JAPANESE ENCEPHALITIS CONTROL PROGRAMME

Introduction

Japajese encephalitis (JE) is a zoonotic disease and caused by an arbovirus, group B (Flavivirus) and transmitted by Culex mosquitoes. There are two cycles of transmission: one is pig-mosquito-pig, and another Ardeid bird-mosquito-Ardeid bird. The disease id transmitted to man by the bite of infected mosquitoes. Man is an incidental "dead-end" host and man to man transmission is not recorded till now. The main vector is Culex group belong to the C. Vishnii, C.tritaeniorhynmchus, C. genidus other are pseudo vishnii in India. The pigs are considered as amplifier.

The clinical manifestations of the disease are characterized with high-grade fever, convulsion, confusion, stiffness of neck and altered levels of consciousness from stupor to deep coma. The fatality rate varies between 10% - 40% and those who survive do so with various degrees of neurological complications like paralysis and cognitive deficiencies.

Burden of Disease

Recently this disease have caused many peidemics and become a major public health problem. This disease has been reported from 26 states and UTs since 1978, only 15 states are reporting JE regularly. The case fatality in India is 35% which can be reduced by early detection, immediate referral to hospital and proper medical and nursing care. The total population at risk is estimated 160 million. The most disturbing feature of JE has been the regular occurrence of outbreak in different parts of the country.

Prevention and Controlb

Govt. of India has constituted a Task Force at National Level which is in operation and reviews the JE situations and its control strategies from time to time. Though Directorate of National Anti-Malaria Programme is monitoring JE situation in the country, there is no separate funds are allocated for JE control. State should manage the situation/programme and may divert resources of NAMP in case of outbreaks.

Strategy for Prevention and Control

1. Strengthening early diagnosis and prompt case management at PHCs CHCs and hospitals through training of medical and nursing staff.
2. IEC for community awareness to promote early case reporting, personal protection, isolation of amplifier host, etc.;
3. Vector control measures mainly fogging during outbreaks, space spraying in animal dwellings, and antilarval operation where feasible; and
4. Development of a safe and standard indigenous vaccine. Vaccination for high risk population particularly children below 15 years of age.