



Statistical Corner

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Question 1:

What does meta-analysis do?

Answer :

Meta-analysis may be used to study potential heterogeneity among different studies based on their individual effect estimate and to provide a single summary measure of the effects across all studies.

Question 2:

What are fixed effects and random effects models?

Answer:

They are two types of method to estimate the summary estimate in a meta-analysis. Random effects model assumes the identified studies were a random sample of a population while fixed effects model makes inference conditioned on the identified studies. Their choice depends on the question being asked rather than on the existence of study-to-study heterogeneity.

Question 3:

What is Forest Plot and how to interpret it?

Answer:

A Forest Plot is a graphical tool to summarize results of all identified studies as well as the summary estimate. Each study in the plot is exhibited as a line, representing a 95% confidence interval, running through a box, indicating the effect estimate from the study. The box size on the line is proportional to the sample size in that study.

Question 4:

Is there any free available software?

Answer:

Review Manager (<http://www.cc-ims.net/RevMan>)