

## SUMMARY

### **Health Pattern and Environmental Factor that Relationships Dengue Hemorrhagic Fever Endemicity**

Dengue Hemorrhagic Fever (DHF) presents a huge community health problem in Indonesia because of its prevalence as an endemic disease with repeated outbreaks and high mortality rate. Dengue Hemorrhagic Fever vectors in Indonesia are *Aedes aegypti*, *Aedes albopictus* and *Aedes scutellaris* mosquitoes. At present, the main vector of DHF is *Aedes aegypti*. Dengue Hemorrhagic Fever is a disease caused by dengue virus with symptoms of sudden onset of high fever, with bleeding manifestation and a serious tendency of shock and deaths. Dengue Hemorrhagic Fever is influenced by environmental factors namely the biological factors (container index, house index, free *Aedes aegypti* larva and fly-range), the physical factors (house sanitation and inhabitants), and the health pattern behavior (knowledge, attitude, action of Draining, Covering, Burying) nutrition, sport habit and smoking.

The objective of this research was to analyze the environmental factor and community healthy living pattern influencing DHF outbreaks in Sumenep regency. The outcome of this research was expected to provide inputs and policy alternatives to the local government and Sumenep Health Office to control, prevent and decrease DHF prevalence in Sumenep regency.

This was an observational research, cross-sectionally done by studying the correlation between independent variables (risk factor) and dependent variables (effect) by measuring in one moment-time. The sample was divided into two groups i.e. study group and potential group. The sample was taken by a systematic random sampling. Each group had 75 family heads. Spearman's correlation analysis was used to find the strength and direction of intervariable relations. Collected data were analyzed descriptively by describing DHF variable conditions at the study site.

The result revealed that the environmental factor influencing DHF endemic condition at two Public Health Centers areas were: 1) the praying place existence with significance of 0.003 and correlation value of  $-0.335$  showing a moderate negative correlation, presenting the closer the praying place, the smaller possibility to be an endemic area; 2) the declivity of water drain with significance of 0.004 and correlation value of 0.332, showing a moderate positive correlation, explaining the less inclination of the drain, the bigger possibility of becoming a DHF endemic area; 3) density of dweller with significance 0,02; 4) existence of mosquito vektor larvae of *aedes aegypti* with significance 0,000 5) mosquito screen application with significance of 0.005; 6) the habit of clothes-hanging with significance of 0.000. The behavior factor consisted of knowledge, and attitude related to Mosquito Nest Eradication (MNE) and to Drain, to Cover, to Bury, were all possessed by the family heads in the endemic area. Thus, the family heads showed good knowledge and attitude of DHF prevention and it was concluded that there was no correlation between respondent's knowledge and DHF endemicity at these two areas.

Although the outcome showed no correlation with the endemicity of the two areas, promotion to refresh the memory of the community of MNE and DCB importance was still relevant to do and best executed before the month of December. Added by special surveillance to environmental factors i.e.: traditional market existence, praying place, ornament plants, rain water pipe, and water reservoir at home proximity, and followed by preventive measures such as application of mosquito screen, mosquito net, persistent community shared-works, and avoiding the habit of hanging clothes.

## ABSTRAK

### Faktor Lingkungan dan Perilaku Kesehatan yang Berhubungan Endemisitas Demam Berdarah Dengue (Studi Di Wilayah Kerja Puskesmas Pandian dan Pamolokan Kabupaten Sumenep)

Arman Endika Putra

Penyakit Demam Berdarah Dengue (DBD) merupakan salah satu masalah kesehatan masyarakat yang penting di Indonesia karena tersebar di sebagian besar wilayah Indonesia sebagai endemis dan sering menimbulkan suatu letusan KLB dengan kematian yang besar. Nyamuk penular (vektor) penyakit DBD yang penting di Indonesia adalah *Aedes aegypti*, *Aedes albopictus*, dan *Aedes scutellaris*.

