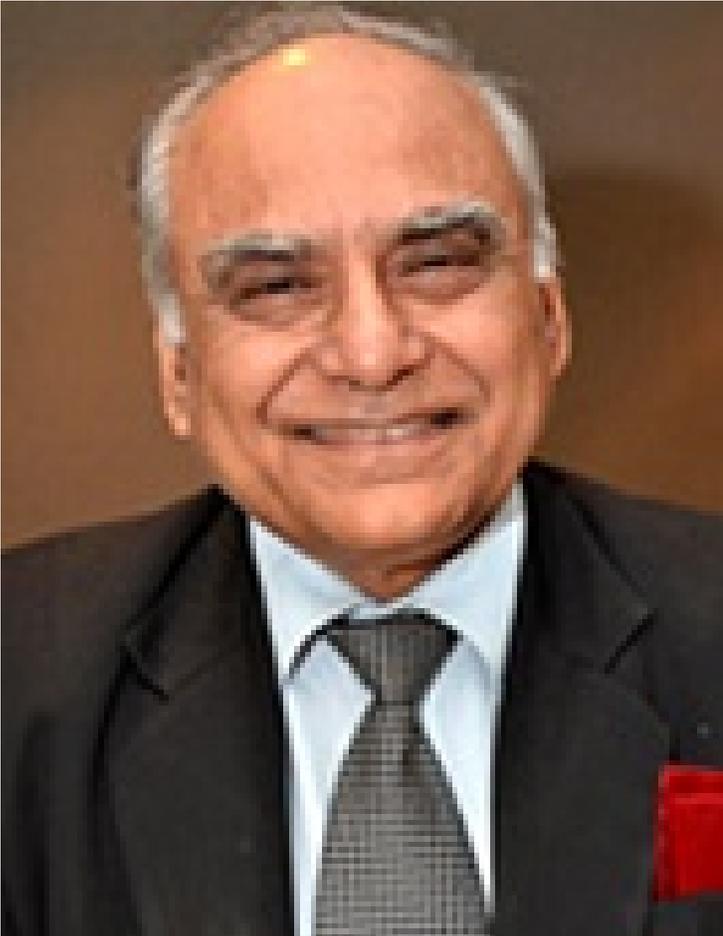


## 'Major effort needed in vector control'

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### 'Major effort needed in vector control'



**1. India is reeling under one of the worst outbreaks of chikungunya and dengue this year. In your opinion what could be the reasons?**

A. The major effort which is needed is the vector control in *Aedes Aegypti* and *Aedes Albopictus*. The public health measures include cleanliness, accumulation of water in tyres, water coolers, the rubber plantation as well as the palm tree collection. Current one test that has been introduced is Wolbachia and sterile mosquito technique. The other preventive measures for Dengue will be introduction of Dengue vaccine one with Sanofi is already cleared for four countries two Indian companies and Butantan vaccine will be available shortly and also one from Takeda. There is a need for cheaper and better Dengue and Chikungunya diagnostic tests.

**2. What are the steps/measures taken by the government to attend to this crisis?**

A. At the moment the major crisis is in Delhi and more than 1,700 cases have been reported. The government has launched a major drive for fogging and other methods for mosquito control has created policies and extra beds in hospitals and also capped the price of diagnostic tests for Chikungunya.

**3. In your opinion what are the key measures needed, to curb this outbreak and prevent further spread?**

A. In my opinion few key measures will be strengthening the Municipal authorities who are first group to undertake the spraying and fogging operations as well as creating public information and advocacy measures. The other measure is capacity building is case management both for Dengue and Chikungunya.

**4 Dengue and chikungunya is a continuing problem in India. What is India's policy in preventing and controlling the spread of vectorborne diseases?.**

A. An integrated vector management programmes which will encompass Dengue and Chikungunya and also to undertake the GIS and modelling particularly the modelling done by Pittsburgh University for the appropriate forecasting in the era of Global warming.

**5. With scary viruses daunting the globe, an epidemic threat looms over India. Is India prepared to handle an epidemic outbreak?**

A. Globally WHO has come up with an emergency outbreak management programme with a defined structure which includes administrative structure. This is now being put in place and NCDC as well as Institutes like National Institute of virology have put up strong surveillance networks which should prepare us better for outbreaks.

**6. What is India's outbreak management strategy?**

A. Previously India use to manage outbreaks when it happens in other part of the world. However with now good surveillance systems it is possible to forecast the diseases as well as take pre-emptive measures. For many of the outbreak causing organisms, vaccines are available now and also point of care diagnostics are available and after Ebola a good disease management systems are also in place.

**7. Is it time to have a national policy for drug development and epidemic outbreak?**

A. Many of the outbreaks are through viruses and for that mostly the drugs are not available except for influenza, Herpes related infection. However, there are now global efforts in developing drugs like ZIKA and Dengue and these should be offal.

**8. How does government encourage new drug research for new and rare organisms?**

A. There are several drug research institutes in India including some were on plant based medicine. These are CDRI, IIM, IICT, NCL etc to name a few ICMR Belgaum institute also work from the plant based medicines. There are lot of funding for the new drug development by the various funding organisation in India.

**9. Is it time to have a collaborative approach and establish more PPP models to encourage research of rare viruses and bacteria to develop effective medical interventions?**

The PPP model of course is useful. The one of the most successful program is the partnership with the Wellcome research foundation.

**10. Any new promising vaccines or medicines under development for chikungunya?.**

For the Chikungunya there is a vaccine from the Pasteur Institute which was given to Walter reed. The Bharat Biotech has a vaccine now and Zydus Cadila is tying up for the development of a vaccine.