

BIOS 662, Fall 2018

Homework 1

Assigned: Tuesday, August 28

Due: Tuesday, September 4

1. For each study in the manuscripts listed below, state which of the following terms apply to the design of the study: single blind, double blind, placebo, observational study, experiment, laboratory experiment, comparative experiment, crossover experiment, cohort, prospective study, retrospective study, case-control study, and matched case-control study. For each study, state the primary endpoint(s). For any matched case-control study, state what factors were used in the matching and whether there was individual matching or frequency matching. For clinical trials, state what phase trial it is and describe the treatment groups.

Copies of the manuscripts are in the “Homework materials” folder in the “Resources” section of the Sakai site.

Note that the manuscript by Dwyer et al. describes **two** studies, as does the one on the design of the Women’s Health Initiative. For the ARIC Study manuscript, ignore the part about the “Community Surveillance Design”.

Be brief in your answers.

- (a) Dwyer T, *et al.* Prospective cohort study of prone sleeping position and sudden infant death syndrome. *Lancet*. 1991 May 25;337(8752):1244-7.
- (b) The Women’s Health Initiative Study Group. Design of the Women’s Health Initiative clinical trial and observational study. *Control Clin Trials*. 1998 Feb;19(1):61-109.
- (c) The ARIC Investigators. The Atherosclerosis Risk in Communities (ARIC) Study: design and objectives. *Am J Epidemiol*. 1989 Apr;129(4):687-702.
- (d) Offenbacher S, *et al.* Maternal Oral Therapy to Reduce Obstetric Risk (MOTOR) Investigators. Effects of periodontal therapy on rate of preterm delivery: a randomized controlled trial. *Obstet Gynecol*. 2009 Sep;114(3):551-9.

2. Use PubMed (<http://www.ncbi.nlm.nih.gov/pubmed>), clinicaltrials.gov or a search engine such as Google to find an example of a randomized clinical trial of physical therapy in which some type of “placebo” physical therapy is used as a comparison group.
 - (a) Give a reference to the study and, if an abstract is available, provide a copy of the abstract.
 - (b) Describe the “placebo” physical therapy treatment.
 - (c) Do you think it is an appropriate placebo? (State why or who not.)
 - (d) Did the authors report finding that physical therapy had a statistically significant effect on their primary outcome?