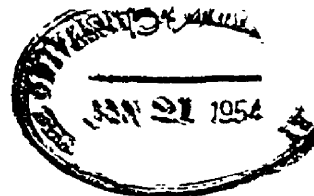


Section 2 December 31, 1953



The New England Journal of Medicine

Formerly the Boston Medical and Surgical Journal
Established 1828

Published by the Massachusetts Medical Society under the Jurisdiction of
The Committee on Publications

VOLUME 249

JULY-DECEMBER, 1953

8 Fenway, Boston 15

GD-000006.0001

The New England Journal of Medicine

Official Organ of
THE MASSACHUSETTS MEDICAL SOCIETY
and
THE NEW HAMPSHIRE MEDICAL SOCIETY
OWNED BY THE MASSACHUSETTS MEDICAL SOCIETY AND
PUBLISHED WEEKLY UNDER THE JURISDICTION OF THE
COMMITTEE ON PUBLICATIONS

Richard M. Smith, M.D., *Chairman*
James P. O'Hare, M.D. Conrad Wesselhoeft, M.D.
Oliver Cope, M.D. Richard E. Alt, M.D.

Joseph Garland, M.D., *EDITOR*

ASSOCIATE EDITORS

Thomas H. Latham, M.D. Donald Munro, M.D.

Theodore H. Ingalls, M.D.

Clara D. Davies, *EXECUTIVE EDITOR*

Robert O'Leary, *ASSISTANT EDITOR*

James F. Ballard, *BOOK REVIEW EDITOR*

Milton C. Paige, Jr., *BUSINESS MANAGER*

EDITORIAL BOARD

C. Guy Lane, M.D.	Vernon P. Williams, M.D.
Henry R. Viets, M.D.	Benjamin Castleman, M.D.
Robert M. Green, M.D.	Hugh R. Leavell, M.D.
Dwight O'Hara, M.D.	J. Englebert Dunphy, M.D.
Fletcher H. Colby, M.D.	Robert W. Buck, M.D.
Robert L. Goodale, M.D.	Herrman L. Blumgart, M.D.
Chester M. Jones, M.D.	Frank N. Allan, M.D.
Harvey R. Morrison, M.D.	Harvey A. Kelly, M.D.
Maxwell Fialand, M.D.	Langdon Parsons, M.D.

Deering G. Smith, M.D.*

*Representing the New Hampshire Medical Society.

SUBSCRIPTION TERMS: \$8.00 per year in advance, postage paid, for the United States (first-year interns, if previous subscribers, and medical students, \$5.00 per year); Canada, \$9.00 per year (Boston funds); foreign, \$10.50 per year. Long-term rates: United States, 2 years \$15.00, 3 years \$22.00; Canada, 2 years \$17.00, 3 years \$25.00; foreign, 2 years \$20.00, 3 years \$29.50.

Microfilm volumes available to regular subscribers through University Microfilms, 313 N. First Street, Ann Arbor, Michigan.

MATERIAL, other than original articles, should be received not later than noon on Thursday, three weeks before date of publication.

THE JOURNAL does not hold itself responsible for statements made by any contributor.

COMMUNICATIONS should be addressed to the *New England Journal of Medicine*, 8 Fenway, Boston 15, Massachusetts. Telephone KE 6-2094.

CANCER OF THE LUNG

In a recent issue of the *British Medical Journal* Smithers,¹ radiotherapist to the Brompton Hospital for Diseases of the Chest, expresses concern about the "alarm" that may be created among the general public by undue publicity accorded to recent statistical research on carcinoma of the lung. That Smithers is not alone in his concern is evident from recent correspondence^{2,3} in the same journal that followed the comprehensive study of Doll and Hill⁴ earlier in the year. Smithers contends, and these are also the basic arguments of other correspondents, that, although one can guess at the nature of some of the factors responsible for the increasing frequency with which cancer of the lung is given as the primary cause of death, the relative importance of

each of these factors is not known — especially since the evidence linking cigarette smoking and lung cancer is incomplete. The medical profession, should therefore "beware of putting extravagant accounts of rising cancer death rates and their causes before the public."

Are these accounts extravagant? Smithers places stress on the lack of knowledge of the extent of the true increase in lung cancer. At the same time, he states that the recorded increase is due in large part to changing age distribution of the population and improved diagnosis, with the implication that the true rise in incidence has been comparatively small. In view of lack of knowledge needed to settle the point, speculation in either direction is indecisive, but many competent people consider the reverse situation to be much more probable — that the startling rise in lung cancer during the past few decades is real. They compare the increase in carcinoma of the lung with that of other internal sites — for example, the large intestine — and point out the disparity in the percentage increases (133 and 3.5, respectively, between 1940 and 1950).⁵ In addition, they question whether diagnostic measures have improved to anything like the degree necessary to account for an increase of 133 per cent between 1940 and 1950. However, this trend is a secondary consideration, since it forms no part of the evidence incriminating tobacco as an etiologic factor. In the United States and in Great Britain lung cancer accounts for between a twentieth and a thirtieth of all deaths in men of middle age. Consideration of present incidence and death rates, quite apart from past experience, is sufficient to justify concern.

