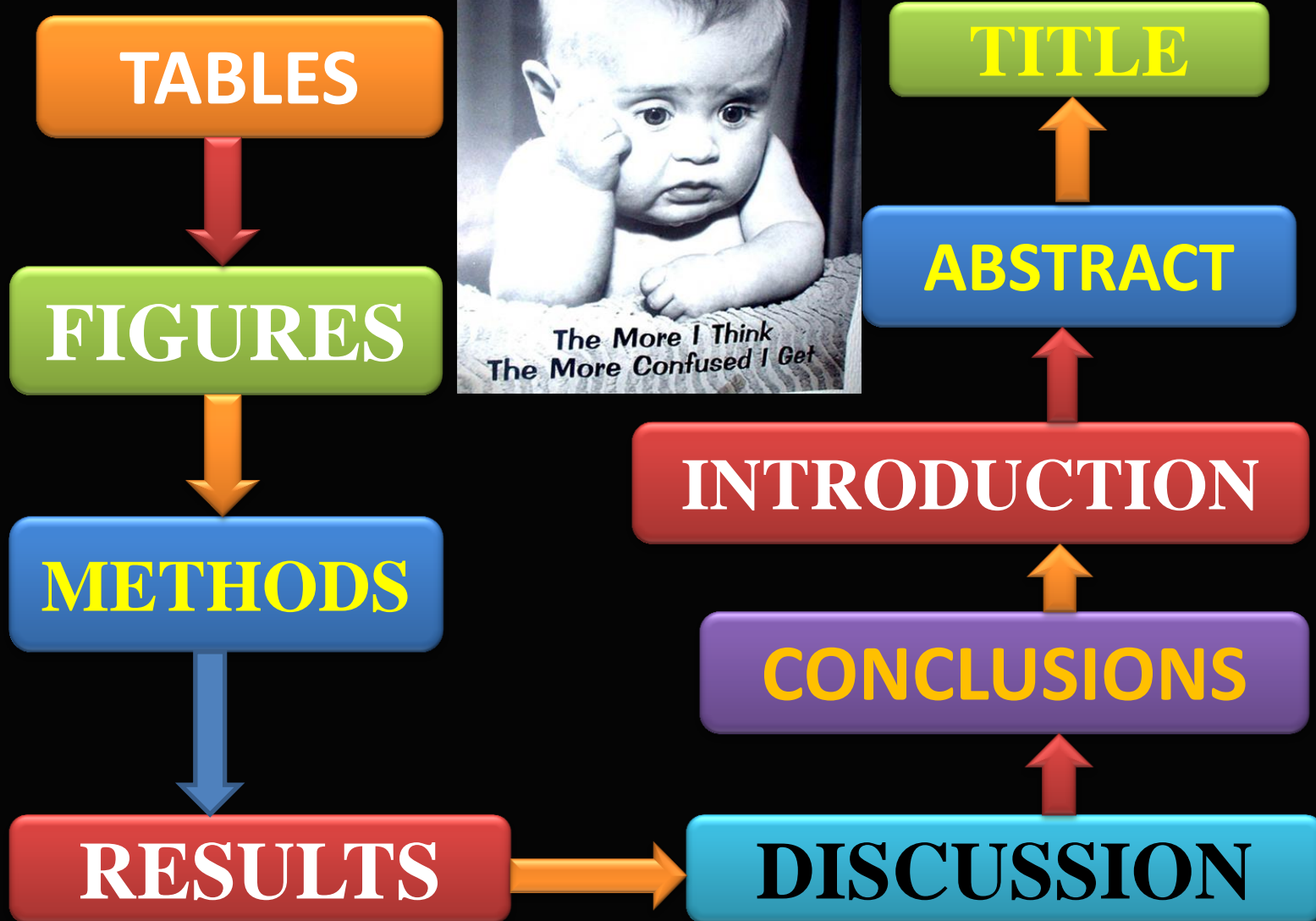
- Main Text**
- **Introduction**
  - **Methods**
  - **Results**
  - **Discussion**

- Effectively present and convey:**
- **Work and main messages**
  - **Findings**
  - **Comparison with pub. reports**

- **Conclusions**
- **Acknowledgements**
- **References**

- **Covey main findings**
- **Call to action**
- **All administrative details**

# Order of Writing Research Article



# Characteristics of Strong Title of the Article

- ① **Attract the reader's attention**
- ① Be specific- title should directly reflect the content of the manuscript
- ① **Keep it informative but concise**
- ① Avoid technical jargon and abbreviations; use formal language

## **Remember:**

- ① **Readers are the potential authors who will cite your article**
- ① Editors and reviewers do not like titles that make no sense or fail to represent the the subject matter adequately.

