



# RESEARCH PROCESS : AN INTRODUCTION

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# **AN INTRODUCTION**

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# **PLANNING AND DESIGNING OF RESEARCH**

## **Objectives and Discussion:**

- What is Research?
- Why Research Conducted?
- What are different types of Research?

How?

Where?

When?

## **Research:**

- Logical effort to solve some difficulty experienced in the context of theoretical knowledge or practical solutions.

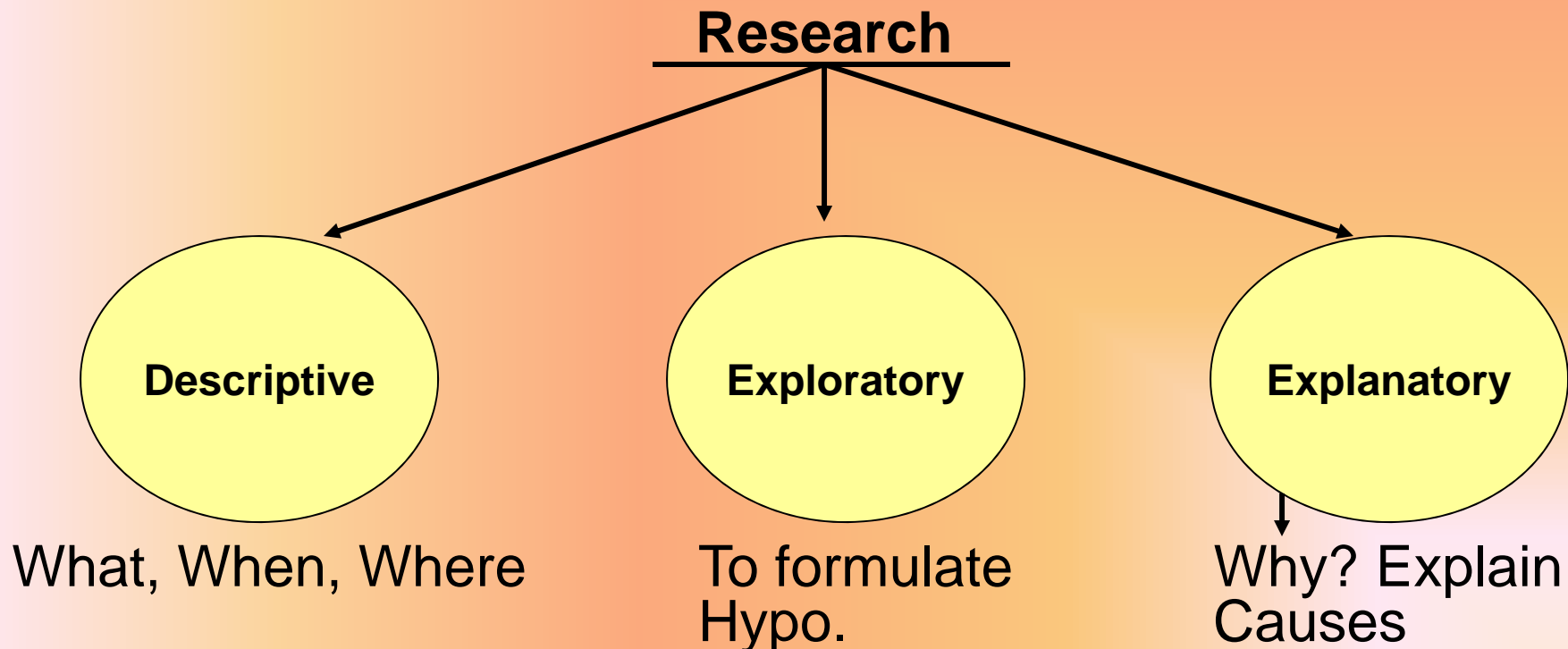
## **Research Question:**

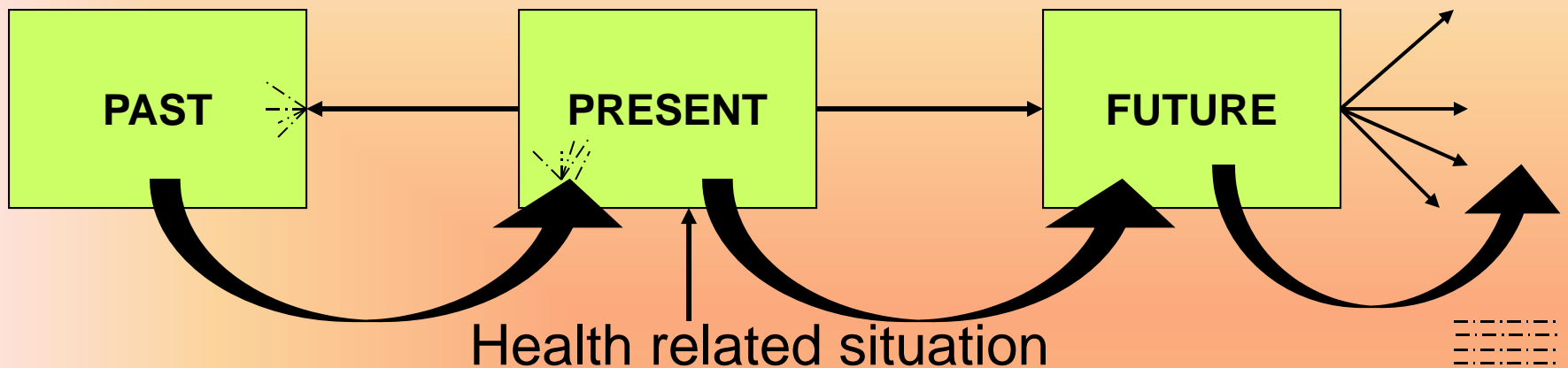
- Uncertainty about something which a researcher want to resolve by making observations.

# PLANNING AND DESIGNING OF RESEARCH

## Research Problem:

- Some difficulty experienced in the context of theoretical knowledge or practical situations or both, which a researcher want to solve.





- Descriptive: - One situation at one time/different times  
- Several situations at one time/different times
- Explanatory: - Concerned with causes about some phenomena
- Exploratory: - No/little information  
