Bioclimatic Analysis of the Malaria Disease Outbreak in Chabahar City

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Abstract

The malaria is an infective dangerous disease characterized by shake, fever, and anemias and sometime is reported by hard and deadly effects. The malaria is created by protozoa from plasmodium family. This disease accession is affected by economical, social, and cultural problems especially environmental conditions. For doing this research, monthly climate elements (temperature, relative humidity and precipitation) in Chabahar meteorological station from 2003 to 2008 have been used. The information of Malaria cases was taken during these lengths from Chabahar health center in Sistan and Baluchestan province. The homogenity of time series was tested by run-test and we construedct missing value by auto-correlation. The normal hypothesis was accepted. We used descriptive statistics and correlation for analyzing this data. The findings of research showed that maximum cases of diffusion were at summer with 43 %, those which are minimum were at winter with 5 % during the year. The Pearson correlation analyses suggest that there were a high positive correlation between the disease cases with temperature average, minimum and maximum temperature averages at alpha level 0.01, minimum relative humidity, and relative humidity average at alpha level 0.05, and a negative correlation with rainfall at alpha level 0.01.

Keywords: Epidemiology, Malaria, Bioclimatology, Medical Geography, Chabahar.