

Evaluating an Article about Therapy or Prevention

Name of article:

Are the results of this single preventive or therapeutic trial valid?

Main questions

Was the assignment of patients to treatments randomized? And was the randomization list concealed?

Was follow-up sufficiently long and was it complete?

Were all patients analyzed in the groups to which they were randomized?

Secondary questions

Were patients, health workers, and study personnel “blind” to treatment?

Aside from the experimental intervention, were the groups treated equally?

Were the groups similar at the start of the trial?

Is this valid evidence about treatment important?

How large was the treatment effect?

How precise was the estimate of the treatment effect?

Will the valid, important results help me in caring for my patients?

Are my patients so different from the patients included in this trial that the results can’t apply?

Is the treatment feasible (“doable”) in my practice?

Are the likely treatment benefits worth the potential harms and costs?

Are there important issues with respect to my patient’s wishes or expectations that are not considered in this trial?

Not applicable to this exercise.

What are the major strengths and weaknesses of this article?

Evaluating an Article about a Diagnostic Test

Name of article:

Are the results of this diagnostic study valid?

Was there an independent, blind comparison with a reference (“gold”) standard?

Did the patient sample include an appropriate selection of patients to whom the diagnostic test will be applied in clinical practice?

Was the reference standard done on all the patients (as opposed to being done selectively only on patients in whom the new diagnostic test was positive or negative)?

Were the methods for performing the test described in sufficient detail to permit replication?

Was the test (or tests) validated in a second, independent group of patients?

Does the valid evidence about this diagnostic test allow us to accurately distinguish between patients who have or don’t have a condition?

Are the likelihood ratios for the test presented or data necessary for their calculation provided?

Can I use this valid, important diagnostic test in my practice?

Is the test available, affordable, and reproducible in my practice setting?

Can I generate clinically sensible estimates of the pre-test probability of disease for my patients?

Will using this test change my management of this disease or condition?

Will my patients be better off as a result of the test?

What are the major strengths and weaknesses of this article?

Evaluating an Article about Harm/Etiology

Name of article:

Are the results of this harm study valid?

Were there clearly defined comparison groups that were similar with respect to important determinants of outcome, other than the one of interest?

Were the treatments/exposures and outcomes measured in the same way in the groups being compared?

Was the follow-up of patients sufficiently long and complete for the outcome to occur?

Is the temporal relationship correct?

Is there a dose response relationship?

Are the valid results of this harm study important?

What is the magnitude and precision of the association between exposure and outcome?

Can this valid and important evidence about harm be applied to my patients?

Are my patients so different from those included in this study that the results don't apply?

Are my patients at risk for the adverse outcome? and what are their potential benefits from the therapy or exposure?

Are there alternative treatments/exposures available?

Are there important issues with respect to my patient's wishes or expectations that are not considered in this trial? Not applicable to this exercise.

What are the major strengths and weaknesses of this article?

Evaluating an Article about Prognosis

Name of article:

Is this evidence about prognosis valid?

Was a well-defined, representative sample of patients assembled at a similar (usually early) point in the course of their disease?

Was patient follow-up sufficiently long and complete?

Were objective and unbiased outcome criteria used? and were these applied in a “blind” fashion?

If sub-groups with different prognoses were identified: was there adjustment for important prognostic factors? and was there validation in an independent group of patients?

Is this valid evidence about prognosis important?

How large is the likelihood of the outcome event(s) in a specified period of time?

How precise is the estimate of likelihood?

Can we apply this valid, important evidence about prognosis to our patients?

Were the study patients similar to our own?

Will the results lead directly to selecting or avoiding therapy?

Are the results useful for reassuring or counseling patients?

What are the major strengths and weaknesses of this article?