



# How to Review Proposals of Mixed /Other Study Designs ( Form C/ D)

How to Review Research Proposal Workshop

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Presenter: Dr. Huda Abu Hamdeh, Dean, Ibra Nursing Institute

Member, RERAC – MoH HQ



## **Session Aims - Participants will be to :**

- identify research designs that use forms C & D**
- critique/appraise a sample of research proposal containing non clinical quantitative design**
- deal with common mistakes encountered by reviewers in quantitative/mixed methods research design**

# Uses of Form C

Form C – Will be used for research involving:

- **Studies involving questionnaires, surveys;**
- **Exploratory/cross-sectional studies;**
- **Exploratory observational studies;**
- **KAP studies, etc.**

# Uses of Form D

**Form D** – Will be used if the research is:

- A mixed research incorporating aspects of qualitative and quantitative research, either simultaneously or sequentially in the proposal;
- Proposed to be done in sequential phases;
- Studies of Diagnostic tests;
- Economic analyses;
- Decision analyses etc

# The Format of a Research Proposal Containing Quantitative Non-Clinical & Mixed Design

## Common Sections

- **Proposal particulars & contribution of research team members**
- **Proposal summary/abstract**
- **Background & literature reviewed**
- **The reason for conducting the study & how will the presentation be used ?**
- **Statement of the Problem and its significant?**
- **Primary research question, hypothesis, aim, objectives**

# The Format of a Research Proposal Containing Quantitative Non-Clinical Design (Form C & D )

- **Study Population & Accessible Participants**
- **Inclusion & exclusion criteria**
- **Sample size, sample calculation and sampling process**
- **Potential control/comparison group, selection, inclusion & exclusion criteria and enrollment**
- **Measurement instruments: Data Collection Method,, settings, validity & reliability of the tool**

# The Format of a Research Proposal Containing Quantitative Non-Clinical Design (Form C & D)

- **Pilot study or pretest**
- **Informed consent**
- **Perceived coercion/ undue pressure /incentive**
- **Attrition & Non Compliance**
- **Adjustment for potential bias**
- **Data Synthesis: Software for data entry & statistical tests**
- **Quality Control of Data**

# The Format of a Research Proposal Containing Quantitative Non-Clinical Design (Form C)

- **Work plan**
- **Anticipated conclusion**
- **Beneficiaries of the research**
- **Potential shortcomings**
- **Dissemination of study findings Proposed sample size**
- **Priority and Importance of the study**
- **Ethical Issues**
- **Any additional resources of the department ? Permission?**



# Form C: Non-Clinical Quantitative

## Form D : Mixed/Other Research Designs

### Form D:

- Specify the research strategy (research design and methodology) that is unique / specific to this study
- A study design is a specific plan or protocol for conducting the study, which allows the investigator to translate the conceptual hypothesis into an operational one.

# Form C: Non-Clinical Quantitative

## Form D : Mixed/Other Research Designs

- How will the eligible participants be enrolled / allocated to the study?
  - Random Sample
  - Systematic sample
  - Convenient sample
  - All eligible participants
- Describe briefly the allocation / randomization technique
- Describe briefly the sampling technique

# What Questions to Consider?

- Is the research scientifically valid, significant and original?
- Is this study needed? Does it fill a knowledge gap?
- Does this work unnecessarily duplicate work that has already been done?
- Are appropriate methodologies selected? Could they do better? Are there alternative approaches?
- Is this work achievable within the suggested timescale?
- What are the strengths and weaknesses?
- Does the researcher or research team have the right skills, skill mix, facilities and support?
- Is the chosen research topic part of the “Health research Priorities”
- Are there any ethical issues?

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- **Read the whole proposal thoroughly**

# Common Mistakes Made in Title

- **Do not reflect what was intended to be done and variables of the study are not clear to the reviewer.**
- **Broad and lacked focus because of being wordy and general.**
- **Population to be investigated and setting are not specified.**

# Research Summary/Abstract

The summary forms the reviewer's initial impression of the quality of proposal. The summary speaks for the proposal when it is separated from it

**Critique the summary considering the following elements:**

- **Background:** statement and importance of the research problem [summarize the significance (need) of the research study],
- **Aim/main objectives** of the research study
- **Methodology:** Research design, sample, sampling method, sample size, data collection tool(s) and technique (s), statistical analysis methods, indicators
- **Implication:** Potential impact of the expected major results.