Whether undue concern has been or is being raised among the general public is to be questioned. The latest study of Doll and Hill,⁴ based on 1465 patients with cancer of the lung and 1465 matched controls, was carefully conducted and yielded evidence of an association between cigarette smoking and lung cancer so strong as to be considered proof within the everyday meaning of the word. Even before presentation of this work, evidence in favor of such an association was strong, deriving especially from a previous investigation by the same authors⁶ and from an investigation of 684 cases by Wynder and Graham⁷ in the United States. Male smokers

between the ages of forty-five and sixty-four experience an incidence of lung cancer between four and thirty-four times as great as that of nonsmokers of the same age, and incidence increases proportionately to the average daily consumption of cigarettes.

If such figures as these have been unduly publicized, the public, medical and lay, shows no sign of taking any of the relatively simple courses that would undoubtedly reduce the incidence of lung cancer. If similar data had incriminated a food contaminant that was not habit forming and was not supported by the advertising of a financial empire, there is little doubt that effective counter-measures would have followed quickly. It is not insufficiency of evidence that accounts for lack of such measures against tobacco tars, and it is debatable whether or not a little more "alarm" would be amiss. It is true that the causative mechanism underlying the association between tobacco and lung cancer is not known, although there is ample room for speculation in the presence of known carcinogens in tobacco tar; also, little is known about dosage, filtration of smoke and other factors that bear on the subject. However, if control of cholera had not been initiated empirically, but had awaited demonstration of the vibrio, active and useful preventive measures would have been delayed fifty years.

The situation affords unusual opportunities for the vast tobacco interests to support impartial researches into the effects that their products may have on human health.

REFERENCES

1. Smithers, D. W. Facts and fancies about cancer of lung. *Brit. M. J.* 1 1235-1239, 1953
2. Passey, R. D. Smoking and lung cancer. *Brit. M. J.* 1 399, 1953
3. Johnston, L. Smoking in lung cancer. *Brit. M. J.* 1 507, 1953
4. Doll, R., and Hill, A. B. Study of aetiology of carcinoma of lung. *Brit. M. J.* 1 1271-1286, 1952
5. Binysh, H. Smoking in lung cancer. *Brit. M. J.* 1 507, 1953
6. Doll, R., and Hill, A. B. Smoking and carcinoma of lung. *Brit. M. J.* 2 739-748, 1950
7. Wynder, E. L., and Graham, E. A. Tobacco smoking as possible etiologic factor in bronchiogenic carcinoma: study of six hundred and eighty-four proved cases. *J. A. M. A.* 143 329-338, 1950

MINNESOTA CENTENARY

THE hundredth anniversary of the Minnesota State Medical Association was celebrated last May at an annual meeting attended by more than 4000 physicians and guests. The program included addresses (all of which are published in the August

issue of *Minnesota Medicine*) by Dr. Richard Trail, of London, head of the Papworth and Enham-Alamein rehabilitation centers for tuberculous patients, Sir Alexander Fleming, director of St. Mary's Wright Fleming Institute of London, and Dr. Alton Ochsner, chairman of the Department of Surgery at Tulane University of Louisiana School of Medicine. Not the least interesting feature of the meeting was the exhibition of a typical doctor's office of a hundred years ago.

Medical advances in Minnesota in the period marked by this anniversary are all the more impressive when considered against the background of the evolution of Minnesota from a territory to a state. Ten years before the organization of the Minnesota State Medical Association on July 23, 1853, there was only one civilian doctor west of Prairie du Chien. Today, the names of the State's leaders in medical and surgical research and practice are bywords in the rest of the nation and throughout the world.

Confident that the next century will more than match the notable progress of the last, the *Journal* congratulates the Minnesota State Medical Association on an anniversary extraordinarily full of meaning to all concerned with the advancement of medical science.

MEDICAL REHABILITATION

THE Bay State Medical Rehabilitation Clinic, put in operation at the Massachusetts General Hospital in June, 1951, has presented the accounting of its first two years of service. During this period its patient-treatment visits have increased from 3153 in the first year to 5363 in the second, a total of 448 patients having been admitted.

The disposition of this group has been broken down into 114 patients with degenerative and 110 with traumatic conditions discharged, 90 still under treatment, 74 who were referred for evaluation only, and 60 who discontinued attendance for one reason or another. In the degenerative cases 38 patients were returned to work and the rest aided in other ways, such as the institution of a home program or referral elsewhere, and in the traumatic cases 62 patients were returned to gainful employment and the remaining 48 otherwise aided.

Clinic re-land states mining area Mine Work-ating at a fir concerned, t the enlighte for the Cripp

The direct have every r of increasing works is to to its list of

POSTGR.

THE notat graduate Me to be match of which a *Journal*. Sp Society and education, ti clearing hou conducted p sicians. The weekly sessio Fitchburg (N (October 7 to 16 to Decem in October, courses in F shire area ar

The subje phases of me tice. Of par grams on ca Fund Audit Boston. The 21, will be bi programs on

The impre stitute cann to keep abro medicine and the highest o medical prac in the princip