ABSTRACT

EXPERT SYSTEM FOR DIAGNOSIS OF DENTAL AND ORAL DISEASES BASED ON A WEBSITE USING CASE-BASED REASONING METHOD
(CASE STUDY: Hermina Podomoro Hospital)

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Oral health problems are one of the health problems that are often not considered by the majority of people in Indonesia. Based on this, there are many factors such as lack of public awareness in maintaining dental health, limited access to dental health services, and economic factors. The purpose of this research is to build a web-based expert system that can help diagnose oral and dental diseases. The inference method used in this research is the Case Based Reasoning method which begins by collecting data in the form of indications or symptoms from cases that have occurred previously based on experts. Furthermore, the data will be calculated using the old case approach and produce a decision as a solution to the problem. The data used in the research includes 9 types of diseases, 40 symptom items, 36 items of treatment recommendations, and 22 items of prevention advice. While the amount of test data used amounted to 21 data covering 104 recurring symptom items. The test results show a precision rate of 95% which indicates that the system can provide a fairly high diagnostic suitability. This system is expected to be a useful tool for medical practitioners and individuals to obtain efficient oral health information.

Keywords: diagnosis, dental, health, oral, expert