ABSTRACT

EXPERT SYSTEM FOR DIAGNOSE CHILDREN DISEASE METHOD WITH FORWARD AND BACKWARD CHAINING (CASE STUDY POSYANDU-PUSKESMAS MANDALAMEKAR

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Mandalamekar Health Centres is one of the public health service in the district Mandalajati.Mandalamekar Health Centres provide health services in the form of checks with several categories, namely: general medicine, dietary and child health.Child health care activities are divided into two types, namely: examination at a health center and check in POSYANDU.

Based on interviews with a pediatrician who served on the Public Health Mandalamekar, with the two child health care activities, while the number of doctors who served only a little, make the pediatricians worked of solid practice. sometimes there are patients who delayed getting treatment because they do not have time to do the examination the doctor. Therefore, we need a tool that can help to diagnose early childhood diseases in the form of an expert system. Expert systems are computer-based system that uses knowledge, facts and reasoning techniques to solving problems that typically can only be broken by a specialist in certain field only.

In this thesis an expert system designed is a system of medical experts in the field of disease diagnosis, especially children. Knowledge representation which uses are a decision table, tracking trees as well as the rules of production rules of IF-THEN form. Tracking method which uses are Forward and Backward Chaining, and the method search is Depth First Search

Based on the results of beta testing at the Public Health Mandalamekar, this expert system can help paramedics to perform early diseases diagnosis of children when the pediatrician was not in place.The resulting information is the possibility that the disease is detected, understanding the disease and its treatment advice for while

Key words: expert system, childhood diseases, diagnosis, forward chaining, backward chaining, depth first search