

Descriptive studies and surveillance - Assignment

Reading: John C. Bailar and Elaine M. Smith. Progress against cancer? *N Engl J Med* 1986; 314:1226-32.

1. During the 20 years from 1962 to 1982, the number of Americans dying from cancer increased 56%, from 278,562 to 433,795. If a news reporter asked you how these numbers could be regarded as anything other than an indication of clear defeat in the "War against Cancer" declared by President Nixon in 1971, what issues about interpretation of these numbers would be important to explain to the reporter?
2. Assuming perfect information, which measure — mortality, incidence, or survival — is the best index of possible progress against cancer? Why?
3. What are the limitations of using national mortality statistics to assess changes in cancer rates?
4. If breast cancer was the leading cause of cancer death in women in 1982, why are the breast cancer mortality rates in Figure 2 so far below those for lung and colon/rectum cancer?
5. Prostate cancer mortality rates in Figure 2 have remained stable despite continual increases among nonwhite men. What are possible reasons why the overall rates have remained stable in spite of this increase?
6. For which change in site-specific cancer mortality in Figure 2 would epidemiology most like to claim credit? Who or what probably deserves credit? Explain.
7. What are some of the limitations of available incidence data for assessing progress against cancer?
8. What are some of the limitations of using case survival data for assessing progress against cancer?

The following questions pertain to the Standardization topic, which has not been covered yet. But see what you can do with them from information in the article or from your own knowledge.

9. Why has the dramatic decline in age-adjusted cancer mortality in Americans under age 30 had so little impact on total cancer mortality?
10. Why do the authors elect to use a direct, rather than an indirect, adjustment procedure for mortality and incidence rates?
11. Figure 5 projects age-adjusted cancer mortality to the year 2000. Would direct or indirect adjustment have been more appropriate for this figure? If the NCI goal is achieved, will crude cancer mortality fall more or less sharply than the projection in Figure 5?
12. Has the War on Cancer been lost? Should resources be shifted from research on cures to research on prevention? Why?