

Phrasing An Operational Research Question

Specifying the research question is the methodological point of departure of scientific research. The research will answer the question posed. For academic study, the answer to the research question is the thesis statement. The answer to a research question will help address a "research problem" which is a problem "readers think is worth solving" (Wayne 1995)

When do we ask clinical research questions?

OR questions can be used in different types of studies. The way that we ask OR questions is dependent on the purpose of the study being conducted.

Category	Typical question
Diagnosis & Screening	How accurate is this test?
Frequency/Prevalence/ Incidence	How often does this disease occur? What is the burden of this disease?
Risk/Aetiology/Cause	What factors increase the risk of this disease/make it more or less likely to get the specific outcome? Could this factor have led to an increased/decreased risk of/association with the disease?
Harm	Is this intervention safe? What are the potential side-effects or adverse events of this intervention?
Prognosis	What are the consequences of this disease over time? What is the prediction of how this disease will progress?
Treatment/Intervention	Does treatment change the course of this disease? What intervention works best? How effective is one intervention versus the other or no intervention? What is the efficacy of the intervention compared to another, or to no intervention? How to best manage the disease?
Prevention/Intervention	Does early intervention keep this disease from occurring, or slows its development? How can this disease/condition be prevented?
Cost-effectiveness	Are the benefits of the treatment worth the costs incurred?
Experiences & Meaning	Why patients behave in a certain way and how do they experience the disease, test or treatment? What are people's preferences?

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OR questions should be clear, measurable and contain the important variables of the study.

Does hand washing as compared to no handwashing or solution among healthcare workers reduce hospital acquired infections?



Read

Aslam, S. and Emmanuel, P. (2010) 'Formulating a researchable question: A critical step for facilitating good clinical research.', Indian journal of sexually transmitted diseases and AIDS. Wolters Kluwer – Medknow Publications, 31(1), pp. 47–50.

Fisher, A. A., Foreit, J. R., Laing, J., Stoeckel, J. & Townsend, J. (2002). Designing HIV/AIDS intervention studies: an operations research handbook. The Population Council: USA

Students for best evidence: <https://www.students4bestevidence.net/start-here/what-are-the-key-steps-in-ebm/>

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