

mone, the antihistamines—these and others he had mentioned as examples of the way in which therapeutics was now progressing.

Further Advances

What further advances were in prospect? An observer of the general situation would have the hope, if not the confident expectation, of further important advances in the curative or, better, the preventive treatment of the common virus infections. Anybody unacquainted with the technical difficulties might reasonably inquire why, after more than 150 years, we had not any method of preventive inoculation, comparable with Jennerian vaccination against small-pox, for most of the still common virus infections of our temperate zone. The real trouble was that hitherto the viruses which people had succeeded in cultivating outside the body happened, unfortunately, to be those like influenza for which no solid immunity was acquired, even from an attack. It could only be said that there was so much accumulated experience and trained ingenuity now employed on relevant researches that it ought not to be long before there was discovered a generally applicable preventive inoculation against one or more of the diseases of this group, or perhaps an effective treatment by some antibiotic or other remedy.

What was going to be done with all this new knowledge? The position had been transformed, as compared with that of only 20 years ago. The change had been, on balance, enormously for the better. The question was bound to arise, concerning the limits of the individual intelligence to absorb, to understand, and to apply all this swelling flood of genuine and potentially useful new knowledge. He had been conscious, during this lecture, when speaking of the intricacies of the different types of paralysing and transmission-blocking agents at neuromuscular and ganglionic synapses, of his own difficulty in expounding, even of being certain that he himself understood completely some of these developments, although they were related to a range of physiology which had been that of his own special interest and concern. And he had wondered how the student of medicine was to be brought into contact with these things, and so to absorb them as to use them safely and intelligently in his practice.

This kind of educational problem, due to the increasing range and complexity of knowledge, was common, of course, to all branches of the medical discipline, and indeed to the learning of all the natural sciences; though it might be suspected that it was unusually acute in medicinal therapeutics on account of the rapid extension there from such small beginnings to this embarrassing abundance. Yet, here as elsewhere, the problem had somehow to be solved. He had himself long felt a strong conviction that the central aim of any scheme for a national health service ought to have been—ought still to be—to deal with this problem, of providing such technical facilities and assistance, such ease and regularity of access to expert advice and consultation, as would enable the individual practitioner to bring the highest practicable proportion of all this new knowledge that research is now producing, and would continue to produce, to the service of his patients, in the diagnosis and treatment of their ailments, with all the help that science could progressively offer.

THE DOCTORS' DISEASES

Addressing his fellow actuaries recently, Mr. E. A. J. HEATH, manager of the Medical Sickness, Annuity, and Life Assurance Society, was concerned mainly with the problems of "permanent" or "non-cancellable" (that is, by the Society) insurance for sickness. But he had also much of interest to tell about the cause of sickness among the members, most of whom are men doctors. Comparing two peacetime years, 1937 and 1952, there was actually a reduction in

the rate of claims for benefit owing to the occurrence of an influenza epidemic in the former year but not in the latter. Still, it was reassuring to hear that, unlike some industrial experience, there had been no general increase. Within this picture there were remarkable changes, however, that mirrored some of the recent trends of morbidity in the general population. Claims for septic infections were three times commoner in 1937 than in 1952; there were no claims for scarlet fever or diphtheria in the later year. Appendicitis was only half as common in 1952, and why this should be so was not at all clear. Surprisingly, pneumonia seemed to be commoner in 1952, though disability was probably much shorter, and as a cause of death pneumonia was now "practically non-existent." The speaker was dealing, of course, with a membership that ceases at 65 years of age.

A Fashionable Complaint

The other side of the balance sheet showed an increase in the claims for an assortment of conditions—for virus infections, for "disks," possibly for cancer, and, dominating the picture, for coronary thrombosis. This is what Mr. Heath had to say about "disks":

"In 1937 there were 47 claims for lumbago, sciatica, sacro-iliac strain, and so on, on the average of fairly short duration. In 1952 there were only 29 such cases—but no fewer than 35 cases of prolapsed intervertebral disks, with a definite increase in the average period of incapacity. I am told that prolapsed disks have been found in skeletons 2,000 years old, but they have only been rediscovered since the war, and very much to the cost of companies doing sickness insurance. Fortunately the drastic operation which was in vogue a few years ago has already fallen out of favour and disks tend more and more to be treated conservatively." It is not often that fashions in diagnosis—and treatment—are documented so neatly.

Coronary Thrombosis

The increase in coronary disease may be represented by these numbers: 9 claims in 1937, including 1 for angina pectoris, and 24 claims in 1952, including 4 for angina. (The figures given for 1952 were all "adjusted" figures, to allow for the changes in the number of members between 1937 and 1952 and the increase in the average age of the members.) Scrutiny of the other cardiovascular claims in 1937, and review of all the other information on the subsequent history of the claimants now available yielded another 6 cases in that year that might conceivably have been "missed coronaries." This procedure (which was not applied to 1952) permits a more conservative comparison of 15 claims in 1937 with 24 in 1952—similar figures to those of the deaths from coronary disease, 6 and 9 respectively. In addition there were 3 "chronic" cases of coronary thrombosis in 1937 and 8 in 1952. On the other hand, there was no apparent increase in these 15 years in the claims for intracranial vascular disease and high blood pressure.

Mr. Heath summed up the outlook in coronary thrombosis as "roughly speaking, one-third die within a day or two, one-third recover in 3 months, and one-third are incapacitated for 6 months or even for many years"—figures not unlike the results of the exhaustive analysis of prognosis in the same material reported previously in our columns.¹ Coronary thrombosis, he said, was probably "the biggest medical problem which life office actuaries have to face today, and it is even more important in the sickness field," which is not surprising in light of the observation of Morris and his colleagues that one in five members joining the society at the usual age may expect to suffer from coronary heart disease before reaching 65, and that a third of all the deaths are so caused.

¹ Morris, J. N., Heady, J. A., and Barley, R. G. (1952). *British Medical Journal*, 1, 508.