

Prioritization of research questions

**First Training Workshop on Research Capacity
Strengthening and Proposal Development for
Basic Health Services Professionals**

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Identification of research problem



Define research question



Problem analysis



Prioritization of research questions



Formulation of Research objectives

Outline of presentation

What is research question

Formulation of research question

Prioritization of research questions

What is research question

- initial step in a research project
- an answerable inquiry into a specific concern or issue
 - ✓ **WHAT, HOW, WHY**
- forms the groundwork that the entire research project is based on later

Research question should be:

- ✓ clear and focused
- ✓ merged multiple sources to present your unique argument or discrepancy
- ✓ easily understand its purpose without needing additional explanation

Why research question is important?

- guides and centers your research
- help provide the focus for where the research starts
- foundational to research and research can both guide and uncover important discoveries.

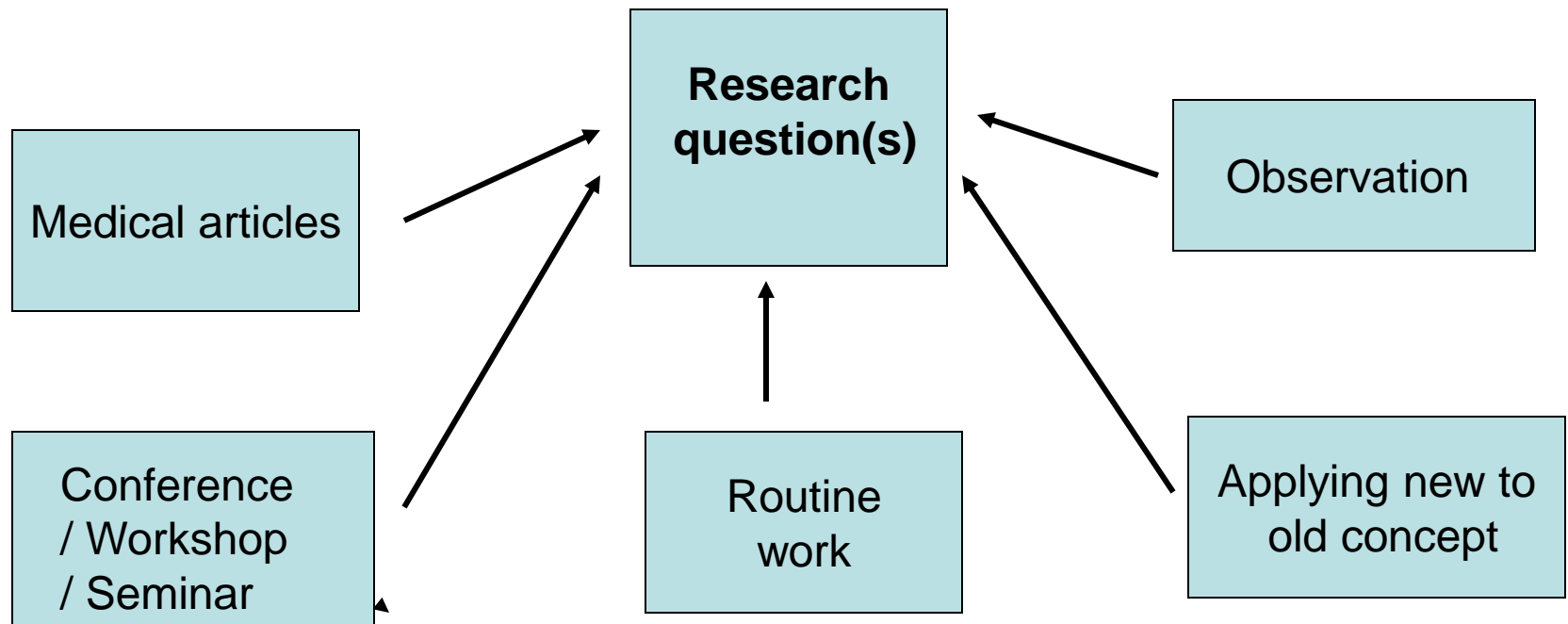
Steps to developing a research question

- Choose an interesting general topic
- Do some preliminary research on your general topic
- Consider your target population
E.g., policy makers, health providers, patients, community, children, etc.
- Start asking questions what do you want to know
- Assess your question
- Begin your research after selecting the research question

