

AN EXPERT SYSTEM FOR DETECTING TUBERCULOSIS DISEASE USING CASE-BASED REASONING METHOD

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ABSTRACT

Tuberculosis (TBC) remains a serious threat, especially in Indonesia, where public health awareness is still low. Therefore, an effective approach for early detection of TBC is needed. One solution is an expert system based on Case Based Reasoning (CBR). This system is a computer application designed to assist in the diagnosis of TBC. Using the CBR method, the system learns and stores knowledge from previous cases and then uses it to analyze new cases. This allows the system to provide accurate disease indication recommendations and advice based on user symptoms. The use of this expert system facilitates access to information about TBC and supports early detection, which is crucial to reducing the risk of spreading the disease and enabling earlier medical intervention. Research shows that the CBR method in this system has an accuracy of 88% in detecting TBC and provides very helpful preventive advice. Overall, the CBR-based expert system offers an effective solution for addressing TBC in Indonesia. This technology not only aids in early detection but also enhances public awareness about the importance of health and disease prevention.

Keyword: *Tuberculosis, Expert System, Case Based Reasoning*