Universiti Teknologi MARA

Diagnosis of Leptospirosis Using Fuzzy Expert System (L-FES)

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ABSTRACT

Leptospirosis is an infectious disease caused by bacteria that called Leptospires. Animal such as rat, dog, and swine transmits these bacteria directly or indirectly to the human when water contaminated with animal urine touches the opening in the skin, eyes or with the mucous membranes. This disease were underreported because not been classified as an epidemic but it is dangerous because can lead to death. This disease happen when have flood and when doing outdoor recreation such as kayaking, water sport and others. This disease can be solved by doing blood test. However, the purpose of this system is to detect Leptospirosis at the early stage and provide advice and early treatment to prevent the virus that spread to a critical level before doing blood test. This system has three inputs and one output. The input is the symptoms of Leptospirosis are fever, headaches and muscle aches. The output is refer to the level of Leptospirosis are not infected with Leptospirosis, moderate and severe. This system uses Mamdani inference method. The result evaluated by the doctor and has a positive result when compared with expert's data. Hopefully, this system can help others people to diagnosis diseases of Leptospirosis. Lastly hope others technique can be used to diagnosis Leptospirosis.

Keywords- Leptospirosis, symptoms and Fuzzy Expert System.

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