

### FACTORS IN THE DEVELOPMENT OF LEPROSY

The recent interesting paper by Dr. Clarence A. Mills on climatic influences in the development of leprosy reminds us of a rather neglected aspect of leprosy investigation. We may or may not agree with the conclusions at which Dr. Mills arrives, but the importance of the epidemiological study of these other factors should be clear.

The irregular distribution of the disease, even in areas where the general incidence is heavy, is a common characteristic of leprosy. Speaking at the moment of China, the contrast between the distribution of tuberculosis and that of leprosy is striking. The former is found in almost every part of the country and, generally speaking, is spread fairly evenly over it; the latter is most irregular in its general distribution and nowhere does it seem to be uniform in incidence. In studying this matter one comes upon comparatively clean areas even in regions where the disease is most prevalent, and often there appears to be a sharp defining line limiting an area of heavy incidence from one where it is not found. Further east, Korea gives a conspicuous example of this condition, for whereas the southern part of the peninsula is one of heavy and possibly increasing leprosy infection, the northern part is said to be quite free of the disease and the line of demarcation is an abrupt one.

While the pathologists have been increasingly busy in an intensive study of leprosy, it seems to have been largely neglected by the epidemiologists. This, of course, has not been entirely the case, and one or two valuable papers on the subject have appeared in our own *JOURNAL*; but generally speaking the intensive study of the distribution of leprosy and the causes that promote and limit that distribution has been very poorly represented. The subject is one of great importance and offers a field for investigation which might prove of very considerable value in the elucidation of some of the problems still waiting solution.

Climatic, geographical and especially nutritional factors all call for study. The nutritional factor is the one that has received the least attention but that may yet prove to be the most important of all. The great flood in central China would seem to have been followed by a marked increase in the prevalence of leprosy, and it has been suggested that the same is true as the result of a disastrous typhoon which, some fourteen years ago, devastated the coast of the province of Kwangtung, causing a loss of many thousands of lives and destroying the crops and fruit trees over a huge area of fertile country. Nutritional problems are very much to the fore just now, and the possible

association of leprosy with avitaminosis needs to be borne in mind. At any rate, the epidemiological problems of leprosy deserve much more thorough investigation than they have received.

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