

MEMORANDUM

July 20th, 1931.

DOCTOR DUBLIN
STATISTICIAN

I really do not know what to say about the significance of these correlations, nor about the desirability of further work along similar lines. Items 3 and 4 appear favorable. Has a diphtheria and heart disease relationship been worked out with a positive lag of several years?

This observation occurs to me, if I interpret the tables correctly. For the Registration Area, there is a marked decline running fairly consistently throughout the entire period for scarlet fever, diphtheria, and rheumatic fever. This is true of the period from 1910-18 as well as of the later years. On the other hand, there was very little, if any, decline for heart disease from 1910-18 inclusive. In fact, the 1918 rate is the highest in the series, though I suppose that was partly influenza. Nevertheless, it might appear that we had to experience a consistent decline in these other causes for a considerable period prior to the appearance of a parallel decline in heart disease. The same general relationship seems to hold for our industrial policyholder experience. Does that mean anything, and is it worth further investigation?

In addition to the above inquiries, I am convinced, in the present more or less hysterical state of the public and of the professional mind concerning the apparent menace of heart disease, that there are several points that might legitimately and advantageously be made:

- 1) We are certain that "heart disease" is a complex of various etiological factors and pathological conditions, most clearly understood when analyzed by age groups.
- 2) There is a younger age group in which heart disease is largely rheumatic in origin, though probably in part related to other acute infections. Here there has been a recent mortality decline, concomitant with and perhaps, chronologically at least, subsequent to a decline in certain probable causative factors. You can best judge what stress, if any, might legitimately be placed upon the apparent correlations. In any case, the situation with reference to this segment of our heart disease problem, is reassuring and hopeful.
- 3) There is a second middle age unit in which syphilis is the principal factor. Is it possible to determine the trend of mortality there? Apparently, the age limits should be approximately from thirty to sixty, according to Carr, Wyckoff, Lingg, Collins, Church, and others. Certainly, this phase of the situation is not hopeless, as syphilis is surely to a large degree, with adequate resources, therapeutically, if not prophylactically, controllable.
- 4) There is, finally, an older age group, largely arterio-schlerotic, or degenerative, where the rates are no doubt rapidly increasing -- an increase

This may have been kept made for book

I am afraid none

Being done for book

dth

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Doctor Dublin.....2.

Does not affect age-specific mortality

which is inevitable because of the ageing of the population. This increase is also, in part, the logical sequela of successful disease preventive and death deferring efforts at younger ages. It is, in fact, the reward of accomplishment. Also, for many it furnishes a prompt and painless exit, and has, from this angle, a beneficent aspect. To some extent, the mortality here may also be in part controllable or deferrable, through personal hygiene, mental hygiene, the periodic health examination, and similar efforts at conservation, and the adjustment of physical and emotional strain.

perhaps

5) Finally, from a mortality point of view, I believe 1930, in our experience, showed for the first time in several years, a turn downward in the curve. 1931 apparently is going to approach 1930, pretty closely. Is there any indication here that inspite of the inevitable accumulation of cardiac hazards in the older age group, the saving at younger ages may be going to stabilize the picture, if not to start a downward trend?

Investi-Sate

6) In any case, it is important to distinguish between these elements. To talk about heart disease as being the greatest cause of death, and being an increasing menace is misleading, because the observation must necessarily be based largely, if not entirely, upon this inevitable natural process reflected in the older age groups. The problem must be split so as more specifically to indicate those phases which have a genuine public health significance, and that reflect promising methods for more complete control, at ages of greatest economic and social significance.

yes. we should focus in

If we can decide what significance to place upon the statistics, can we not develop something that would have timeliness and orientation value?

gap - specific dentals

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