Abstract

Dental health is often not became main priority for some people. Sometimes people just go to the dentist if his dental condition is severe and unbearable pain. Also please note the fact that dental disease can lead to more severe disease, even can lead to death. By trying to apply knowledge from dentist into a system, of course this system can help patients to detect their diseases earlier and also useful for doctors for diagnosing the diseases, so errors that may occur when diagnosing can be minimized. This is called the expert system.

This final project developed an expert system to diagnose oral and dental disease by using two approaches, Certainty Factor and Dempster-Shafer theory. Both of this approaches is deemed appropriate for diagnosing because both of them use reasoning with uncertainty for making decision. This uncertainty condition is often encountered when doctors diagnosing people diseases.

Testing of this expert system uses 50 patient's health history data that owned by drg. Sudarti. Based on these tests, Dempster-Shafer theory is able to produce higher accuracy than the approach using Certainty Factor.

Keyword : Expert system, Oran and dental diseases, Certainty Factor, teori Dempster-Shafer.