

## MEMORIAL SLOAN-KETTERING CANCER CENTER

1275 YORK AVENUE, NEW YORK, NEW YORK 10021





January 4, 1980

Joshua Lederberg
President
The Rockefeller University
New York City 10021

Dear Doctor Lederberg:

I looked over Sam Epstein's commentary in the Wall Street Journal, which was in response to an editorial by Harry Schwartz.

Whether the 1940, 1950, 1960 or 1970 United States population is used as a standard for age-adjustment, which would enable comparison of summary mortality statistics over time, the distorting effect by choice of standard should be minimal. An important issue, however, is that age-standardization may obscure significant differences in age-specific patterns. Furthermore, total cancer mortality statistics may obscure important site-specific differences over time and these may vary by sex, race, ethnicity, social class, geography, occupation, etc.

The trend of increasing number of cancer deaths in the United States over the past 40 years must be interpreted in the context of:

- a) increasing numbers in the population at risk and the proportion of older persons in the population;
- b) improving diagnostic technology and completeness of reporting;
- c) improving methods of treatment resulting in decreasing mortality; and
- d) changing incidence due to carcinogenic exposures of varying potency, intensity and duration.



Joshua Lederberg January 4, 1980 page two

During the period 1930-1970, the population at risk increased 74% and almost twice as many people reached 65 or older. Devesa and Schneiderman (American J. Epidemiology 106:1-5, 1977) concluded that after adjusting for these population characteristics, the "real" increase in age-specific mortality over a period of 40 years was 9.5%, and during the period 1960-1970, 2.8% or 0.28% per year.

Although Dr. Epstein is correct in pointing out the increases among black males, these pertain largely to the tobacco-dependent sites and prostatic cancer.

I am uncertain whether the magnitude of "real" increase during the period 1969-1976 has been as high as 5.5%. This would reflect an acceleration in the annual rates, when compared with 1960-1970. I am checking into this, however, and will send you material from the National Cancer Institute when it arrives.

Sincerely yours,

daire Schittenfeld V

David Schottenfeld, M.D. Chief of Epidemiology and Preventive Medicine Professor of Public Health

DS:jz enclosure