# Writing an Abstract



# Differences Between Abstract & Summary

## **N Abstract**

**a. Concise summary of a research paper, thesis, dissertation etc.**

**b. Has four elements:**

- Research objectives
- Research methods
- Results
- Conclusion and recommendations

**c. Usually presented at the beginning of a research article**

**d. To reflect the mind of the author of the research paper**

## **Summary**

**a. Concise or abridged version of a text or a lengthy article**

**b. Can refer to several things:**

- Chapter / entire of a book
- General article (essay)
- Film and play
- Executive summary (in business report)

**c. Usually presented at the end of an essay or article**

**d. To reflect the events of the particular act of a play**

# Writing an Abstract

Is it hard to write?





# Study and Think to Write an Abstract





# Wake up to Write the Abstract



# Writing the Abstract of an Article



# What is the Purpose of Study?



# What is the Objective of the Study?



# Writing of an Objective

- ① **To identify –**
- ② **To establish –**
- ③ **To describe –**
- ④ **To determine –**
- ⑤ **To estimate –**
- ⑥ **To develop –**
- ⑦ **To compare –**
- ⑧ **To analyze –**
- ⑨ **To assess –**
- ⑩ **To collect –**

# How is the Study Carried Out?



**Writing Research Methods**



# Writing Results of the Experiment



**Writing Results of  
the Experiment**

# Writing Conclusion!





# Readable Abstract

**READABLE**



# **What is an Abstract?**

- **The abstract is a concise summary of the full text of the research manuscript or entire thesis.**
- **It is a well-developed single paragraph of approximately 250 words in length.**
- **The function of the abstract is to outline briefly all parts of the paper**
- **Although it is placed at the beginning of the paper, the abstract should be the last thing, after writing the conclusion.**

# How are Abstract Used?

## **Selection**

- Allow readers who may be interested in the paper to quickly decide:
  - Whether it is relevant to their purposes
  - Whether they need to read the whole paper

## **Indexing**

- Databases accessed through the library enable to search abstract

# Why should I know how to write abstract?

**Abstracts are usually required for:**

- **Submission of articles to journals**
- **Application for research grants**
- **Completion and submission of thesis**
- **Submission of proposals for conference**
- **When writing a proposal for a book chapter**
- **Overview conference programs, abstract collections, book chapters**

# Types of Abstract

## a. Descriptive

- Humanities
- Social sciences

Two  
types

## b. Informative

- Science
- Engineering

Key parts

- Background
- Purpose
- Particular interest
- Overview of contents

- Background (what?)
- Objectives (why?)
- Methods used (how?)
- Results (findings)
- Conclusions

# What Makes a Good Abstract?

☺ **The abstract should be one paragraph and should not exceed the word limit.**

☺ **Edit it closely to be sure it meets the four criteria of abstract writing**

1 **Complete- it covers the major parts of the project.**

2 **Concise- it contains no excess wordiness or unnecessary information.**

3 **Clear & Specific- it is readable, well organized and not too jargon-laden.**

4 **Cohesive & self-sufficient- it flows smoothly between the parts.**

# Qualities of an Informative Abstract

- ⊗ **May be the most difficult part of the article to write an effective abstract.**
- ⊗ **Manuscript- a lot of more room to describe findings in a paper (≈ 3000 words)**
- ⊗ **Abstract = a 1/10<sup>th</sup> the length to engage reader(s) and make point (250-300 words)**
- ⊗ **Typically, it is best to write the abstract after writing the whole paper, create the abstract step-by-step based on the four steps chronology of the abstract.**
- ⊗ **Abstract can be understood without reading the whole paper**

# How to Write Abstract Systematically

- ⚽ **Write 1-2 sentences on introduction that explain background (**what?**) and research objectives (**why?**).**
- ⚽ **Write 1-2 sentences describing the methods including analysis (**how?**).**
- ⚽ **Write 1-2 sentences describing the results (**findings/products**).**
- ⚽ **Write 1-2 sentences containing the **conclusions** and recommendations.**



