evidently been derived mostly from the work of internists whereas contributions from the ranks of ophthalmology is evidently meager.

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## CANCER MORTALITY TRENDS[1]

DISPASSIONATE analysis of mortality from cancer is very much needed. McKinnon has presented annual age and sex specific cancer death rates for the period 1921–1947 for seven of the provinces of Canada. For one province the period was 1926–1947. The province of Prince Edward Island was excluded. According to McKinnon, "Propaganda and publicity of official, semiofficial, and voluntary organizations of national scope aimed at stimulating earlier diagnosis and treatment of cancer have been spread through all the provinces; and increased activity in any province is likely to so influence routine practice of medicine and public health in other provinces."

The provinces varied widely, however, in the development and the breadth of their programs for the control of cancer. For example, in province A there was a relatively inactive organization; on the other hand, province B initiated its program in 1929 and by 1944, complete diagnostic and treatment services and care (all tax paid) were provided for all cancer throughout the province. Between these two extremes there have been various gradations of facilities, services, and activities. McKinnon concludes that if any of the programs had been effectual in reducing cancer mortality to any significant degree, differences should be found in the trends of cancer mortality in the different provinces.

A comparison of the trends in breast-cancer mortality and for all cancer mortality in the different provinces from 1921 to 1947 revealed a similarity of pattern throughout the period. McKinnon's conclusion was "Program or no program, increase or no increase, acceleration or no acceleration, early treatment

[1] McKinnon, N. E.: Cancer Mortality Trends Under Different Control Programs. *Canadian Journal of Public Health,* January, 1950, *41:* No. 1, pp. 7–14.

or late treatment, much money spent or little, the trends of breast-cancer mortality and of all cancer mortality show no significant differences from province to province."

A further conclusion was as follows: "The data, both in themselves and by comparison, provide further substantial evidence of the noncurability, in general, of cancer that gives remote metastases. They thus support the old contention, almost lost in recent optimistic claims, that it is the fundamental nature of the neoplasm rather than the time of treatment which determines, almost exclusively, the final outcome of treatment."

McKinnon emphasized the fact, however, that "the objectives of treatment are not limited to cure (eradication of the disease). The objectives of treatment also include the prolongation of life in those cancers that are apt to kill by local extension before metastases develop and mental and physical relief in these as well as in others. Further, in the individual case, it is impossible, from the practical standpoint, to differentiate with certainty between the remotely metastasizing cancer and the cancer that does not yield remote metastases; and the individual patient may be the exception to the rule even in cancers which usually give remote metastases. Thus the earliest and best treatment possible is not only justified but required."

In a subsequent analysis,[2] "Cancer Mortality Trends in Different Countries," McKinnon examined the trends in the death rates from breast cancer among females in England and Wales, Ontario, Canada, and Massachusetts during the past twenty to twenty-five years. The mortality showed no decline in any age group in any one of the three areas. He concluded that "the maintenance of levels of breast-cancer mortality in three different countries, under three different book-keeping auspices, is very strong confirmatory evidence of the lack of any real decline in breast-cancer mortality" in any one of the three.

The all-cancer mortality rates in Ontario showed no decline in any age group but both the England and Wales rates to 1939, and the Massachusetts rates showed a decline in practically all age groups under old age. In McKinnon's judgment, "their

[2] McKinnon, N. E.: Cancer Mortality Trends in Different Countries. *Canadian Journal of Public Health,* June, 1950, *41:* No. 6, pp. 230–240.

variability in extent and course from age group to age group and in time and type of onset, and, too, in the lack of any consistent acceleration in the rate of decline, suggested paper changes rather than real declines."

Again, the author emphasizes the point that the claims with respect to present-day capacity to "control" cancer mortality are too broad.

JEAN DOWNES

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## THE NUTRITIONAL IMPROVEMENT OF LIFE[1]

THE first half of the 20th century has been marked by tremendous increase in research in all of the biological sciences and has opened new horizons for the improvement of life. The science of nutrition, although in its infancy at the beginning of the century, has grown to sturdy adulthood during this period.

Dr. Sherman's book, THE NUTRITIONAL IMPROVEMENT OF LIFE chronicles this growth and outlines the successive steps by which we have arrived at the "concept of the potentialities of the science of nutrition to improve the hitherto accepted norms of human life history."

Probably no one is better fitted to chronicle this development than Dr. Sherman, whose fifty years in nutrition research have contributed to many of the achievements he records. In his lifetime he has seen the science of nutrition develop "through the stages of opinion into the realm of established fact and principles."

The book is an exposition of Dr. Sherman's credo that "nutrition is everyone's adventure" and that the human implications of improved nutrition include higher health throughout life, and an extension of "life with those extra years added to the prime of life."

The book is of value to every student of nutrition because of

[1] Sherman, Henry C.: THE NUTRITIONAL IMPROVEMENT OF LIFE. Columbia University Press, New York, 1950, 270 pp.