

The Relationship between Geographical Distribution of Death and Climate in the Province of Isfahan

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Abstract

Background: In recent years, applied climatology is using climate data in order to achieve industrial, economic and scientific goals. Climate effects on medical fields are also very important. The purpose of this research was to recognize the relation between some climate elements such as temperature, rain and height with the most prevalent diseases in the Province of Isfahan, Iran.

Methods: Statistical data regarding the number of the deceased due to different diseases during 2002-2007 was collected from the report provided by the Climatology Organization and the Ministry of Health in 2007. The data was analyzed by regression equations. Disease distribution and climate elements maps were prepared by ArcGIS software.

Findings: A direct relation was found between number of deaths and temperature. In fact, an increase in temperature would lead to higher death rates caused by different diseases. In addition, negative inverse relations were observed between death rates and rain and height, i.e. fewer people died in higher and rainier parts of the Province of Isfahan.

Conclusion: In general, it is indicated that number of deaths increases as we move from west to east throughout the province.

Keywords: Disease, Medical geography, Climate elements, Disease distribution, Province of Isfahan.

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