- To diagnosis situations, screening alternatives, new ideas, est. of hypo, case studies on clinical manifestations, surgical complications, adverse reactions etc.

# **CHOICE OF A RESEARCH TOPIC**

## **RESEARCHABLE:**

- Practical and theoretical relevance.
- Utility of the RP
- Feasibility
- Reliable Information
- Capable of developing hypothesis
- Acceptable, Applicable, Ethical

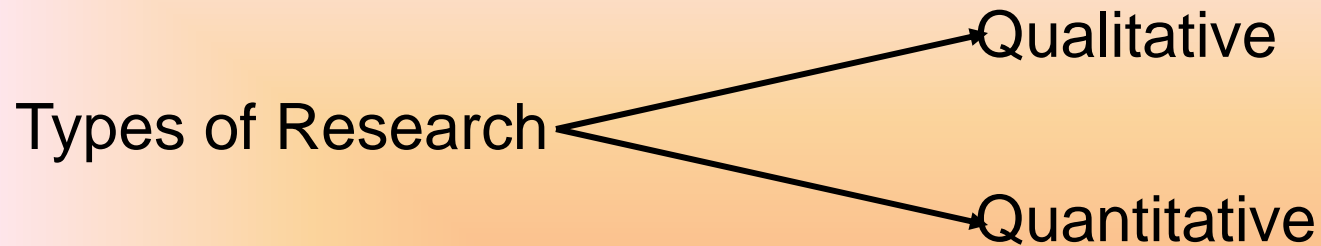
## **Guidelines:**

- Avoid saturated areas
- Think what, why and how?
- Individual Interest
- Decide clear-cut objectives
- Feasibility

# SOURCE OF SELECTION OF RP

- Earlier Research / Review
- Experience
- Prevalent Theories
- Govt. Priorities
- Imaginations
- Observed Situations
- Personal Curiosity
- Adoption of newer technology
- Prevalent theories / review

# CHOICE OF A RESEARCH TOPIC



## **Qualitative Research:**

- No representative sampling
- No strict sampling design
- Description of experiences
- Helpful in estab. Hypo. for future res.
- Non quantitative analysis

## **Quantitative Research:**

- Representative sampling
- Strict sampling design
- Prior Hypothesis
- Quantitative & Qualitative Analysis with all scales of measurements.



