

## Editorial

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### Recent Dengue Management: A New Concept

Globally 2.5 billion people in tropical and subtropical countries are at risk of dengue fever. An estimated 50 million dengue infectious occurs worldwide annually. An estimated 5,00,000 people with Dengue Hemorrhagic fever require hospitalization each year. Approximately 90% of them are children age group and about 2.5 % of them die.<sup>1</sup>

Dengue fever (DF) and Dengue Hemorrhagic fever (DHF) is endemic in more than 100 countries of the world. Of them South East Asian and Western Pacific Regions are most seriously affected. Epidemics of dengue increasing in frequency every year. Seasonal variation is observed. *Aedes aegypti* is the primary epidemic vector. Dengue is primarily an urban disease but now spreading to rural area worldwide. Imported cases are common. Co circulation of multiple serotypes / genotype is evident.<sup>2</sup>

In may 1993, the 46<sup>th</sup> world Health Assembly adopted a resolution on dengue prevention and control which urged that the strengthening of national and local programmes among the foremost health priorities in WHO member countries where the disease is endemic. Global strategy for DF/DHF vectors include selective integrated mosquito control with community and intersectoral participation, active disease surveillance based on strong health information systems, emergency preparedness capacity building and training and intensive research on vector control.<sup>1</sup>

In the last one decade from the year 2000 the average annual number of DF /DHF cases are reported to increase enormously. So prevention and control may not have been adequate what was expected. More lives are being lost than before.

Dengue case management is now become an important issue. In the recent years WHO has issued the revised and expanded guideline where case management and new concept of case detection are important issues. Viral antigen detection; the NS<sub>1</sub> gene product is a glycoprotein. This antigen appear in blood as early as day one of onset of fever and decline to undetectable levels by 5-6 days. Hence tests based on this antigen can be used for early diagnosis. About

the case management, warning sign is an important issue now. About which we were not aware in our 2009 national guideline. These include persistent vomiting abdominal pain, extreme lethargy, restlessness, sudden behavioural changes, bleeding manifestation giddiness, pale, cold and clammy hands and feet, less or no urine out put in 4-6 hours. Intravenous fluid therapy in DHF is another new concept for proper management. In non shock DHF, start fluid (crystalloid solution) after calculation of deficit which has to be given in 48 hours. For DHF shock cases, start loading fluid in hour then reduce in next 24 hours. The previous guide line for fluid replacement therapy has been totally changed to the above concept.<sup>1,2</sup>

Expanded dengue syndrome is a new concept where there is only presence of organopathy usually liver, kidney, brain involvement and may lead to death. This is the time we should prepare and revise our national guideline for the recent update so that we can manage our cases properly and adequately. We hope no life will be lost from DHF. In Bangladesh there is no mortality in the last few years. Our health care providers should be trained for recent update management of DF/DHF to achieve the goal. All South East Asian Regional countries are adopting the revised guideline why not we are?

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2. Dengue, guidelines for diagnosis treatment, Prevention and control New edition 2009, TDR.