

G. Epidemiology and Vaccination

Factors Which Might Contribute to the Spread of Leprosy¹

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In the study of each biologic, socio-economic and environmental factor, it has been suggested or emphasized that none of them taken alone could explain the spread of leprosy in the different regions of the world. Furthermore they are intermingled and cannot be dissociated from other factors present in the same area and are often related to each other, such as poor housing, overcrowding, promiscuity, malnutrition, low standard of hygiene, and ignorance. Warm and humid climates in certain areas of India and Amazonia are associated with particular living original, socio-economic and cultural conditions which also would play a role in the spread of leprosy. These factors would act by increasing the exposure and/or decreasing the resistance in the most susceptible individuals, and their importance may vary from one area to another.

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With due consideration of each possible factor, the author thinks that socio-economic, hygienic and cultural conditions play perhaps the most important role in the spread of leprosy in every part of the world, in association with the other factors present in each area. The low socio-economic and cultural conditions constitute, in fact, a common denominator in each area where leprosy is endemic. In his opinion, a rise in standards of living and education at all levels of the population would lead to the natural decrease of the endemic, even if the agents (drugs and/or vaccine) used to control leprosy have not reached the desirable level. The attainment of these ideal conditions of living takes a long time—obviously different from one country or area to another—and consequently the control of leprosy may be delayed for decades in many countries unless prophylactic measures are fully applied or a drug as efficient as penicillin in the treatment of treponematoses is discovered for the treatment and prevention of leprosy, and/or an immunizing agent is found.