# CHOICE OF A RESEARCH TOPIC

- RP should be focussed on assessing relationship between two or more concepts.
- Several research questions / objectives
- Clear statement and possibility of data collection
- No ethical problem
- Practical and theoretical relevance
- Beneficial to the community
- Implications to clinical practice

## **Factors Affecting Selection of Topic:**

- Researcher's interest
- Research Question
- Research Model and Research Value
- Units of study
- Time and cost schedule

# **BROAD AREAS OF RESEARCH**

- Experimental
- Applied
- Operational (Evaluation & Monitoring)

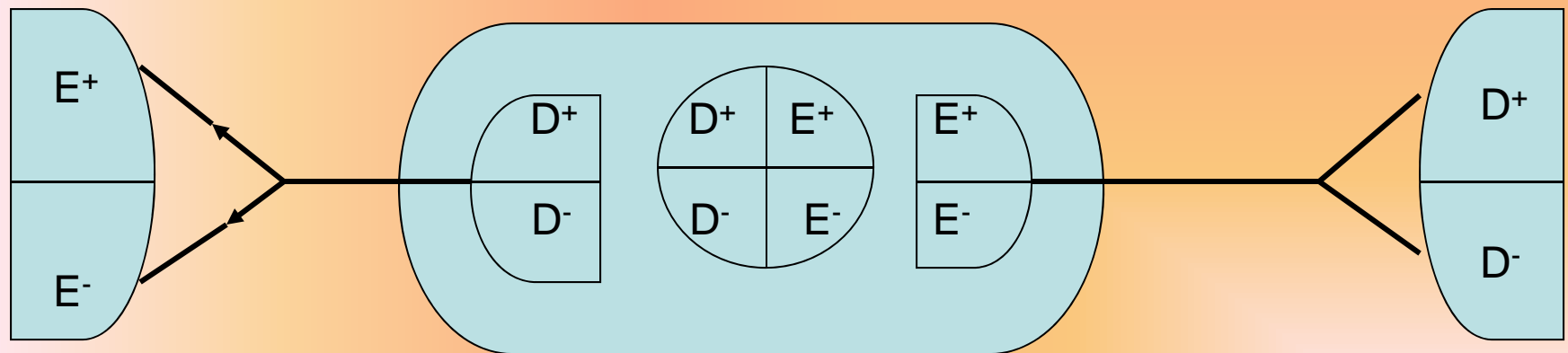
## **Broad Classification:**

- Quantitative Research
- Qualitative Research

## **Types of Research:**

- Exploratory / Formulative
- Experimental
- Descriptive
- Evaluation
- Explanatory / Casual
- Pure Vs Applied
- Basic Research
- Epidemiological Research
- Clinical Research

# APPROACHES OF CONDUCTING RESEARCH



Case control

Recall Past Exposure

Cross Sectional

Cohort

Record outcome

PLANING OF RESEARCH

STEPS INVOLVED

# STEPS INVOLVED IN PLANING OF RESEARCH

- Objectives of Survey/Study
- Information to be collected
- Target Population and Sampled Population
- Optimum Sample Size
- Sampling Design
- Study Design
- Questionnaire/Schedule

- Organization of Field Work
- Data Collection
- Problem of Non-Response
- Data Analysis
- Report Writing
- Guidance for Future Work



A scenic landscape photograph featuring a snow-capped mountain peak in the background, a dense forest of evergreen trees in the middle ground, and a calm lake reflecting the scene. In the foreground, there are lush green plants with small purple and white flowers. Overlaid on the center of the image is the word "THANKS" in large, bold, capital letters. The letters have a textured, crumpled brown paper appearance with a dark brown outline.

THANKS