

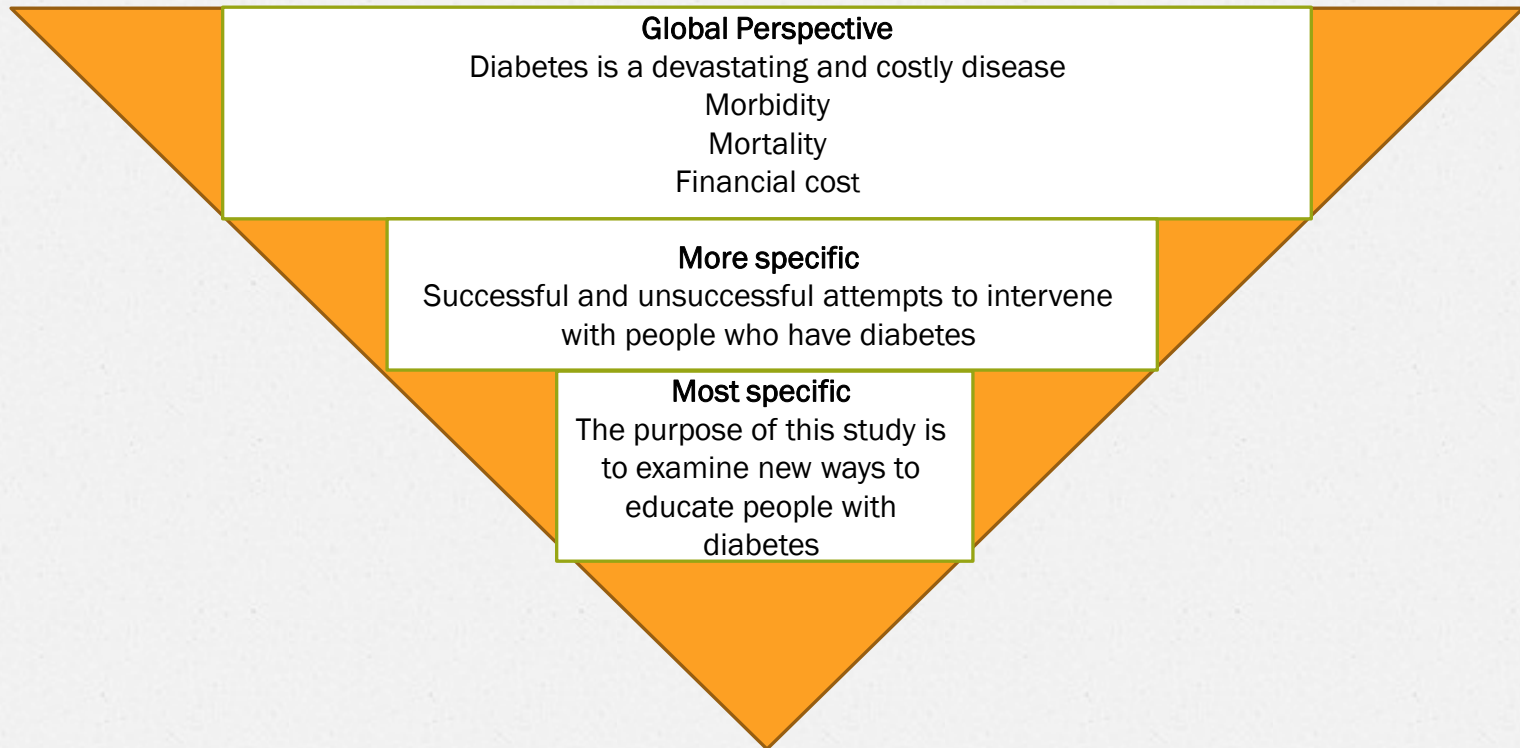
What we learnt before:

Research Process

- The Research Problem
- Formulation of Research Objectives
- Review of Related Literature
- Delimitation of the Research Problem
- Formulation of Testable Hypothesis
- Identification of Research Variables
- Construction of Research Design
- Designing Tools for Data Collection
- Designing Plan for Data Analysis
- Collection of Data
- Data Processing
- Data Analysis and Interpretation
- Drawing Conclusions and Recommendations
- Writing of Research Report
- Reporting of Research Findings



