**Pilot Implementation of Pharmacist-Led Prescription Review in Clinical Departments at a Central Hospital**

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**Background and aims.** In modern healthcare, hospital pharmacists are increasingly recognized as integral members of the clinical care team, contributing directly to safe, effective, and rational medication use. Their role has expanded from traditional dispensing functions to active involvement in prescription evaluation within clinical settings. This pilot study, conducted at a leading tertiary hospital in Vietnam, aimed to design, implement, and evaluate a pharmacist-led prescription review model. The primary objective was to assess its effectiveness in improving medication safety and explore its potential for broader implementation across the hospital system.

**Methods.** The study was conducted in two phases: (1) a qualitative investigation involving direct observations and semi-structured interviews with nine healthcare professionals was used to identify limitations in the existing prescription review process and to develop a structured intervention protocol; (2) a prospective pilot was carried out, applying the newly designed model to analyze 830 prescription orders from 181 inpatient records.

**Results.** Key system deficiencies identified included limited pharmacist staffing, inadequate coordination between departments, and the absence of IT infrastructure. The new model, which placed clinical pharmacists directly in departments for real-time, on-site review, led to a twelve-fold increase in review time (from 20 to 240 minutes/day). A total of 93.3% of prescriptions were reviewed before dispensing, with pharmacist interventions required in 6.5% of cases - primarily due to inappropriate drug choices (74.1%) and dosing errors (25.9%). Physicians accepted 94.4% of pharmacist recommendations. Gastrointestinal and anti-infective drugs were the most frequently intervened categories.

**Conclusion.** The updated model promoted safer medication practices, better prescribing accuracy, and stronger interdisciplinary collaboration. Assigning pharmacists to specific departments and enabling on-the-spot prescription assessments were critical to success. The outcomes support broader application across hospitals and underline the need for enhanced staffing and IT systems to sustain the approach.

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