

Discussion section 2 #4

AM57
12 Oct 09

P. R-30

treatment variable:

vs. conventional

acupuncture (T)

C	T
0	1
0	0
1	1
1	1
0	1

$n = 31$

req. 0% $\frac{30}{31} = 97\%$

1 row for each patient with spinal puncture

outcome:

complete & permanent relief from headaches or not

(this is a repeated measures design) worry about placebo effect &

generalizability outward from her 31 high-randomly-chosen patients

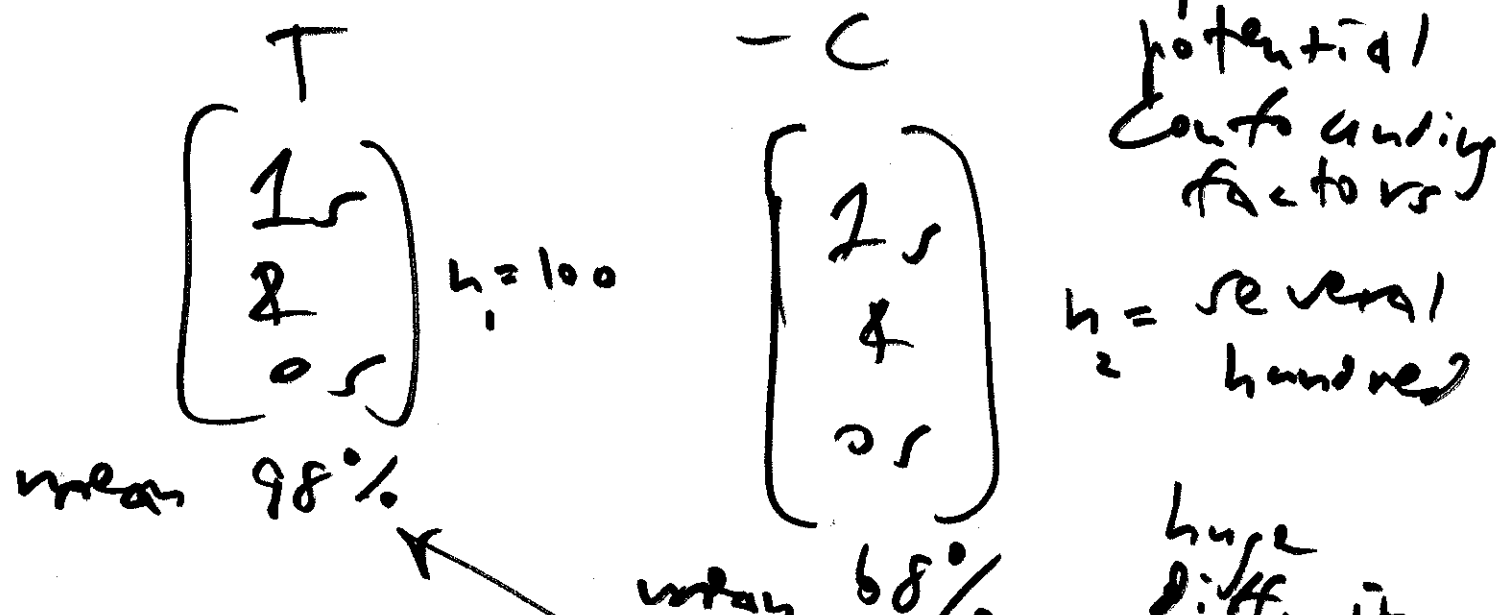
(b) treatment variable: CABG vs. Conventional

(X) (T) (C)

outcome variable: survival for 3+ years (1) or not (0) (2)

basic design: obs. study

enemy: bias from PCF (2)



hint: in any study with outcome variable y , a PCF is the value of y at the time the experiment begins (baseline, ex. y = health of y , z = baseline health)

Dr. Hill got probably got the healthiest coronary-artery-disease patients he could find (3)

This would have biased results in favor of CABGs

5. treatment: eating cottage or hot cheese (X)

outcome variable: weight (Y)

theory: (X) → (Y)
"X causes Y"

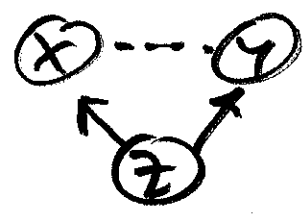
alternative explanation:

