

ABSTRACT

TITLE : DECISION SUPPORT SYSTEM FOR DRUG INVENTORY MANAGEMENT USING THE SIMPLE ADDITIVE WEIGHTING (SAW) METHOD AT THE EMERGENCY DEPARTMENT PHARMACY OF DR. ACHMAD MOCHTAR REGIONAL GENERAL HOSPITAL, BUKITTINGGI

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The management of drug inventory in hospital Emergency Departments (ED) must be efficient to ensure the availability of the right medications to support medical services. The current system often faces challenges in handling a large number of drugs and high turnover rates, especially at Dr. Achmad Mochtar Regional General Hospital (RSAM), which has experienced an increase in patient visits. Traditional management methods can lead to errors such as overstocking or shortages, which may disrupt medical services. To address this issue, the implementation of a Decision Support System (DSS) based on the Simple Additive Weighting (SAW) method is used to determine drug requirements systematically and data-driven. This method helps evaluate alternative medications based on predefined criteria, improving procurement efficiency and reducing management errors. By applying the SAW method, drug inventory decisions can be optimized, ensuring that necessary medications are always available while minimizing excess stock. This study aims to analyze the application of the SAW method in drug inventory management, assess its impact on procurement efficiency, and enhance the quality of pharmaceutical services in the Emergency Department.

Keywords: Decision Support System, Drug Inventory Management, Simple Additive Weighting (SAW), Emergency Department Pharmacy.

ABSTRAK

**JUDUL SKRIPSI : SISTEM PENDUKUNG KEPUTUSAN
PENGELOLAAN PERSEDIAAN OBAT
MENGUNAKAN METODE SIMPLE
ADDITIVE WEIGHTING (SAW) DI APOTEK
IGD RUMAH SAKIT UMUM DAERAH DR.
ACHMAD MOCHTAR BUKITTINGGI**

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Pengelolaan persediaan obat di Instalasi Gawat Darurat (IGD) rumah sakit harus dilakukan secara efisien untuk memastikan ketersediaan obat yang tepat dalam mendukung pelayanan medis. Sistem saat ini sering menghadapi tantangan dalam menangani jumlah obat yang besar dan tingkat perputaran yang tinggi, terutama di Rumah Sakit Umum Daerah Dr. Achmad Mochtar (RSAM) yang mengalami peningkatan kunjungan pasien. Metode pengelolaan tradisional dapat menyebabkan kesalahan, seperti kelebihan stok atau kekurangan obat, yang berpotensi mengganggu layanan medis. Untuk mengatasi masalah ini, penerapan Sistem Pendukung Keputusan (DSS) berbasis *Simple Additive Weighting* (SAW) digunakan guna menentukan kebutuhan obat secara sistematis dan berbasis data. Metode ini membantu mengevaluasi alternatif obat berdasarkan kriteria yang telah ditetapkan, meningkatkan efisiensi pengadaan, serta mengurangi kesalahan pengelolaan. Dengan menerapkan metode SAW, keputusan persediaan obat dapat dioptimalkan sehingga obat yang dibutuhkan selalu tersedia tanpa menimbulkan kelebihan stok. Penelitian ini bertujuan untuk menganalisis penerapan metode SAW dalam pengelolaan persediaan obat, menilai dampaknya terhadap efisiensi pengadaan, serta meningkatkan kualitas layanan farmasi di IGD.

Kata Kunci : Sistem Pendukung Keputusan, Persediaan Obat, *Simple Additive Weighting* (SAW), Apotek IGD.