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Comments to The Problems of Dengue Virus Infections in Cuba and in South East Asia

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It is evident that an increasing world wide spread of dengue fever has been affecting tens of millions of people annually. I would like to mention some observations from my WHO and other assignments.

The vectors of dengue viruses breed rapidly in clean water, and in most of the cases closely to the housings. The spread of dengue has continued also widely with increasing urbanization due to the little unplanned settlements. Community however may contribute to the reduction or elimination of the local breeding places.

It is known that DHF/DSS develops on the second infection in particular, when the second dengue virus is different from the first infection. For these reasons, DHF/DSS in people coming from the nonendemic to the endemic countries for a short period is very rare. On the other hand, the number of classical dengue fever cases is permanently increasing among travelers.

An epidemic of dengue 2 fever and DHF/DSS occurred in Cuba in 1981 following four years after an outbreak of dengue 1. It was the biggest outbreak recorded until now and the first one of DHF/DSS in Americas. More than 320,000 cases were reported and about one-third were hospitalized. More than 10,000 cases were classified as severe and 158 patients died, among them 101 were children (fatality rate was 0.46/1,000 cases). The clinical picture was similar to that in Vietnam. In South East Asia, the cases in adults were infrequent, while in Cuba 1/3 of patients were adults. An intensive campaign against the vectors was launched with the international assistance under the leadership in Havana. All the human and material resources for this campaign were allocated. The health personnel and auxiliaries circulated permanently in the areas under surveillance and encouraged the people in eliminating all breeding places of vectors. A complete elimination of vectors was achieved.

First serious outbreak of dengue like disease in Vietnam occurred in 1980 in Tonkin and later in the South. The infection was probably imported by a ship to the Haiphong harbor. The first outbreak confirmed in the laboratories occurred in 1960. During this epidemic only in Red River Delta was affected and at least 2 millions of inhabitants fell ill. Among the patients admitted to the hospital, 40-70% had DHF and 20% DSS (mortality less than 1%). Since the second part of 80', some dengue like outbreaks have been observed. I have carried out with my collaborators a serological multipurpose survey.
using the HI test according to Clarke and Casals in a randomized sample of population in North as well as South Vietnam. Antibodies were detected in 6 to 68% of individual sampling points at least against two dengue viruses, but the circulation of all dengue viruses was confirmed. The chikungunya antibodies were revealed in about 5 to 50% of individual sampling points. I have paid attention to the main breeding places of vectors (jars and different tanks for storage of water for the households). The campaign against the vectors in Vietnam was not successful as in Cuba due to different social and anthropomedi cal as well as ecological factors, which must be taken into consideration in any antivectorial measures.