*Formulation of
Research question*

A problem is restated as a research question

Uncertainty about something in the population that the investigator wants to resolve by making measurements on his/her study subjects



Selecting a Topic

- ❖ brainstorm for ideas
- ❖ choose a topic that will enable you to read and understand the literature
- ❖ ensure that the topic is manageable and that material is available
- ❖ make a list of key words
- ❖ be flexible
- ❖ define your topic as a focused research question
- ❖ research and read more about your topic

Criteria for a good Research question - FINER

Feasible

- Adequate no. of subjects, adequate technical expertise, affordable, timely, manageable in scope

Interesting: to the investigator

Novel (original)

- Confirms or against previous findings, extends previous findings, provides new findings, different setting

Contd.

Ethical

- Research question must be ethical whether study poses unacceptable physical risks or invasion of privacy

Relevant

- To scientific knowledge, clinical and health policy, future research directions

Examples of Research question

1. What are the risk factors of bony fractures in post-menopausal Myanmar women?
2. Why has the new supply logistic system been incapable of delivering needed medication to HIV positive TB patients?
3. What are the challenges to treatment seeking for TB among urban dwellers?
3. How community case management of pneumonia and diarrhoea in children under 5 in Township X will be improved?

*Prioritization of
a research problem*

What is prioritization?

- Identify priorities using *criteria*
- Prioritization processes ensure that the most important *issues* are addressed

Why need prioritization?

- ✓ allows you to identify the most important tasks at any moment
 - those important tasks can give more of your attention, energy, and time
- ✓ helps everyone concerned with the project to plan systematically

7 Criteria for prioritization of a research problem

1. Relevance (widespread, who is affected, severity)
2. Avoidance of duplication
3. Feasibility (available resources)
4. Political acceptability
5. Applicability (capacity and willingness to act on the issue)
6. Urgency
7. Ethical applicability

1. Relevance

How large or widespread is the problem? Magnitude of problem

Who is affected?

How severe is the problem?

2. Avoidance of duplication

Find out previous studies relating to suggested topic had done either within the proposed study area or in another area with similar conditions

3. Feasibility

Consider complexity and required resources such as personal, time, equipment, money that are locally available

4. Political acceptability

- Interest and support of the authorities

5. Applicability of possible results and recommendations

- Depend on blessing of authorities and availability of resources for implementing the recommendations, ability to have a measurable impact / effect on the issue

6. Urgency of data needed (timeliness)

- How urgently are the results needed for making a decision?
- Which research should be done first and which can be done later?

7. Ethical acceptability

- Need among vulnerable populations
- Cultural sensitivity
- Informed consent
- Conditions

Rating scale for research topics

1 = Low

2 = Medium

3 = High

Rating scale for each criteria

Relevance

1 = not relevant

2 = relevant

3 = very relevant.

Avoidance of duplication

1 = available sufficient information

2 = available some information

3 = available no sound information

Feasibility (available resources)

1 = available resources are not feasible

2 = available resources are feasible

3 = available resources are very feasible

Political acceptability

1 = topic not acceptable

2 = topic more or less acceptable

3 = topic fully acceptable

Applicability

1 = no chance of recommendations being implemented

2 = some chance

3 = good chance

Urgency

1 = information not urgently needed

2 = information could be used right away, but a delay of some months would be acceptable

3 = data very urgently needed for decision-making

Ethical applicability

1 = major ethical problems

2 = minor ethical problems

3 = no ethical problems

Prioritization Matrix

- useful technique to identify which problems are the most important to work on solving first
- helps you rank problems or issues generated through brainstorming, using weighted criteria that are important to your project and/or organization

- ✓ **All studies should start with a research question**
- ✓ **All research questions should be:
focused on a single problem or issue**

References

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Thank you