A SYSTEMATIC REVIEW OF CLIMATE CHANGE IMPACT AND INFECTIOUS DISEASE

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Background Biological and ecological processes of climate changes could be influence infectious disease transmission. The aim of this systematic review was evaluated the influence of climatic factors on infectious disease.

Methods Systematic searches were conducted via a range of related databases such as PubMed, Medline, EBSCO and ISI Web of Knowledge. Searches focused upon papers published in English between 1995 and 2010. Retrieved papers were studied by the authors in order to inform the topic and theme. The following terms were used for searching: Climate Change, infectious disease, communicable disease, malaria, eltor, Lishmania, time series and indirect pathway.

Results A total of 290 publications were retrieved, of which 150 met inclusion criteria. There were classified and are discussed according to their focus on disease classification relevant to climate/health relationships.

Conclusion Many studies showed seasonal fluctuations in infectious disease but few of them have documented long-term trends in climatic associations. There were a causal relationship between climate change and vector born and water born diseases. For preventive policies the epidemiological data can be shared with policy makers.

DETERMINANTS OF HUMAN BRUCELLOSIS IN A REGION OF IRAQ: A CASE-CONTROL STUDY

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Introduction Although contact with animals and their infected products are known as a main risk factors of brucellosis, but climate conditions, type and management aspects of animal husbandry and people nutritional behaviours on dairy products consumption in each country, are the factors affecting incidence pattern of the disease in each country. Human brucellosis is a notifiable disease in many countries, but official figures do not fully reflect the number of people infected each year and true incidence has been estimated to be between 10 and 25 times higher than what reported figures indicate. Therefore burden of this disease in Iran with about 25 000 new cases in 2005 is very important from the view point of public health.

Methods In this study in order to determine the risk factors of brucellosis and infected animals, a multicenter case-control study was conducted in Qom in 2006. A total of 170 cases with serological diagnosis and physician confirm of brucellosis answered to questions. Control group was selected from patients without brucellosis. In all 170 parsons were selected as controls.

Results OR for all independent variables was computed and revealed that: occupational contact with animals, (OR=5.4 (3.4–8.9)), consumption of at least one unpasteurised dairy products, (OR=2.96 (1.33–6.58)) were associated with the disease. Butter consumption was a risk factor, (OR=6.5 (3.3–12.7)). Also rural residency was another determinant of disease (p<0.01)

Conclusion Public health education for people with livestock exposure and monitoring for consumption of pasteurised dairy products can be the main intervention in human population for control of brucellosis.