

ABSTRAK

Paru-paru sebagai pompa satu-satunya untuk sistem pernapasan adalah organ yang sangat penting bagi berlangsungnya kehidupan. Namun masih banyak orang yang kurang peduli dengan kesehatan paru-paru, hal ini menyebabkan banyak orang yang terindikasi menderita penyakit paru-paru, antara lain Tuberkulosis, Bronkitis, PPOK (Penyakit Paru Obstruktif Kronis), dan *Pneumonia* (Radang Paru-Paru). Banyak masyarakat yang menderita penyakit paru-paru, dan terlambat mendiagnosa sehingga mencapai tahap kronis dan sulit untuk ditangani, bahkan tidak sedikit yang harus mengalami kehilangan nyawa, karena penderita penyakit paru-paru harus rutin selalu berkonsultasi dengan pakar ahli kesehatan (ahli penyakit paru-paru), mengenai penyakitnya, maupun gejala-gejala yang dirasakan.

Sistem pakar adalah cabang kecerdasan buatan yang menggunakan pengetahuan/*knowledge* khusus untuk memecahkan masalah pada level *human expert*/pakar. Salah satu penerapan sistem pakar dalam bidang kedokteran adalah untuk melakukan diagnosa penyakit. Masalah ketidakpastian pengetahuan dalam sistem pakar ini diatasi dengan menggunakan metode *inferensi Forward Chaining* dan metode *Certainty Factor (CF)* yang dimaksud untuk membantu dalam mendiagnosa penyakit paru-paru dan memberi informasi tentang penyakit paru-paru. Sistem ini dibuat untuk mendeteksi secara dini penyakit paru-paru dan mengurangi gejala-gejala kronis akibat penyakit paru-paru dengan mudah di *device mobile* berbasis Android.

Kata Kunci : Sistem Pakar, Paru-Paru, *Forward Chaining*, *Certainty Factor (CF)*, Android.

ABSTRACT

The lungs as the only pump to the respiratory system is an organ that is essential for life. But there are so many people who do not care with soundness of the lungs, this has led to a lot of people who allegedly suffer from a disease the lungs, among others tuberculosis, bronchitis, ppok (lung disease chronic obstructive), and pneumonia (pneumonia). That many of the people suffering from an illness the lungs, and late diagnose so as to achieve a chronic stage and are hard to deal with, not even a little ever have to endure had been killed, because lung disease sufferers have to routine always consult with experts health experts (Lung disease expert), about his illness, and symptoms that was felt to be.

Expert system is a branch of the artificial intelligence that uses knowledge/knowledge special to solve the problem at the level of human expert/experts. One of the assembling of expert system in medicine is the diagnosis disease. Problems uncertainty knowledge in the system this specialist overcome by using the method inference Forward Chaining and methods Certainty Factor (CF) to to assist in diagnose phthisis and inform on phthisis. This system made to detect in a premature manner phthisis and reduce symptoms chronic because of diseases the lungs easily in mobile device based android.

Keyword : Expert System, The Lungs, Forward Chaining, Certainty Factor (CF), android.

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