Tujuan umum penelitian ini adalah menganalisis faktor lingkungan dan perilaku pola hidup sehat masyarakat yang mempengaruhi KLB DBD di Kabupaten Sumenep. Penelitian ini termasuk penelitian observasional, berdasarkan waktu penelitian maka penelitian ini termasuk penelitian *cross sectional*. Sampel penelitian ini dibagi menjadi 2 kelompok yaitu kelompok studi atau kasus dan kelompok potensi. Pengambilan unit analisis sampel dilakukan secara *systemic random sampling*. Besar sampel untuk masing-masing kelompok 75 KK. Analisis data dilakukan korelasi spearman untuk mengetahui kuat dan arah hubungan- hubungan antar variabel.

Faktor lingkungan yang mempengaruhi endemisitas DBD di dua wilayah puskesmas antara lain; Keberadaan saluran air hujan di sekitar rumah responden dengan signifikansi 0,004 dan nilai korelasi 0,332. Keberadaan tempat ibadah di sekitar rumah responden dengan signifikansi 0,003 dan nilai korelasi -0,335. Kepadatan penghuni dengan signifikansi 0,02 dan Keberadaan vektor (ada tidaknya jentik) dengan signifikansi 0,000. Sedangkan faktor perilaku yang berhubungan dengan endemisitas DBD antara lain *Tindakan* dengan signifikansi 0,029 dengan nilai korelasi positif lemah 0,259. Pemakaian kasa dengan signifikansi 0,005 dan *Kebiasaan menggantung pakaian terhadap endemisitas DBD* dengan signifikansi 0,000

Kesimpulan faktor lingkungan yang paling dominan yang berhubungan dengan endemisitas DBD keberadaan jentik. Faktor dominan yang berhubungan dengan keberadaan jentik adalah keberadaan saluran air hujan. Faktor perilaku yang paling dominan yang berhubungan dengan endemisitas DBD yaitu kebiasaan menggantung pakaian

Saran penyuluhan yang bersifat menyegarkan ingatan warga akan pentingnya PSN dan 3M masih tetap diperlukan sebelum bulan Desember sebaiknya. Pengawasan terhadap faktor lingkungan yang diduga berhubungan endemisitas DBD di dua wilayah puskesmas antara lain; terutama saluran air hujan disekitar rumah. Kemudian diperlukan tindakan yang bersifat *preventif* dan menghindari kebiasaan menggantung pakaian.

Kata kunci : faktor lingkungan, perilaku kesehatan dan endemisitas Demam Berdarah Dengue

## ABSTRACT

### **Health Pattern and Environmental Factor that Relationships Dengue Hemorrhagic Fever Endemicity (study in public health center pandian and pamolokan in Sumenep Regency)**

**Arman Endika Putra**

Dengue Hemorrhagic Fever (DHF) presents a huge community health problem in Indonesia because of its prevalence as an endemic disease with repeated outbreaks and high mortality rate. Dengue Hemorrhagic Fever vectors in Indonesia are *Aedes aegypti*, *Aedes albopictus* and *Aedes scutellaris* mosquitoes. The objective of this research was to analyze the environmental factor and community healthy living pattern influencing DHF outbreaks in Sumenep regency.

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The result revealed that the environmental factor influencing DHF endemic condition at two Public Health Centers areas were: 1) the praying place existence with significancy of 0.003 and correlation value of  $-0.335$  showing a moderate negative correlation, presenting the closer the praying place, the smaller possibility to be an endemic area; 2) the declivity of water drain with significancy of 0.004 and correlation value of 0.332, showing a moderate positive correlation, explaining the less inclination of the drain, the bigger possibility of becoming a DHF endemic area; 3) density of dweller with significancy 0,02; 4) existence of mosquito vektor larvae of *aedes aegypti* with significancy 0,000 5) mosquito screen application with significancy of 0.005; 6) the habit of clothes-hanging with significancy of 0.000

The conclusion is environmental factor which most dominant related to DHF endemisitas is existence *Aedes aegypti* larvae. The dominant factor related to existence *Aedes aegypti* larvae is the declivity of water drain. The health pattern which is most diminan related to DHF endemisitas that is the habit of clothes-hanging.

Suggested promotion was to refresh the memory of the community of MNE and DCB importance. Special supervision to environmental factors i.e.: especially water reservoir at home proximity, followed by preventive and avoiding the habit of hanging clothes.

**Key words:** environmental factors, health pattern, endemic, DHF