

ABSTRACT

Climate change caused by global warming is a world wide issues. Climate change is a serious thing in every country and has has already affected human health. Taking steps to tackle the root causes of climate change, understand the health co-benefits of action, invest in healthy environments, and advocate health-related developments is vital in order to reduce the burden of disease and promote population health like *sun burn*, *heatstroke* dan *stress*. The other impact of climate change is accelerating the spread of animal-borne diseases. One of the deseases is dengue fever that caused by *Aedes aegypti*.

The major objective of this study was analyzing influences of climate change and people's behavior toward mosquito larvae density and the incidence of dengue fever in Perak Utara village and Perak Timur, Sub districts of Pabean Cantikan, Surabaya. This study uses 2 methods, cross sectional study and ecology time series. This study analyced corelation of climate (temperature, humidity, wind speed, solar radiation and rainfall) during 6 years (2007 – 2012) wits the incidence of dengue fever in perak utara and perak timur. This study also analyced behavior of Perak timur Village dan Perak utara community (knowledge, preventive measures and attitudes) to mosquito larvae density, this study has taken 7 days for observation.

The result of analytical secondary data showed that in Kelurahan Perak Utara therewere a significant corelation between the air humidity ($p=0,003$) and solar radiation ($p=0,043$) with the existence of the *Aedes aegypti* larvae the number of the incidence of dengue fever. In Kelurahan Perak Timur, there was significant and corelation between the air humidity ($p=0,008$), rainfall ($p=0,000$) and solar radiation ($p=0,013$) with the existence of the *Aedes aegypti* larvae and the number of the accident of dengue fever. Primary data showed that both in Kelurahan Perak Utara and Kelurahan Perak Timur there were no between people behavior (knowledge, preventive activites and attitudes) toward mosquito larvae density.

It was concluded that the most important factor influences the accident of dengue fever in Perak Utara and Perak Timur was air humidity and solar radiation. It is recommended to Local Health Department to increase alertness inpertaining 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

Keywords: weather parameters, mosquito larvae density, the incidence of dengue feve