

Investigations to Track Down Age-Old Secrets

By

Alec Forrest

RHEUMATISM is a world-wide evil. Thousands are crippled by its attacks. Millions suffer in some form from its disabling power, its aches and pains. To conquer this disease in all its forms would be an enormous triumph for medical research and untold suffering would be avoided.

It has not yet been possible to achieve that goal but thanks to intensive research carried out in Britain by the Empire Rheumatism Council, at long last some big advances are being made to track down rheumatism's age-old secrets.

Research workers in other countries are benefiting, too, by the new pattern of inquiry launched by the Council. Its spearhead in this battle against the disease is a Mobile Field Survey Unit, based at present on the University of Manchester.

Population Surveys

The Unit's specialists have been making population surveys in the north-west of England, selecting for their investigations a typically crowded industrial area—they found it in and around Leigh in Lancashire—and, as a contrast, the rural district of Wensleydale in Yorkshire.

From their findings, long held theories are being disproved.

The evidence collected by these experts shows that damp houses are not the actual cause of rheumatism. But once a person has the disease, then life in

damp surroundings probably makes it much worse.

Rheumatoid arthritis is one of the most cruel forms of the disease. Until these new findings, dampness was often blamed for it. But, say the experts, it is the result in almost equal measure of a person's heredity and environment.

By environment, they do not mean simply the victim's local surroundings, climate and living conditions, but every ill and mischief he or she has suffered since birth.

The north-western area, surveyed by the Unit, is noted for its damp climate. Yet the number of people in the area in proportion to the total population, suffering from rheumatoid arthritis is not greater than that claimed by the disease in an exceptionally hot rural area in tropical Jamaica. However, in the warmer region, the disease is generally less severe in effect.

On the question of hereditary or genetic influences, the Survey's experts say that relatives of those suffering from rheumatoid arthritis are four times more likely to catch the disease than other people.

Studies of Towns

But, because their studies make this fact clear, it does not mean that environment plays no part in spreading the disease.

Six hundred families, selected

at random, have allowed the Unit to study all possible facts, past and present, about their individual members.

From this great family inquiry, the experts hope to discover if the genetical factor can explain the presence of rheumatism in one or more members of a family. Then, by carrying their research further, they may find out whether a person's environment can be made to diminish or present the effect of this genetical factor, or, at the other extreme, make it more dangerous.

Studies, too, are being made of twins. Several hospitals co-operating with the Survey Unit now ask every rheumatic patient whether he or she is a twin. When the answer is "yes", the other twin is sought out and examined for symptoms or potential signs of rheumatism.

Comparisons between identical and non-identical twins should then make it possible to tell whether their common ancestry or their common environment or a combination of both will yield vital clues to the causes of this disease.

It is a very long job, calling for great patience and scientific skills. But once scientists can "fix" the causes of rheumatism, then a great victory will be won. After that, it should soon be possible to devise methods of cure and prevention, to the immense relief of mankind.

(By Courtesy, B.I.S.)