# Common Mistakes Made in Summary

- **Unstructured summary**
- **In adequate information related to statement and importance of research problem**
- **Methodology, sample & sampling techniques, and statistical analysis methods, implication of expected results are missed**
- **Language errors and typos**
- **The summary does not coincide with the whole proposal**

# Literature Review

- This section addresses why the proposed work is important in the field, and answers the question, “so what?”.
- It provides the status quo of the relevant work field and identifies a gap in knowledge or activities that must be filled to move the field forward.
- Sufficient details should be given in this section to:
  - make clear what the research problem is and exactly what has been accomplished;
  - show why the previous work needs to be continued.
- To sum, a literature review should include introduction, summary and critique of journal articles, justifications for the research project



# Literature Review

- Is the literature review adequate ? Does it give the needed information to understand the objectives and approaches in the research proposal.
- Is it well structured? Does it go from broad information to specific information? From specific to broad?
- Does it cover research relevant to all the variables being studied

# Literature Review

- Does it examine the current literature about the problem and identify at the end what still is not known (gap of knowledge)
- Compare & Contrast: Does it show how research studies are similar to and different from each other
- Are all sources cited in the literature review listed in the references and vice-versa.

# Common Mistakes Made in Literature Reviews

- Review isn't logically organized
- Review isn't focused on most important elements of the study
- Review doesn't relate literature to the study variables
- Too few references or outdated references cited
- Review isn't written in author's own words – Lack of in-text citation
- Review reads like a series of disjointed summaries
- Review doesn't argue a point
- Improper referencing style

# Common Mistakes Made in Problem Statement

- There is not sufficient knowledge available to explain the problem (why does it matter) and to determine possible solutions.
- Fail to make a convincing argument for the need to test what is known.
- The problem is not of sufficient importance or is unlikely to produce any new or useful information
- Statement of the problem that **prompted the need** to conduct the study **vs** the primary research question

# Primary Research Question & Hypothesis

- Is the question clearly linked to the literature review, does it fill in gaps in the present knowledge?
- Is the question scientifically well-posed, i.e. is it stated in a hypothetical form that leads to a research design and analysis?
- Does the research question require data that is accessible or attainable at a reasonable cost or effort?
- Are the units of analysis (observation) clearly identified?
- Is the hypothesis formulated properly?

# Common Mistakes Made in Objectives

- The objectives are not stated clearly – kind of knowledge the study is expected to obtain
- Too many objectives, and combined objectives
- Broad not attainable and measurable objectives

# Form C: Non-Clinical Quantitative

## Form D : Mixed/Other Research Designs

### Form D:

- Specify the research strategy (research design and methodology) that is unique / specific to this study
- Is the study design clearly stated?
  - Is the study design appropriate for achieving the objective of the study?
  - Did the researcher provide a detailed explanation for choosing the design?

# Common Mistakes Made in Target Population & Accessible Population, Inclusion & exclusion criteria

- General/ national population - Fail to describe which would be the study population
- Target population **Vs** accessible population
- Exclusion criteria opposite to inclusion criteria



# Common Mistakes Made in Sample size , Size Calculation, Enrollment of Participants

- The sample has to be selected to be as representative as possible of the target population, and in enough numbers to provide valid answers.
- The minimum sample required and how it is arrived?
- Allocation of participants - Convenient sample? – all eligible?

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- Control/comparison group –inclusion & exclusion criteria

# Common Mistakes Made in Measuring Instrument

- Inadequate information about the measuring instrument
- Instrument - not available
- Validity and reliability of the instrument
- Pilot study - Pre-test of the instrument

# Common Mistakes Made in Informed Consent

- Not Applicable
- Not sufficient information to ensure that the center understood all rights, duties privileges
- Omission of consent form
- There will be unlikely any perceived coercion

# Common Mistakes Made in Data Synthesis and Management and Data Control

- In adequate description on how the variables will be measured and how they will be presented (quantitative and / or qualitative).
- In adequate information on procedures used for data management, including data coding, monitoring, and verification

# Common Mistakes Made in Ethical Issues

- Not Applicable
- Ethical issues are not adequately addressed-

# Reviewers' Feedback – Salient Points

- Feedback from 4 governorates on Form C
- Sought clarification on unclear points – posing questions
- Made suggestions as to how the researcher can improve a given section.
- Rewrote the objective, hypothesis etc.
- Few comments on a few section
- Commented on the layout of the form

# Critique and Appraise Research Proposal Form B

- Large Group discussion



# References

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- Leila Jones (2017) Reviewer guidelines and best practice *Publishing Manager Journal Development – June 22- 2017* .retrieved on 12/10/2017 <http://editorresources.taylorandfrancisgroup.com/reviewers-guidelines-and-best-practice/>
- Peer Review Guidance. Medical Research Council – Uk . Retrieved on 12/10/2017 <https://www.mrc.ac.uk/documents/pdf/reviewers-handbook/>



# Thank you