

METHODS SECTION OF A RESEARCH PROPOSAL

LEARNING OBJECTIVES

- Explain how the methods section is linked to the aim of the study
- List the questions answered by the methods section of the proposal
- List the components of the methods section of a proposal
- Define a research setting
- Distinguish between target population, sampled population, sampling unit and unit of inquiry
- Recognize the importance of operational definition of terms used in the proposal
- Link the study instrument with the type of data to be collected
- Identify the activities that should be covered in the time frame
- Provide a description of the implementation procedure

PERFORMANCE OBJECTIVE

Writing the methods section of a research proposal

INTRODUCTION

A research proposal is a “Scientific document written to provide a clear description of what is intended to be done and how it will be achieved”

A research proposal is simply a “plan of a action” or “plan of the investigation” or “ a blue print of the intended investigation”

What are the intended achievements?

- Goal _____ Overall aim of the study
- Specific objectives _____ Specific achievements
e.g. to “describe” , “reveal” , “determine” , “identify”

Don't use

- To compare the results with international findings
- To discuss reasons for the findings obtained

METHODS SECTION OF A RESEARCH PROPOSAL

WHAT ARE THE COMPONENTS OF THE METHODS SECTION ?

1. Research design
2. Research setting
3. Study population
4. Sample size and sampling method
5. Operational definition
6. Study instruments
7. Procedure of implementation
8. Data analysis
9. Time frame

What is the research design?

- Cross section study
- Case control study
- Cohort study
- Intervention study

Provides information on the epidemiologic approach that will be used to investigate the problem and realize the aim

What is the research setting?

Place

- Hospitals (outpatient or inpatient)
- Primary Health Centers
- Education institutions (schools, universities)
- Work place (factories)
- Community dwellers in a specific locality (population)

Time:

Period that reflects the data

Provide information on where and when the study will be conducted

What is the population?

- Target population
 - About which an inference will be drawn
 - To which findings will be generalized
 - It may be the population at large or specific subgroup
- Sampled population
 - From which a conclusion will be drawn
 - That will be selected for the study

Specify the inclusion and exclusion criteria

What is the sample size and sampling method?

- Sample size
 - How many will be included
 - Based on sample size calculation
- Sampling methods
 - The probability sampling technique that will be followed
 - How the sampling unit will be selected

Operational definition of terms

E.g.

Smoking

Obesity

Child maltreatment

Repeated abortion

Gestational diabetes

Severe hypertension

DON'T USE JARGON

What are the data that will be collected and how?

Instrument (s)

Intended information

E.g.

- Questionnaire interview _____ to obtain information on
- Observation checklist _____ Quality of performance
- Review of records _____ to obtain information on
- Anthropometry _____ to determine nutrition status
- Analysis of samples _____ to determine anemia

Description of the implementation of the study

Visiting the site (clinic, ward or the school) on Tuesday ----then

Subjects (cases or students) will be identified and interviewed---then

Completeness of the interview will be checked -----then

Samples of (blood or tissue) will be obtained -----then

Delivered to the lab and kept at a temperature of X°C --then

After completing the collection of samples these sample will be analyzed for _____

Data analysis specifies

- Method of checking for data entry errors
- The descriptive statistics that will be used
- The test of significance that will be applied
- The level of significance that will be used to judge significance of the obtained results

DON'T

- Limit data analysis to the program that will be used
- Say that the type of analysis will be determine later

Specify the duration or the time of each activity

- Review of the literature
- Obtaining necessary approval
- Conducting a pilot study
- Data collection
- Analysis of the samples collected (if any)
- Data analysis
- Reporting of the findings

Time of activity may overlap