



Understanding Health Research

A tool for making sense of health studies

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Are some types of evidence better than others?

Researchers use different types of research to address different types of questions. For example, if a researcher wants to know how effective a treatment is under specific conditions, a randomised control trial might be the most appropriate way to test it. If, on the other hand, researchers want to find out in depth information about what patients like and dislike about the treatment, qualitative interviews might be more appropriate.

Traditionally, in scientific research, some methods have been considered to be 'better' than others, or at least more useful for evidence-based decision making.

Lists of methods ranked by their usefulness are called *evidence hierarchies*. Evidence hierarchies have tended to place systematic reviews and meta-analyses at the top of the hierarchy, followed by randomised control trials, whereas methods such as case reports or qualitative methods like interviews and focus groups tend to be at the bottom.

These hierarchies are appropriate for answering some types of questions. For example, randomised controlled trials are generally more useful than case series studies for making clinical decisions because the research design means that it is less likely to be affected by bias and confounders. However, the most important thing is that the research is conducted properly, and a well-conducted case series could be much more dependable than a poorly-conducted trial.

More recently, health researchers have become increasingly critical of traditional evidence hierarchies. Critics argue that the order in which types of evidence are traditionally arranged is not necessarily correct, and directly comparing quantitative and qualitative research, which make very different types of claims, is not helpful. Also, evidence hierarchies can lead to people dismissing high quality evidence that comes from different sources, such as qualitative research.

Well-conducted systematic reviews and meta-analyses are still considered the gold standard for making decisions, because they take into account all over the evidence on a topic. However, we should keep in mind the importance of using the right tool for the job; rather than always concluding that one type of evidence is better than another type, we should consider:

- what is the research question?
- what method is most appropriate for answering that question?
- how well has the research been conducted?

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