

## University of Pittsburgh

GRADUATE SCHOOL OF PUBLIC HEALTH Department of Epidemiology

March 5, 1981

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Dear Henry:

Jawan Splder 5F All folan Subject: American College of Cardiology Panel in San Francisco

This is a followup to our discussion in Washington last week about the American College of Cardiology meeting. I think I would like to initially talk about the classification of the deaths and the possible relationship to the declining trend. I think it is very important to note that the cardiovascular death rates in the United States have declined in every age, race and sex group, and in many countries including those where the death rates are relatively low to start with, and the major risk factors, such as cholesterol and cigarette smoking would not seem to be major factors. I think it should be important to note that we have not done a single good systematic study of even mortality within a major community in the United States that tried to determine whether the decrease in mortality was related to sudden or not sudden death or to the characteristics of in-hospital mortality.

As I mentioned to you, I have two thoughts about the decline in mortality. First, is that at least some of the increase, if not a great deal of increase in mortality in the late 1940's through 1950 and into the 1960's was a function of the treatment of cardiovascular disease in the United States, that is, the emphasis on vasopressars, powerful diuretics, and potential over use of anticoagulation. In the late 1960's the introduction of the coronary care unit concepts and the results of major research coming from studies such as the Myocardial Infarction Research Unit had a major effect on centralized care of heart attack patients in hospitals, the realization that cardiac arrhythmias and the concern about the use of drugs which were likely to increase the risk of cardiac arrhythmias, the potential hazards of over digitalization, the better monitoring of venous pressure and many of the patients treated with digitalis probably did not need it changed the in and out of hospital care of the patient. The development of better diuretics and the early ambulation and decrease in possible thrombosis may also be a factor.

The second major effect is probably even more important. The decline in severe hypertensive disease and subsequent treatment of the mild to moderate hypertension in the United States may be the key. Thinking back now to an earlier study I did in the 1970's in Baltimore when we reviewed all the death certificates related to arteriosclerotic heart disease, and discovered that many of the deaths in reality related to congestive heart failure, renal failure,

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severe hypertensive disease even though carried under the rubric of arteriosclerotic heart disease I have a suspicion that most of these deaths have now disappeared and that this may in some ways account for the decline in mortality especially in the black population and in the older age groups. I think also the effects of hypertension on both stroke and coronary disease makes the most sense.

I have noted from the most recent data that the death rates in the United States have leveled off, and in fact, rose a little last year probably due to a combination of the relative recession and the effects of the flu. The death have appeared to have increased more in the older age groups, and therefore I suspect the effects of the more recent flu season may be the culprit, however, it is interesting to note the death rates have flattened out and actually increased last year a little for the first time in quite a long time. These are only provisional data and perhaps when they are finalized the decline will persist.

Sincerely yours,

Lewis H. Kuller, M.D. Professor and Chairman

LHK/rc