One of the major success stories against infection diseases in the 20th Century is hampered by re-emergence of old ones and with co-occurrence of new disease as well as drug resistance strains. Several bacterial diseases are re-emerging due to poor public health measures. Both microbial expertise and epidemiological surveillance are deficient in general health care and public health system in India; therefore infections disease that have been under control elsewhere remain prevalent in the country, but are also under diagnosed and under reported. Also empirical antimicrobial policy, lack of pharmacy vigilance and over the counter prescriptions lead to masking of clinical features. Further despite of advances in laboratory medicine, several tests though now available particularly for serodiagnosis; need validation. In the last few decades diseases like malaria, leptospira, dengue, anthrax, salmonella have re-emerged and multi-drug resistant strains of HIV, Salmonelia, Ecoli, TB are on the rise.

Plague re-appeared in two outbreaks in Maharasthra and in 1994, indicating a breakdown of the public health measures that had prevented its occurrence of for several decades. Leptospirosis appears to be the increase in Kerala, Tamilnadu and the Andamans during the last two decades, probably due to increased farming and inadequate rodent control is suggested that melioidosis due to the soil organism Burkholderia pseudomallei may be prevalent in many parts of India, but is under-diagnosed and under-reported. Since 1991, a completely new choleragenic Vibrio cholerae, designated 0139 has emerged in southern India and spread to parts of India and to neighbouring countries. Animal anthrax is very common in many parts of India, but North Arcot districts, its prevalence had increased in recent years. Since a multi-drug resistant variety of typhoid fever had been prevalent in many parts of India, caused by Salmonella typhi resistant to chloramphenicol, ampicillin and trimethoprim-sulphamethoxazole. Nosocomial methicilli resistant Staphylococcus aureus infection seems to be widely prevalent hospitals in many regions in India, and its prevalence seems to be on the these pathogens pose new threats to public health, and call for appropriate responses.1

In the South Asia region vast human populations are exposed daily and considerable intensity to close contact with vast animal populations and excreta. Among the commonest zoonotic diseases prevalence member countries are rabies, brucellosis, Japanese encephalitis, echinococcosis, tuberculosis, visceral leishmaniasis, taeniasis, salmonel campylobacteriosis and leptospiriosis. To coordinate zoonotic disease surveillance, there is growing need now to set up veterinary public health system. Also in urban slums, drainage, monsoon water management need to be re-looked. Leptospira has hit virtually all parts of urban, semi-urban, semi-rural and rural India in the last decade. The rodent population in rice mills of Salem with wet environment and unprotected workers lead to ideal setting for an outbreak in 2000. 68.3% of Rice mill worker were seropositive.2 Urban slum children in Mumbai 32% had acute leptospirosis in monsoon.3 Thus during monsoons parents should ensure that their child does not come in contact with contaminated flood water. 18.6% of Pune cases were seropositive in cases of Pyrexia of unknown origin.4 In Surat, South Gujrat there was on out breaks in July-Sept 2000,5 while post-cyclone arise in Oct-Nov 1999 19.2% had seropositive leptospirosis.6

In the current issue of JAPI; from urban sums of Delhi in leptospirosis in reported from febrile patients.7 Also Pune group recently reported evaluation of clinical criteria.8 The classical clinical diagnosis by Faine criteria and a tropical relevant modification has been
suggested. In fact Rainfall or contact with contaminated environment are possibly as important as history of animal contact. Serodiagnostic tool of micro agglutination test (MAT) is the gold standard but is not universally available. The eastern Delhi study used simple IgM ELISA which has a specificity of 93% and sensitivity of 100%. In the study by Winslow et al, a positive ELISA was detected in 12 out of 41 patients even before MAT antibody titres were detected. Therefore IgM ELISA is a good diagnostic tool for the diagnosis of leptospirosis in early stages. Where laboratory support is not routinely available, as is the situation in most parts of our country, latex agglutination assay should be used. It is simple, cheap and the result obtained within 30 seconds. Such slum outbreaks from urban cities like Delhi, Mumbai, Pune, etc. serve a grim reminder of our prevailing public sanitation as well as public hygiene. Without improving microbiological expertise and application as well as epidemiological skills and practices, emerging and re-emerging diseases will not be recognised, identified or intercepted in their early stages.

REFERENCES