What we learnt before: Problem Statement





Part 1

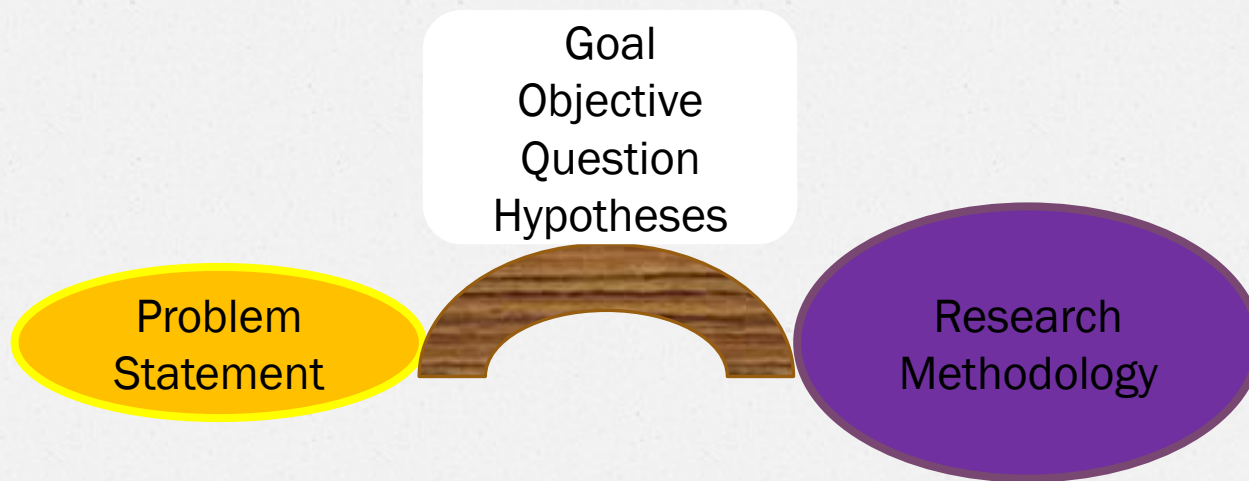
Goal and Objectives



Objectives

- o This presentation will assist you in improving your knowledge in writing goal and objectives of your research proposal. Hence, after this presentation you will be able to:
 1. **Write goal of given topics.**
 2. **Write precise research objectives.**

Introduction



Goal

- o A general, broad statement of what you wish to achieve
- o Related to problem statement
- o What is to be accomplished by the study
- o Similar to title with some additional information
- o Determine instead of assess



Objectives

- A step toward accomplishing a goal
- Specific in agreement with the title
- Logical roadmap to the goal
- Identify variables, research design, methodology, data gathering
- The same as goal in simple studies; e.g, determine the average weight of ...
- Not work steps

Objectives

- o Action verbs(describe, determine, identify, assess, compare)
- o Improper verbs: perceive, believe, understand, prove
- o Secondary objectives: subgroups data analysis
- o Better to determine at the beginning
- o Applied purposes

An Example:objectives

- o Correlation of ratings of students' overall performance in a medicine clerkship with ratings of knowledge
 1. Rating students' overall performance in a medicine clerkship
 2. Rating students' knowledge in a medicine clerkship
 3. Determining the correlation of ratings of students' overall performance in a medicine clerkship with ratings of knowledge

An example: secondary objectives

- o Correlation of ratings of students' overall performance in a medicine clerkship with ratings of knowledge
 1. Rating students' overall performance in a medicine clerkship by students' gender
 2. Rating students' knowledge in a medicine clerkship in different age groups
 3. Determining the correlation of ratings of students' overall performance in a medicine clerkship with ratings of knowledge

An example: applied objective

- **Correlation of ratings of students' overall performance in a medicine clerkship with ratings of knowledge**
- If research hypothesis is approved, our institution will plan to increase students' knowledge; otherwise;



Part 2

Research Questions and Hypotheses



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Objectives

- o This presentation will assist you in improving your knowledge in writing research questions and hypotheses . Hence, after this presentation you will be able to:
- o Write appropriate research questions.
- o Write hypotheses and null hypotheses.

Questions, Hypotheses

- Questions for descriptive objectives
- Hypotheses for analytical objectives
- The same number with research objectives
- Hypotheses: researchers' best guess
- Will tense

Hypotheses

- Testable
- Statistical or research hypotheses
- Null(H_0) or Alternative(H_A) hypotheses
- Directional or non-directional
- Two-way or one-way

An example: Hypotheses

- Correlation of ratings of students' overall performance in a medicine clerkship with ratings of knowledge
- H_0 : There is no correlation between
- H_A : There is correlation between

Or

There is a positive correlation between ...



Appreciate Your Attention