

The Language and Prospects of research in reproductive health

Professor Friday Okonofua

Definitions

Some terms to be defined:

- Population
- Sample – sampling and randomisation
- Subject or participant
- Parameter
- Statistic
- Concept
- Hypothesis

Definition

Population: entire group of people, events, institutions, etc.

Sample: subset or sub-group of the population

Subject: a simple member of a sample

A parameter: an attribute of a population

Statistic: an attribute of a sample

A concept: an abstraction based on characteristics of perceived reality. It is a word that expresses generalization of a particular idea.

Definition2

Variable: a symbol or characteristics whose values vary.

Types of variables

- Continuous variables – e.g. age, income, height and weight
- Categorical (or discrete) variable – e.g. sex, religion, marital status, etc.

Definitions3

Independent versus Dependent variables –

Independent variable: the presumed cause or the explanation for an outcome

Dependent variable: is the outcome, that is influenced by the independent variable.

Example is the relationship between maternal mortality (dependent variable) and level of education as the independent variable.

There is often one dependent variable, but several independent variables.

Defining hypothesis

A hypothesis is a statement linking two or more variables – at least one independent and one dependent variable in a relationship.

Much of scientific research involves the analysis of data to uphold or falsify such hypothesis

Types of Hypothesis

Null hypothesis – no difference between a dependent and an independent variable e.g. There is no difference in maternal mortality ratios between women with primary and those with secondary level education.

Alternate hypothesis. Maternal mortality ratio is higher in women with primary education as compared to those with secondary education.

Theories

- The ultimate aim of research is to develop powerful theories that explain developmental challenges of dilemmas.
- A theory is a set of argument or meaning given to explain an observation or a phenomenon

Problems and Prospects of Research in RH

- Adequate and up-to-date knowledge of RH
- Sensitive nature of RH, with related ethical concerns
- Experience and knowledge in research
- Resource constraints
- Poor library/archival facilities
- Poor knowledge of know-how of literature review
- Low level of culture of research
- Poor policy/industry linkage of research

Choosing Research/Dissertation topics in RH

- Choose a topic in which one is familiar – through thorough and in-depth reading
- Read past and recent journal articles relating to the subject matter.
- Continue to read recent publications on the subject matter even when the research is in progress
- Choose a new area of research – a new idea that has not be worked on
- Choose a supervisor that is familiar and has written papers on the topic and who can adequately mentor you.

The dos and don'ts of topic selection

- Select a topic you are interested in, and for which you are passionate
- Possibly a topic that relates to a specific RH challenge that you know.
- Avoid a topic that is too ambitious. Try to be as specific and focussed as possible.
- Select a topic in which you are likely to make original contribution to knowledge.

Types and sources of data for RH Research

- Systematic analysis and meta-analysis
- Archival pre-existing data e.g. DHS and other existing field data
- Experimental data – mainly laboratory data
- Field data – especially survey data
- Public data e.g. from censuses, etc.
- Social science data – focus groups, in-depth interviews, etc.

Writing a Research Proposal

- Abstract
- Literature Review
- Statement of the problem
- Study Objectives, research questions and hypotheses to be tested
- Proposed research methods
- Scope
- Study limitations, and risks
- Significance of the study
- References