EPID 5310 Cross-sectional Studies Lab

The following figure shows the prevalence percents and prevalence proportion ratios for evidence of myocardial infarction (MI) by estrogen use category for all post-menopausal women and separately for women with normal glucose tolerance (NGT) and those with diabetes (DM) or impaired glucose tolerance (IGT).



a. Using data for all women, summarize the results of this analysis of the association of estrogen use and prevalent MI.

b. Are the results influenced by diabetes status? Explain your answer.

c. What is the purpose of statistical adjustment of the prevalence proportion ratio for the variables listed?

d. These data are derived from a cross-sectional study, and as such, are subject to incidence-prevalence bias. Suppose the true association of estrogen use and MI is a prevalence proportion ratio of 1.0, how might incidence-prevalence bias have produced a PPR of 0.64?

f. What kinds of things might you do to assess the possibility that incidence-prevalence bias the prevalence proportion ratio results?