

Editorial

Dengue and mosquitoes: the intertwined twin plagues of Sri Lanka

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It is that time of the year again, the time of dengue epidemics in Sri Lanka. It is practically the same old story, year in and year out. Dengue is causing havoc and the *Aedes aegypti* together with *Aedes albopictus* are laughing at us all the way. Many things have been written about dengue fever, particularly the clinical presentation, assessment and modalities of treatment. In fact, the Sri Lanka College of Paediatricians has drawn up and published guidelines on the management of this frightful disease. Of course, we have been very successful in the treatment of this disease with mortality rates that are comparable to some of the best centres in the world. We have been patting ourselves on our backs but isn't there something else that is perhaps even more important that we should consider? That age old cliché still holds good; prevention is that much better than cure.

Every year the disease raises its ugly head during the inter-monsoonal rain showers. Then it picks up momentum and an epidemic is declared. Only then does it become news, once again! The media, the government and lastly the general public get activated. Many campaigns are started and several interested parties get on to the centre stage, a veritable band-wagon. Drains are cleared, steps are taken to deal with possible breeding places of the mosquitoes, compounds are cleaned up, spraying of insecticides stepped up, fogging is started and teams are sent abroad¹ to find out the latest ways and means of controlling the pestilence that is the omnipresent mosquito population. Then, in the nature of things, either a severe drought or torrential rains deplete the breeding places of the mosquitoes. The disease dies down or at least becomes quiescent. The general public is happy and everybody relaxes. It is only a temporary respite, for the entire cycle to be restarted again with the epidemic in the following year.

With a vaccine not exactly at the front of drug company Research and Development Lines, dengue prevention comes down to mosquito prevention². Mosquitoes are as omnipresent as people in any area of our beautiful land. This country has been at the receiving end of several mosquito-borne diseases like malaria, filariasis, dengue and Japanese encephalitis.

As it stands today, controlling the mosquito population is as important as having many different Health Ministry Decentralised Campaigns to deal with these diseases.

In Singapore, a unique and many faceted programme of mosquito control, which includes source reduction, public education, law enforcement, chemical control and research, is in place³. It is a programme that is implemented right round the clock, 365 days a year.

For large expanses of water, which may act as mosquito breeding grounds, the use of several larvicidal measures such as larva eating fish, bacteria such as *Bacillus thuringien*, chemicals like temephos and anti-mosquito oils are perhaps appropriate. However, their usefulness in the small-container collections of water which act as breeding places is totally unconvincing. Thermal and cold fogging together with spraying of selected insecticides are effective against adult mosquitoes but this will have to be a perennial and universal exercise for it to be of any benefit. Ironically, in a country like ours, the possible cost-effectiveness of such a programme remains without conviction and proof. It would perhaps be more desirable and definitely more cost-effective to inspire a sense of personal responsibility in the general public for keeping their own backyards free from mosquito breeding places. The onus of responsibility should be on every institution, every man, every woman and every child. A sense of patriotism on such an enterprise is the need of the hour.

It is a well-known fact that the basic sanitation services of this country are not what they used to be. All the physical measures that are undertaken with such enthusiasm during an epidemic of a dreaded disease should really be an all-year-round endeavour. Cleaning of drains and dealing with mosquito breeding places should not be left until a pestilence strikes.

For a disease like dengue, there is no vaccine in sight, certainly not in the near future. The only sensible way of preventing it would be to try and control the mosquitoes. If we manage to do that, we would perhaps be rid of this pestilence and it would not be necessary to depend on forces of nature such as droughts or floods to control it.

References

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