

EPIB-609: ASSIGNMENT: Cohort studies [2012]

1. Read the two papers by Doll and reflect on the issues raised in the two papers with regard to confounding and cohort study design.
 - Doll R. Cohort studies: history of the method - I. prospective cohort studies. *Soz Praventiv Med* 2001;46(2):75-86. See Letter to the editor by Gerstman B.
 - Doll R. Cohort studies: history of the method - II. retrospective cohort studies. *Soz Praventiv Med* 2001;46(3):152-160.

You can find the papers at:
www.epi.mcgill.ca/hanley/c609/material/index.html#cohortStudies

2. Read the paper by Smith and Doll. Comment on the study design used and identify the name given today for this study design. You can find clues in the abstract, Table 2 and Table 13. Pay particular attention to the way the person-time is handled in Table 13.
 - Smith PG, Doll R. -- *BMJ* 284, 1982, 449-460. Mortality among patients with ankylosing spondylitis after a single treatment course with x rays.

You can find the paper at:
www.epi.mcgill.ca/hanley/c609/material/index.html#cohortStudies

3. 2011 ONLY [when JFB was the guest faculty for this topic]

A) Search the scientific literature from the last 5 years and find two cohort studies that deal with the same general research question, but differ substantially in the way confounding issues arise or are dealt with. Be prepared to discuss them in the class.

B) Prepare a powerpoint presentation with two slides, one for each paper. The slides should contain information on the general research question and details on the design or analytic techniques to deal with confounding. The only constraint is that the two papers should represent cohort studies, and that the problem being contrasted has to do with confounding. Some examples are given below, but feel free/encouraged to come up with your own ideas for a meaningful contrast.

Examples:

1. Contrast a cohort study with matching with one without matching.
2. Contrast a cohort study that has no concern about confounding (e.g. a perfect natural experiment) with a cohort study that has a very difficult confounding situation.
3. Contrast a paper that did a great job vs one that did a very poor job at handling confounding.
4. Contrast a paper that used a simple elegant solution to the confounding issue with one that used a sophisticated but perhaps cryptic approach.

~~Please upload your powerpoint presentation on the computer in Rm 48 before the start of the class. Email the written answer to Question 2 to JH before the beginning of the class.~~