Environmental and Socio-Behavioral Factors Influencing DHF Epidemic Outbreak in Mataram

Abstrak:

Dengue Hemorrhagic Fever (DHF) is a viral endemic disease in Indonesia transmitted by Aedes mosquitoes vector. The only way to prevent the disease is by cutting disease transmission chain namely vector control that is influenced by environmental and socio-behavioral factors. Therefore the aim of this study was to analyze environmental and socio-behavioral factors influencing DHF epidemic outbreak in Mataram.

This study was designed as a cross-sectional observational survey conducted during DHF outbreak in Mataram, Nusa Tenggara Barat province in March to June 2004. Four villages as outbreak zone were taken as study area. Whereas sixteen villages of non-DHF outbreak zone were taken as control area. From each village, ten households were taken as samples amounting to a total sample of 200 people. Associations between environmental factors or socio-behavioral factors with DHF epidemic outbreak were tested by the Chi-square. A both environmental and socio-behavioral factor all together in relation to DHF epidemic outbreak was analyzed using by multiple logistic regression model.

The data showed that there were associations between container indexes, attitude to DHF disease, action in vector control, abatization with DHF epidemic outbreak in Mataram in 2004 (Chi-square tests, all p < 0.05). However, in multiple logistic regression model it was revealed that the only container indexes was of significant influence on the DHF epidemic outbreak (p < 0.01) with relative risk (RR) was 2.96.

It is concluded that the most important factor influences DHF epidemic outbreak in Mataram is high container index. It is recommended to Local Health Department to increase alertness in pertaining to DHF outbreak by intensifying program of abatization, health education on DHF and action in vector control. There is an urgency of inter-program and inter-sectoral joint cooperation in prevention of DHF outbreak.

Keyword:

DHF, environmental factor, socio-behavioral factor