

# BACTERIOLOGY AND INFECTIOUS DISEASES

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### BIOGRAPHY

Sujit K Bhattacharya graduated from Calcutta University in 1959 and completed his internship and House-man ship from Nilratan Sircar Medical College Hospital, Kolkata, India. After graduation, he joined the National Institute of Cholera and Enteric Diseases, Kolkata of the Indian Council of Medical Research (ICMR) and became Director in 1994. He is a Fellow of the prestigious academies in India (FNA, FNASC, FAMS and FIPHA). He has worked at WHO, about a little less than three years and was looking after the elimination of Visceral Leishmaniasis in the Indian Subcontinent. His areas of interest are NTDs, particularly Kala-azar, HIV/AIDS and Diarrhoeal diseases. He has published more than 450 papers. Some of his publications appeared in *NEJM*, *The Lancet Infectious Diseases*, *Journal of Infectious Diseases*, *Journal of Antimicrobial Agents and Chemotherapy* and many other prestigious journals. He was temporary adviser in a number of WHO meetings. He attended a large number of international conferences. He was associated with development of anti-kala-azar drugs like miltefosine and paromomycin.

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### KALA-AZAR ELIMINATION PROGRAMME IN SOUTH-EAST ASIA REGION

Visceral Leishmaniasis or Kala-azar is characterized by fever (>14 days), anaemia, loss of body weight and most importantly splenomegaly. The disease is endemic in many parts of the world. In the South-East Asia region, the disease is prevalent in localized pockets of India, Bangladesh, Nepal and few indigenous cases in Bhutan. Kala-azar is a disease of poverty, causes stigmatization, retards economic growth and enhances malnutrition. The disease if not treated the patient dies in about two years due to undercurrent infection. Tuberculosis and worm infestations are common in kala-azar infection. At one time Sodium Stibogluconate was the sheet anchor of treatment of kala-azar (last 60-70 years). Over the years, the parasite called *Leishmania donovani* became resistant to the drug. Escalation of dosage was associated with cardiotoxicity and death. In the recent past, an international collaboration in India facilitated development of several safe and effective drugs. The most suitable drug was miltefosine, the first ever oral drug developed for kala-azar. This was followed by paromomycin, an injectable aminoglycoside. Amphotericin B and then lipid amphotericin were developed. Lipid amphotericin B is the safest and most effective drug for the treatment of kala-azar. A phase IV community trial showed that miltefosine may be used in the out-patient's treatment of kala-azar. rK39, a rapid diagnostic test, was developed and vector control methods were in place. As the disease is localized and *Phlebotomus argentepis* was the only vector and man is the only reservoir, it was considered possible to eliminate the disease from the region. Currently, the incidence of kala-azar in all the three countries have come down drastically and approaching elimination target (less than 1 case per 10000 populations in endemic areas). This programme is viewed as "Poverty alleviation programme".