

ABSTRACT

AN EXPERT SYSTEM IN DIAGNOSING EYE DISEASES USING THE DEMPSTER SHAFER METHOD

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The eyes are the five senses that are very important in human life for seeing. If the eyes experience eye disorders or diseases, it will have very fatal consequences for human life. Not all eye disease sufferers can know what eye disease they are suffering from due to limited knowledge in the medical field, financial problems and difficulties in transportation to see an eye specialist so they do not get the right attention and action to treat eye disease. However, it cannot be denied that the Rafflesia Hospital in Bengkulu City has a minimal availability of experts or ophthalmologists. This also causes the diagnosis process to tend to take longer, so that the time used becomes inefficient. For this problem, there is a need for a computerized system solution in the form of an expert system that can be used by the public to increase knowledge and information and can be consulted to get initial diagnosis results of eye diseases and how to cure them. This expert system was designed using the Dempster Shafer method. The results of consultation tests with this system show that this expert system is able to determine the disease and the initial treatment or treatment that must be carried out, based on the symptoms selected by the user. This system can be used by patients as a first step when experiencing symptoms of eye disease, to consult a doctor from anywhere online via the URL address: <https://sistempakar-mata.my.id>. Based on the results of this test, it can be concluded that the application of the expert system for diagnosing eye diseases is functioning well and in accordance with what was recommended by the doctor/expert.

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