# Conclusions

## **a. Significance of work**

- Main outcome of the findings

## **b. Call to action**

- Implores the audience to change

## **c. Offer a solution**

- Suggest some possibilities to resolve the problem

## **d. Make a prediction**

- Can be a warning or an encouragement

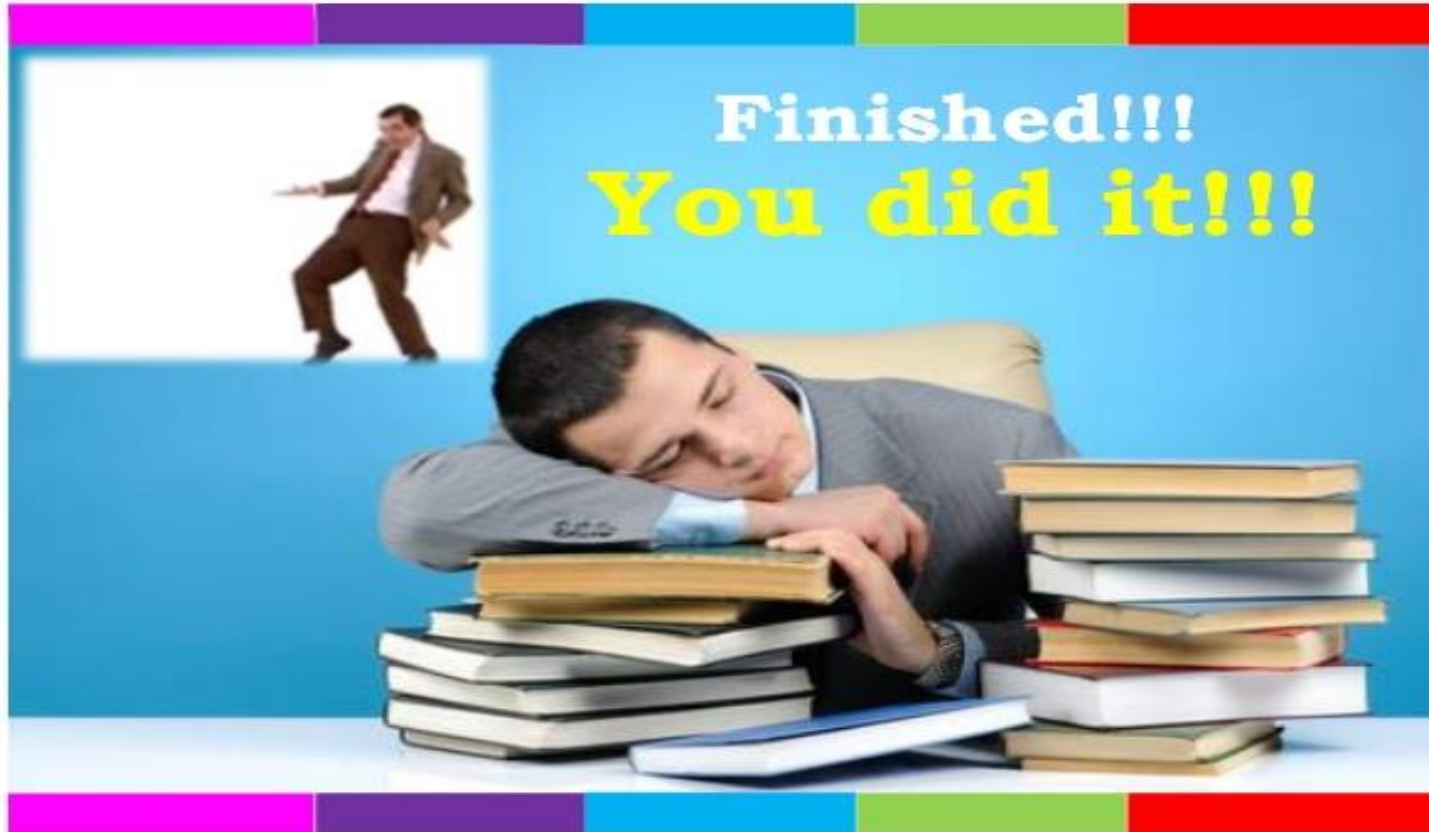
# Recommendations

- Based on the findings and conclusions
- Suggestions for further studies
- Non-technical language
- They should be feasible, workable, flexible, doable, adaptable

# **Not to Write in an Abstract**

- ① **Do not refer to other works**
- ② **Do not add information not contained in the original work**
- ③ **Do not define terms**

# Abstract Writing is Completed



# Did Great Work



# Questions/Comments



Thank you for attending!