INTISARI

Latar belakang*:* Di pulau Jawa, Provinsi Jawa Tengah menyumbang kasus malaria terbanyak (59,1%) dari total seluruh kasus di wilayah Jawa-Bali. DIY merupakan provinsi yang berbatasan dengan kabupaten endemis di Jawa Tengah. Penyakit malaria sering dijumpai di daerah pedesaan sehingga dengan ketersediaan data tentang potensi desa (PODES) akan sangat membantu mengatasi kesulitaan geografis dalam upaya pemberantasan malaria di Indonesia. Vulnerabilitas daerah terhadap malaria ditentukan oleh kedekatannya dengan daerah malaria. Faktor sosial ekonomi mempengaruhi vulnerabilitas respon populasi terhadap perubahan global penyakit malaria. Penggunaan Sistem Informasi Geografis (SIG) dalam survei penyakit, memberikan peningkatan pemahaman yang lebih baik tentang epidemiologi spasial dan peningkatan strategi dalam pengawasan dan pengendalian penyakit menular.

Metode: Penelitian menggunakan desain *crossectional study* dengan uji analitik (*chi square*) dan uji autokorelasi spasial *Moran's I*. Objek penelitian adalah data Podes BPS 2014 dengan menggunakan instrumen berupa kuesioner pendataan Potensi Desa/Kelurahan 2014.

Hasil: Dari uji *chi square*, didapatkan 7 variabel bebas yang bermakna yaitu status daerah, topografi, penderita gizi buruk, jenis jamban, bencana banjir, penerangan listrik dan sumber air bersih dengan nilai p value < 0.05. Nilai RR dari masing-masing variabel bermakna digunakan sebagai bobot dalam metode pengharkatan spasial. Dari hasil pengujian Indeks Moran, dengan taraf signifikansi 5% didapatkan nilai *Indeks Morans* sebesar 0.39 yang menunjukkan adanya autokorelasi spasial positif. Analisis moran mendapatkan, 10.3 % desa dengan tingkat vulnerabilitas sosial malaria sangat rentan (*High-High*) dengan pola mengelompok di bagian tengah wilayah Provinsi Jawa Tengah. Pada Provinsi DIY pola berkelompok sangat terlihat di wilayah bagian barat Kabupaten Kulonprogo.

Kesimpulan: Berdasarkan uji *chi square*, faktor sosial di desa dan geografis berpengaruh pada kejadian KLB malaria. Berdasarkan analisis tingkat vulnerabilitas sosial dengan Indeks Moran, didapatkan desa-desa di wilayah kabupaten yang non endemis malaria masih sangat rentan untuk terjadi KLB malaria.

Kata kunci: Vulnerabilitas social, Malaria, Provinsi Jawa Tengah dan DIY

ABSTRACT

Background: In Java, Central Java is the largest contributor to malaria cases (59.1%) of the total cases in the Java-Bali region, and DIY are bordered by malaria endemic distric in Central Java. Malaria is often found in rural areas so that the availability of data on village potential (PODES) will greatly help overcome geographical difficulties in efforts to eradicate malaria in Indonesia. Vulnerability of area to malaria is determined by its proximity to the malaria area. Socio-economic factors influence the population responses vulnerability to global changes of malaria. The use of Geographic Information Systems (GIS) in disease surveys, provides a better understanding of spatial epidemiology and improved strategy in monitoring and controlling infectious diseases.

Method: The research was used a crossesctional study design with analytic test (*chi square*) and *Moran's I* spatial autocorrelation test. The research object is the Podes data BPS 2014 using an instrument in the form of a data collection questionnaire of village potency 2014.

Results: From the *chi square* test, there were 7 meaningful independent variables, namely the status of the area, topography, sufferers of malnutrition, types of latrines, flood disasters, electric lighting and sources of clean water with p value <0.05. The RR value of each meaningful variable is used as a weight in the spatial scoring method. From the results of the Moran Index test, with a significance level of 5%, Obtained the *Morans Index* value was 0.394022 which showed positive spatial autocorrelation. Moran analysis gets 10.3% of villages with very vulnerable malaria social vulnerability (*High-High*) with clustered patterns in the central part of Central Java Province. In the Province of DIY the group pattern is highly visible in the western part of Kulonprogo Regency.

Conclusion: Based on the chi *square test*, the socioeconomic factors of the community and the geographical environment of the village were very influential on the incidence of malaria outbreaks. From the *Moran's I* test shows the results of the villages in non endemic malaria regions were still very vulnerable to malaria outbreaks.

Keywords: Social vulnerability, Malaria, Central Java and DIY Province