

Human Brucellosis in Klang District: A Missing Chain

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ABSTRACT

INTRODUCTION: Brucellosis is the most widespread zoonosis that has important social and economic impact to the country. However, human brucellosis has been one of the most neglected disease. There are a knowledge and skill gap for diagnosis and a fragmented intervention measure for control and prevention by stakeholders. **METHODS:** A retrospective epidemiological study was conducted, including laboratory investigation. Data from investigation and laboratory results were reviewed and analysed. Conclusion was made of the possible risk and source of transmission of human brucellosis. **RESULTS:** A human brucellosis outbreak has been occurred among eight persons, having drink improper pasteurized goat milk from Farm M situated in Klang District in 2018 without related to occupational exposure. All seven cases detected through notifications from hospital and one through active case detection. A total of four cases (50.0%) were from Klang, three from Petaling (37.5%) and one from Sepang (12.5%), aged between 4 to 39 years old. The main symptoms include prolonged fever, body ache and headache. Epidemiological linkage and laboratory results have been proven that all cases and a focus of goats with positive *Brucella* were from farm M. A joint investigation between Communicable Disease Control Unit, Food Safety and Quality Unit and Veterinary Department was carried out and control and prevention measures taken. **DISCUSSION:** Human Brucellosis can be prevented effectively by elimination of animal reservoir, enforcement of Food Act 1983 and disclose a knowledge gap of better diagnostic tools and vaccines. These need a close collaboration between health department, veterinary department and local authorities.

KEYWORDS: brucellosis, human, intervention, enforcement

Impact of Climate Change on Riverine Flooding of Healthcare Facilities in Peninsular Malaysia

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ABSTRACT

INTRODUCTION: Climate change will increase the magnitude and frequency of extreme weather events and create risks that will impact health care facilities. Health care facilities (HCF) will need to assess climate change risks and adopt adaptive management strategies to be resilient. This study aims to project and identify HCF prone for riverine flooding due to climate change. **METHODS:** The HCFs were categorised as Community Health Clinics (CHCs), Primary Health Clinics (PHCs) and Hospitals. Projection of the 15 most vulnerable river basins in Peninsular Malaysia was done based on IPCC SRES-AR4 and Regional Hydroclimate Model of Peninsular Malaysia. A total of 1268 CHCs, 520 PHCs and 82 Hospitals were included in this study. HCFs in Sabah, Sarawak and Labuan were excluded. The current (baseline) and future flood assessments of 2030 and 2050 were carried out based on 100-year Return Period. **RESULTS:** At Baseline, 108 CHCs, 25 PHCs and two hospitals were projected to be flooded under the current flood modelling simulations. Flood projections at 2030 estimated 217 CHCs, 27 PHCs and three Hospitals being affected. There was an increase in the affected HCFs to 215 CHCs, 67 PHCs and 11 Hospitals in the future flood assessment at 2050, at various ranges of flood depth levels (FDL). **DISCUSSION:** Many HCFs have not been designed with extreme weather events like riverine flooding in consideration. This study enables stakeholders to assess vulnerability of flooding and plan adaptation measures in anticipation of the impact of climate change on riverine flooding affecting HCFs in Malaysia.

KEYWORDS: health care facility; climate change; modelling; riverine flooding; adaptation