

# **Research Methodology & Biostatistics**

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## *RESEARCH PROBLEM / QUESTION*

**Introduction :** A research problem is a question that a researcher want to answer or a problem that a research want to solve. A research problem is the first step of the research process.

**Definition:** A research problem is a enigmatic troubling area or topic which needs an enquiry to get better understanding or ultimate solution.

**According to kerlinger:** A problem is an interrogative sentence or statement that ask what relation exists between two or more variables.

**Identification of research problem:** Identification of a research problem is the first and most important step in research process generally, a broad area is selected and than a broad topic is narrowed down to a specific on sentence statement of the problem.

## Source of research:

Common sources from which researcher may find ideas to identify and formulate a research problem.

**Personal Experiences:** By personal experience of a researcher, the researcher can get idea to formulate research problem.

**Practical Experiences:** Nurses get plenty of ideas to formulate research problems from their clinical experience.

**Nursing Literature :** Ideas for research projects often come from reading the nursing literature.

**Previous research:** A body of knowledge should be developed on a sound foundation of research findings.

**Theories:** Research is a process of theory development and theory testing.

**Social Issues:** An idea for a study may arise social or political issues relevance to the health care community for example, HIV/AIDS, Domestic violence, female foeticide and sexual harassment are the current social and political issue.

**Ideas from external sources:** External sources sometimes provide idea for research for example, research topic given to the student, discussion with other nurses, researchers or nursing faculty.

**Consultation with experts:** Experts are believed to have sound experience in their respective field and may help in finding a current problem, which may serve as basis for formulation of research problem.

**Exposure to field situations:** During field exposure, researcher get variety of experiences, which may provide plenty of ideas to formulate researcher problems. For example, while working in a field a researcher observed a specific traditional practice for cure of a disease condition, which can be used as research problems to investigate its efficacy.

**Folklores/Mythos:** Common beliefs could be right or wrong. For example, it is generally believed that studying just before the test decrease the score; we believe we should not study just before test to relax out mind. Researchers can conduct a research study; whether one should study before the test or not.

**Intuition natural ability or power:** It is believed that reflective mind is good sources of ideas, which may be used to formulate a good research problem.

# Criteria of a good research problem

1. **Significance to nursing profession:** - A research problem could be considered significant for nursing profession if it fulfils the following:
  - A research problem is significant for nursing profession when it is directed to develop or refine the body of professional knowledge.
  - Nursing profession, patients, nurses and health care professional will be benefitted from the study.
  - The results will improve clinical nursing practices.
  - Promotes nursing theory development or testing.
  - Provides solution of current nursing practice needs.
  - Generate information to get practical implications for nursing profession.

2. **Original** – Every research problem should be new and unique in itself. It is the key responsibility of a researcher that an innovation knowledge is used for selecting a research problem. So it will be able to extend the growth of body of knowledge in a profession.
3. **Feasible possible to do** – Feasibility is an essential consideration of any research project. Feasibility of research problem in reference to time, availability of subjects, facilities, equipment, money and ethical considerations should be checked.
4. **Solvable/Researchable** – Problem selected is considered good only if it is solvable.
5. **Current issue** – A good research problem must be based on the current problems and needs of a profession.
6. **Interesting** – A research problem can only be considered good if it is interesting in research field.

## STEPS for Formulation of Research problem:-

Selection of a research topic



Reviewing the literature and theories.



Delimiting the research topic.



Evaluating the research problem.



Formulating final statement of research problem.

THANK YOU