

# READING THE LITERATURE TO CHANGE YOUR CLINICAL PRACTICE

K. Spindler (adapted from Greenhalgh 2001 and Lang and Secic 1997 ref texts)

1. TITLE: \_\_\_\_\_

2a. AUTHOR: \_\_\_\_\_

2b. REF: \_\_\_\_\_

3. HYPOTHESIS: 1° \_\_\_\_\_

2° \_\_\_\_\_

4. TYPE STUDY = (Circle one)

TREATMENT / DIAGNOSIS / SCREENING / PROGNOSIS / CAUSATION

5. METHODS:

A. Yes / No Is there control or comparison group in treatment study?

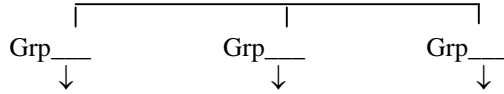
B. Yes / No Did author control for major known variables that could bias result?

C. \_\_\_\_\_ = List other known factors not controlled between groups

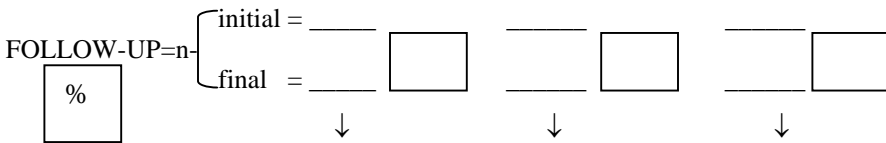
D. \_\_\_\_\_ = Gold standard in diagnostic study

E. Prospective or Retrospective (Circle one)

F. STUDY or TARGET POPULATION  
ALLOCATION



INTERVENTION = \_\_\_\_\_



Outcomes = 1. \_\_\_\_\_

(Goal match same outcomes eval in all groups)

2. \_\_\_\_\_

3. \_\_\_\_\_

G. Y / N Did author demonstrate demographics (age, gender, etc) equal in groups?

H. Length f/u min = \_\_\_\_\_ avg f/u \_\_\_\_\_

BIAS (Circle & List)

Y / N SELECTION (method allocation)

- 
- 

Y / N PERFORMANCE (lack control variables other intervention effect outcome)

- 
- 

Y / N EXCLUSION OR TRANSFER (not uniform or inadequate f/u <70%)

- 
- 

Y / N DETECTION (bias in outcome eval)

- 
- 

Y / N Independent Examine

Y / N Validated Questionnaire

6. Statistics (ref Lang and Secic, Greenhalgh)  
Data (variables) are (circle below):
- A. Continuous (ht, age) → normality tested Y / N / unknown  
Yes → parametric tests  
No → nonparametric tests
  - B. Discrete (Yes, No, %) → nonparametric
  - C. Stats are acceptable Y / N / unknown
  - D. Stats consultation requested Y / N Who = \_\_\_\_\_

7.

Outcome/Result	Absolute Difference	P	If ns power = ( ) for ( ) diff	Clinically relevant
a.				
b.				
c.				
d.				

8. SUMMARY

- A. If no comparison group or control group in TREATMENT STUDY → READ FOR INFORMATION ONLY – no evidence-based reason or data to change practice pattern.
- B. If no comparison of groups that equal PreTREATMENT → RESULTS MAY NOT BE CAUSED BY TREATMENT BUT BY DIFFERENCES IN GROUPS.
- C. If INTERVENTION contains additional proven or suspected variables other than 1° hypothesis indicating Performance Bias, results NOT SPECIFIC TO INTERVENTION → RESULTS UNCLEAR SIGNIFICANCE TO TREATMENT.
- D. Inadequate follow-up (<70%) indicates EXCLUSION or TRANSFER BIAS → RESULTS COULD CHANGE IF ADEQUATE FOLLOW-UP.
- E. Are STATS acceptable?
- F. Are absolute values which are statistically significant also CLINICALLY RELEVANT?

CONCLUDE: If A → F are acceptable, **STRONGLY CONSIDER CHANGING YOUR PRACTICE – IF YOUR PATIENT POPULATION MATCHES STUDY AND YOU CAN SUCCESSFULLY PERFORM THE TREATMENT.**