Host Genetics and Infectious Diseases in South India

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ABSTRACT Major advances in genetic epidemiological methodologies have helped in understanding the role of host genetic factors in susceptibility / resistance to infectious diseases. Recent human genome mapping information and the identification of a large number of candidate genes provide the tools for such studies. In the present article we review the implications of host genetic factors in infectious diseases such as leprosy, tuberculosis and HIV. India being known for its genetic diversity, studying the role of host genetic factors in disease susceptibility / resistance in Indian populations would throw light on pathogenesis of disease and for the design of preventive and therapeutic strategies.