

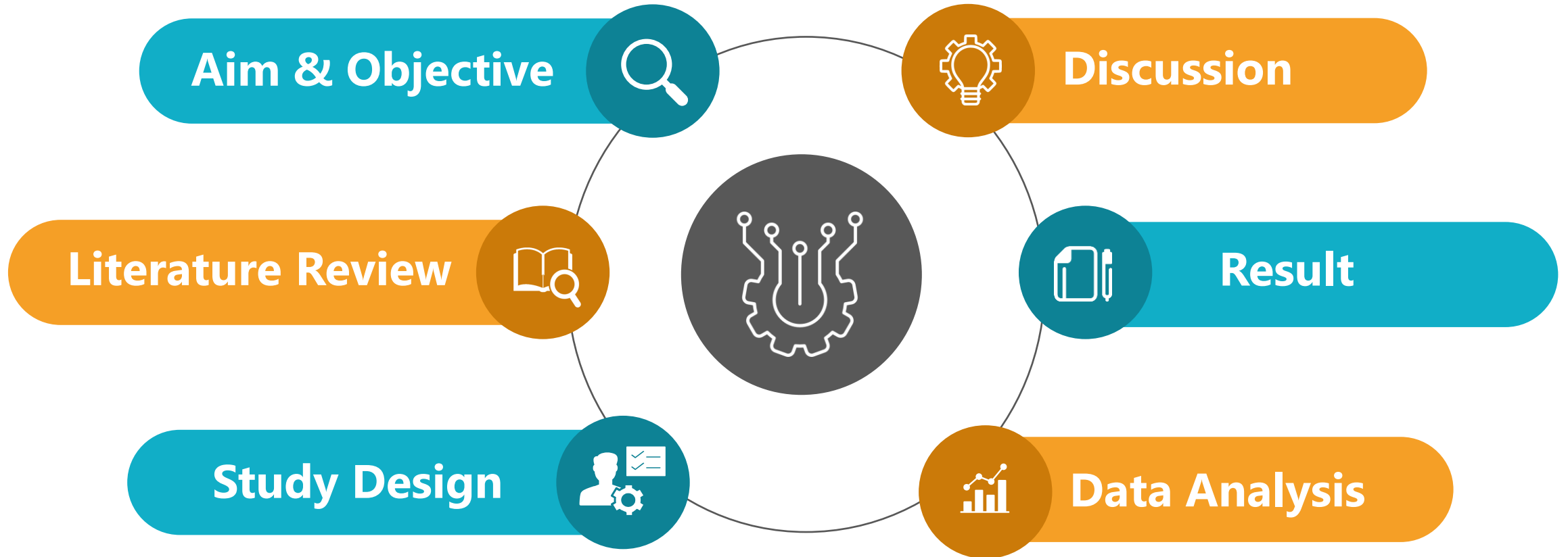


# **Crafting a Successful Research Article: Strategies and Support from the Medical Research Unit**



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# Key Elements of a Research Article





**Aim answers,** "What is the purpose of this research?"

**Objective answers,** "What specific tasks need to be done to achieve the aim?"

"Investigating the Effects of a New Drug on Blood Pressure in Hypertensive Patients: A Pre-Post Intervention Study"

## Aim

**To investigate the effects of a new drug on blood pressure in patients with hypertension.**

## Objective

- To measure the baseline blood pressure of patients with hypertension
- To administer the new drug to the study group over 3 months
- To analyze changes in blood pressure before and after drug administration.



**The research question guides the entire study.**

## Characteristics of a Good Research Question:

**Specific**

**Relevant**

**Feasible**

**Progressive**

**Weak Research Question:** "What are the effects of smoking?"

**Strong Research Question:** "How does smoking during pregnancy affect fetal development in women aged 20-30?"

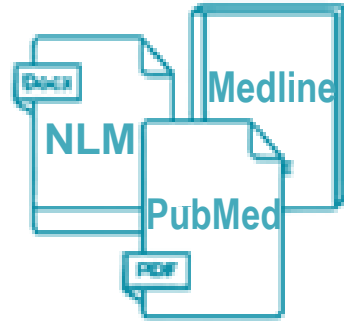
# Literature Review



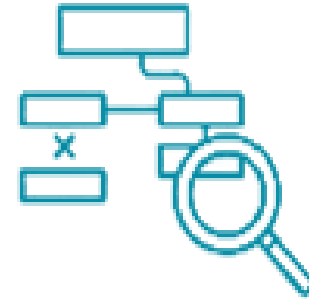
## Steps to Conduct a Literature Review:



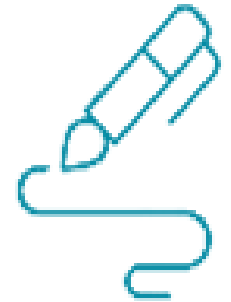
Search for  
relevant literature



Evaluate  
sources



Identify themes,  
debates and gaps



Outline the  
structure

Provide **context** and **justify** your research question.

**Synthesize, Don't Summarize**

Use proper citation (EndNote, Mendeley)

# Study Design



## Research Question

- Drives the choice of study design



## Ethical Considerations

- Ensure compliance with ethical guidelines (e.g., informed consent, IRB approval)



## Population and Sampling

- Define the target population and sampling method



## Variables

- Identify dependent, independent, and confounding variables



## Intervention/Exposure

- Specify treatments or exposures being studied



## Outcomes

- Define how success or effect will be measured



**Converts raw data into meaningful results.**

Early Planning

Decide on statistical methods during study design and collect data accordingly

Choose Appropriate Tests

Match tests to data type (e.g., t-test, chi-square, regression)

Visualize Results

Use relevant graphs, diagrams and tables to summarize the findings

**"What"** and **"When"** is more important than **"How"**



**Explain in the context of the research objective and hypothesis.**

**Purpose of a Results Section:** The results section summarizes and presents the findings of the study to put them in context with your research question

**Structure of Results Section:**

- Introduction to connect the results with the research objective,
- be sure to include a combination of text and visuals,
- summarizes the key findings

**The results section should not attempt to interpret or analyze the findings, only state the facts.**





01

## **Summarize Findings**

Begin with a concise summary of your main results

02

## **Interpret Results**

Interpret and explain the meaning of your findings

03

## **Compare with Literature**

Compare your results to the existing literature

04

## **Discuss Implications**

Explore theoretical and practical implications

05

## **Acknowledge Limitations**

Clearly state and discuss the limitations of your study

06

## **Propose Future Research**

Suggest directions for future research



01

## Research support

- Consultation on research design
- Support in developing survey questionnaires and data management
- Assistance with manuscript revisions and ethical guidelines.

02

## Analytical Support

- Support with methodology and sample size calculation
- Data analysis and statistical consultation.



**Thank You**