alone being considered and the percentage of the population under £15 and over £20 being given. Even without considering rateable value, it appears that the exposed streets have actually nearly four times the phthisis death-rate of the sheltered, and when a rough correction is applied for rateable value the ratio becomes rather greater than four to one. Without insisting for a moment on these precise figures, it seems fair to conclude on the whole that the influence of rainy wind is considerably greater than those of soil and poverty. This conclusion is important, because it makes possible an enquiry into the effects of rainy winds in localities where the part played by soil and poverty cannot be assessed.

6. The Influence of Rainy Wind Direct.

Lastly, it has been asserted, on no grounds of evidence whatever, that the influence of rainy winds on phthisis is indirect only, producing its effect on the people through the medium of the houses, either by compelling the closure of doors and windows or by driving wet into the walls. It might have occurred to those who put forward these theories that doors and windows are not all on the westerly sides of houses, and that houses standing in valleys which receive the drainage of surrounding hills are at least as likely to be damp as those on a steep hill slope exposed to wind but with rapid drainage for rain. But the present material affords more solid ground for rejecting these surmises.

In Exeter Mr. Wreford, the Sanitary Inspector, assures me that the phthisis distribution cannot be explained by wet driven into walls, because the newer houses have double walls and 75 per cent. at least of the older house have battened walls, which amount to the same thing.

Further, the streets which suffer most from phthisis are those along which the wind blows—that is, just those in which it does not drive directly against doors, windows, and walls; and again, since the streets which suffer most are those whose roadways are exposed, it seems natural to conclude that the rainy wind exerts its influence on the people themselves as they pass along these roadways.

The recognition of a direct influence of rainy wind explains its injurious effect observed in cases of phthisis exposed to it, and the unsatisfactory results sometimes seen from "change of air" to a situation which is rainy and windy.

In conclusion, my best thanks are due to Mr. Wreford, Sanitary Inspector of Exeter, for most kindly placing at my disposal the invaluable assistance of his long and intimate knowledge of all parts of the city, especially for corroborating my classification of the streets into sheltered and exposed as regards the winds.

RESULTS OF FOUR YEARS' SANATORIUM WORK IN THE TREATMENT OF PHTHISIS.

BY

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Nordrach-upon-Mendip.

THE Sanatorium of Nordrach-upon-Mendip has now been open for five years, and a sufficiently large number of cases has come under observation to give a value to the statistics of results.

Only the first four years' cases have been taken into consideration, for it is only when a case has been tested by the lapse of some time that any confidence can be felt in the permanence of the benefit obtained from treatment, and of the cases of the first four years, only those have been retained for purposes of argument concerning whom definite news was forthcoming in the summer of 1904.

As far as possible all cases have been followed up, and the figures that follow have been based upon the replies that were made to our inquiries. The total number of cases available for use in this paper is 289. They may be divided into three main classes:

A. Severe (disease affecting either the whole of one lung or considerable areas in both, often complicated with disease of the larynx).

B. Moderately severe (disease affecting not more than one half of one lung, with or without slight affection of the other—laryngeal diseases occurring in this class also fairly frequently).

C. Slight (disease confined to one lobe of one lung).

CLASS A.—SEVERE.

This class includes 183 cases.

(a) Of these 56 died either in the Sanatorium or at home within

twelve months of commencing treatment. Percentage, 30.6. As no effort is made in this Sanatorium to select mild cases, this class includes a number of patients who come as a last resource, often nearly moribund.

(b) Twenty-three patients died within two years of the time of commencing treatment here. Percentage, 12.7. In these cases treatment may fairly be said to have prolonged life, but nothing in the nature of even a partial cure was obtained.

(c) Thirty patients have been followed for two years, but we have no news of them later. We know only that they were alive more than two years after beginning treatment. Some are no doubt dead, and the others ought to fall into the divisions that follow, but in the absence of exact knowledge it seems better to form a special class for them. Percentage (alive after 2 years), 16.3.

(d) Thirty-nine patients report themselves in fair health in 1904. They are not able to undertake the work of people that have never broken down, but are all able to enjoy life and do a certain amount of work, but need to exercise care in living. Percentage (in fair health), 21.3.

(e) Thirty-five patients are in enjoyment of normal health, working as hard as ever they did, and able to do all that the normal healthy man can do. Percentage (cured), 19.1.

CLASS B.—MODERATELY SEVERE.

This class includes 84 cases.

(a) Corresponding to similar subdivision of Class A, includes 2 cases. Percentage (died within twelve months), 2.3.

(b) Includes 3 cases. Percentage (died within two years), 3.5.

(c) Includes 19 cases. Percentage (alive two years after), 22.6.

(d) Includes 11 cases. Percentage (in fair health), 13.09.

(e) Includes 49 cases. Percentage (cured), 58.3.

CLASS C.—SLIGHT.

Includes 22 cases.

There are no cases in subdivisions a and b.

(c) Includes 1 case. Percentage (alive two years after), 4.5.

(d) Includes 1 case. Percentage (in fair health), 4.5.

(e) Includes 20 cases. Percentage (cured), 90.9.

Taking all the classes together, the percentages are as follows: Total, 289 cases.

Subdivision (a) 58 cases. Percentage (died within twelve months), 20.06.

Subdivision (b) 26 cases. Percentage (died within two years), 8.9.

Subdivision (c) 50 cases. Percentage (alive two years after), 17.3.

Subdivision (d) 51 cases. Percentage (in fair health), 17.6.

Subdivision (e) 104 cases. Percentage (cured), 35.9.

The classification according to severity sufficiently emphasizes the desirability of commencing treatment early; but if even of severe cases 19.1 per cent. can be wholly cured and another 21.3 restored to a very fair measure of health—over 40 per cent., taking both classes together—then there can be hardly any cases of phthisis wherein something may not be hoped for from sanatorium treatment.

FURTHER REPORT ON THE TREATMENT OF PHTHISIS BY IODOFORM INFUSION.

By THOMAS W. DEWAR, M.D., F.R.C.P.,
Dublaine.

IN the BRITISH MEDICAL JOURNAL for November 21st, 1903, I published a short preliminary report on the treatment of advanced pulmonary tuberculosis by the intravenous injection of iodoform, devoting myself chiefly to a description of the method. This involves at a later date either an admission that the hopes then expressed have not been fulfilled or the submitting of more convincing evidence to support the thesis then maintained. To establish the bona fides of my statements as far as possible I have had control examinations of the sputa made at the R.C.P. laboratory. In making the request I have intimated that the patients had been recipients of the iodoform infusion. At the beginning or end of some of the cases the name of a physician is placed in brackets. If at the beginning it means that they saw the case then, if at end, after treatment. I have asked their permission to introduce their names as evidence that the physical conditions were as stated, and I take this opportunity of thanking them for the courtesy. But they must not necessarily be understood as either approving the treatment or endorsing the moderate claims I have put forward for it. Until the lapse of time has confirmed the stability of the results and a larger number of cases have responded to the uniform treatment it is premature to ask them to commit themselves further. This being a purely clinical paper only a brief summary of lung symptoms is given. Other notes and observations are withheld.