



Preparing a project

Webinar: Preparing a project with publishable data and ethical considerations of community outreach

AOHAB Student Leadership in Global Oral Health

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Learning Objective

- To understand the concept of research in health
- To understand the importance of each component included in developing a project

OUTLINE OF PRESENTATION

- What is Research?
- Components of a Research Proposal
- Brief on Intellectual Property
- Overview of Good Clinical Practice (GCP)

What is Research?

- In simple terms -Research is a process of discovering new knowledge
- May be defined as **careful consideration of a study** regarding a particular concern or problem using scientific methods
- involves systematic inquiry to describe, explain, predict and/or control observed phenomenon

Research in Health

- Have the characteristics of an activity that can be replicated.
- Where the methods or procedures should be clear enough for one to conduct the same research.

This is considered a hallmark of credible scientific finding.

An example is: Laboratory experiments



- Research tends to generate new questions.
- Research should aim at bettering society and therefore should be *apolitical*.



Research and Dental Public Health

- Public health refers to promoting and maintaining health of a community
- Dental diseases have a lot of information on **causes** in particular the two most prevalent; Dental Caries and Periodontal disease
- Dental Public health recommend prioritise/focus research
 - Disease Prevention
 - Effective Health promotion
- Research into what is appropriate solution for oral disease at local levels given the difference in economics, scientific resources, ... e.t.c.

Conducting a research is guided by a document: **Research proposal**

Research proposal

There are several versions of proposals; for example business proposals, grants proposals e.t.c However, we shall restrict our discussion to majorly **Academic research proposals**

This should



- Well written
- Clear and simple language
- Organized
- with Accurate information

Research proposal

- Definition: A detailed plan of a scientific or medical, experiment, treatment, or procedure.
 - Idea encompassing how, who and when will the plan be carried out.
 - details your plan and plan of actions.
- Proposal document content evolves to a **Written report** after the activities have been conducted.
- Written reports are used in disseminating 'the new knowledge' to the wider community for example; as **presentations** at conferences, **publications in scientific journals** e.t.c

Components of a proposal

1. Title page
2. Table of contents
3. Abstract
4. Introduction
5. Literature review
6. Goals/Objective
7. Methodology
8. Outcome
9. References
- Practical Aspects
 - Personnel
 - Budget, e.t.c
- Appendices



Today's focus

Introduction

The Introduction is the signpost of what you are going to do.

Here you answer two main questions

1. WHAT ARE YOU RESEARCHING?
2. WHY ARE YOU RESEARCHING?

In the section information to:

- Share a broad overview of the topic
- Introduce the unique terms in the topic
- Justify your choice of topic
- Clearly State the research problem
- Introduce the research objective(s)

Literature Review

- Literature relevant to the study problem is discussed in 'your own way'
- That is, as you develop the document, you first identify a problem (research area/topic), then read more around it to;
 - Get more context- who is affected, what has been researched about it... e.t.c
 - Understand and Highlight the relevance and the specific interests- who are affected, who will benefit, where.... e.t.c
- This will also help you garner more ideas and information that you shall use to develop and write other Proposal components
- Make good record as notes where you source information you will use this to set up your **Reference list**

Goal/Objective

- Research objective is what a researcher hopes to achieve in doing this activity.
- Can only be formed when you have developed a clear understanding of significance and relevance of issue that needs attention

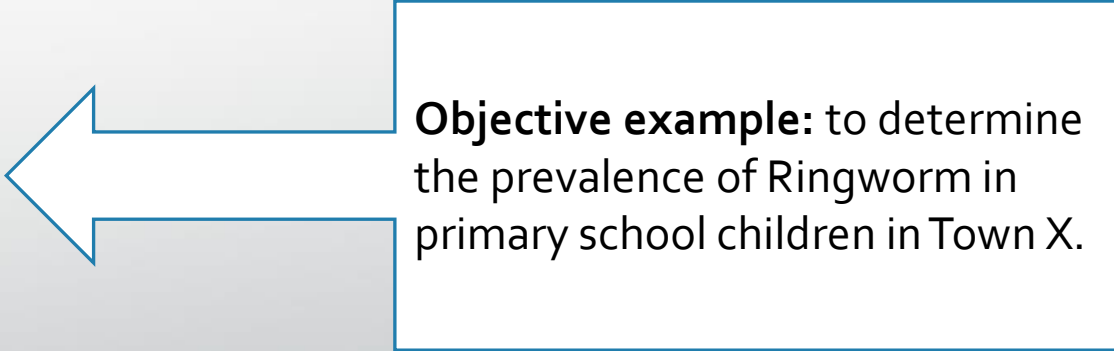
1. General objective

- is what you hope to achieve in general terms
- A research has few General Objectives (normal to find one)
- Goal

Goal/Objective

2. Specific Objectives

- aspects of the General objective that will be solved
- Common Acronym for objectives is:
 - **S-PECIFIC**
 - **M-EASURABLE**
 - **A-TTAINABLE/ACHIEVABLE**
 - **R-ELEVANT**
 - **T-TIMELY/TIMEBOUND**



Objective example: to determine the prevalence of Ringworm in primary school children in Town X.

Methodology

This refers the process of

- Collecting, analyzing, interpreting and reporting information

Research terms related to design;

- Medical (Biomedical) research is grouped into 3 main areas: *Basic, Clinical and Epidemiological*.
- Based on the description of methodology designs: *Explanatory, Descriptive, Exploratory*
- Design used to describe the nature of the data to be collected: *Quantitative, Qualitative, Mixed*

Practical Aspects

These include;

1. Timeframe
2. Human Resource
3. Budget
4. Facilities and
5. Equipment



These shall be influenced by;

- Purpose of project
- Accuracy required for data
- available time
- costs
- and labor involved in project

Outcome

- At the proposal stage, this refers to what the authors hope to achieve on completion of the project
 - Stating **who** will benefit
 - And **how** they may benefit

when the project is conducted successfully!

NB: written in the future tense

Intellectual Property

- **Intellectual property (IP)** are creation of the minds.
 - **Intellectual property rights** are the rights given to persons over their creations, for example inventions.
- Current trend of Information Technology has seen greater access to information and more areas conflict on who owns IP.
- IP policies are set up Nationally and Internationally, to provide an environment that supports researchers to access and share knowledge
- IP may be protected in the law by – **patents, copyrights** and **trademarks**
 - Patent; the inventor has the right to decide if their invention can be used

Good Clinical Practice

- important to ensure people/animals that are involved clinical research are kept safe, and not exploited i.e. their rights and welfare are not compromised.
- is considered as Ethical conduct
- **Good Clinical Practice (GCP)** is an international ethical and scientific standard for conducting biomedical and behavioral research involving human participants
- GCP Principals are applicable to all stages in studies involving human research participants; design, conduct, oversight and management



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Thank you for your attention!

Any Questions?