ABSTRACT

The application of expert systems in medicine to diagnose the type of epilepsy disorders is one of the applications of computer science development . lack of skills and knowledge of general practitioners and paramedics in dealing with epileptic disorders, less inequality medical personnel who are experts in the fields of neurology and psychology, lack of knowledge of the patient about disorder and epilepsy symptoms, and standard first aid should be done when a seizure occurred is a major problems for the basis construction of this expert systems.

Expert systems in general is a system that trying to adopt a human knowledge that experts in the particular field to a computer, so the computer can resolve the issue as it is commonly done by experts, or in other words, the expert system is a system designed and implemented with the help of specific programming language to be able to resolve the problem as done by experts. This expert systems are built using the PHP programming language and HTML as an interface and engine interference and uses MySQL as a database for storing the data base of cases, patient history data, types of disorders data, anti epileptic drug data, and the computation data. This expert systems are built with two combined methods, therefore: data collection method and system development methods. Data collection Methods are in the form of library research and interviews. System development methods consist of requirements analysis, system design, system implementation , and analysis of results. In this case using the Case - Based Reasoning as a decision-making method.

The results of the implementation of this thesis is the application of expert systems have been able to diagnose and determine the type of disorder, as well as to provide recommendations on anti-epileptic drugs in accordance with the type of disorder suffered by the patient's user based on the symptoms given by physician's user as an input for the system with accuracy up to 90, 5%.

Keyword : Expert System, Epilepsy Disorders, Case-Based Reasoning