(Y) → (X)

eating cottage makes cheese people's weight go down



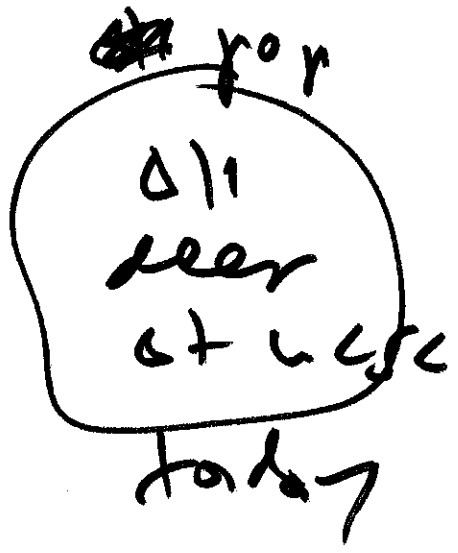
"X, Y associated"



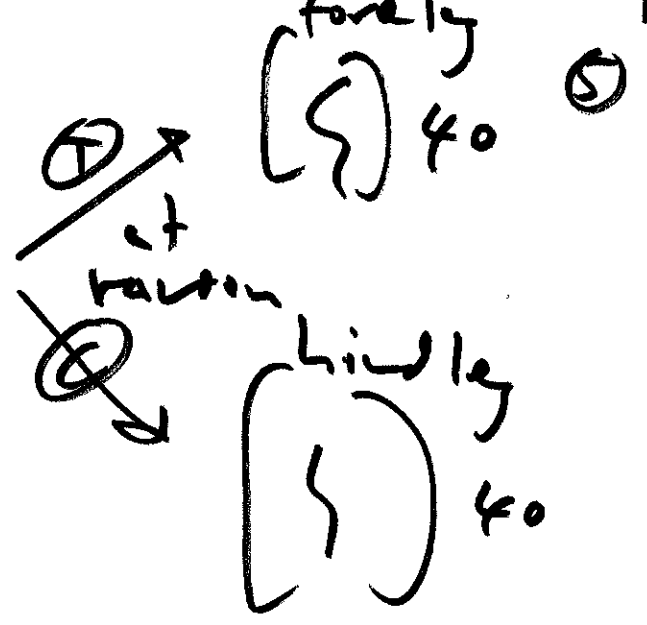
6. choice between 2 unpleasant ⁽⁴⁾
options: aspirin

(a) drop refusers entirely ⁽⁵⁰⁰⁰⁾
(result is randomized controlled trial,
but only on non-refusers
(bad for generalizability))

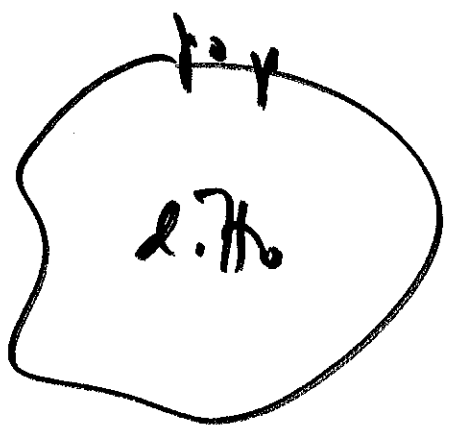
(b) put refusers in (c) group:
(result is observational study
bad ^{bias from refs} on everybody with
that disease (good))



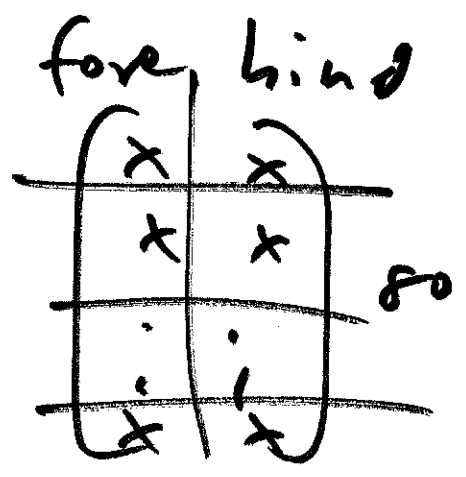
for
deer
at
work



valid but not as accurate
as you could achieve



for
deer
at
work



also valid but likely to be
more accurate since entire
deer is held to fact
~~everything about sample~~
deer