Detection of Post-dispensing Errors at Out-patient Pharmacy Department, Buriram Hospital

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Introduction: Medication error, one of the leading causes of mortality and morbidity in many countries, can occur in any step of medication use process i.e. prescribing errors, administration errors, dispensing errors. Detecting post-dispensing errors, therefore, is very important because it helps prevent adverse events that would have occurred. The objectives of this study were to identify the rate of post-dispensing errors and classify post-dispensing errors at outpatient pharmacy clinic at Buriram Hospital, Thailand.

Method: The study was conducted from Oct 3rd, 2011-Oct 21st, 2011. Patients were randomly selected from outpatient pharmacy department during 10:00 AM-12:00 PM. Data collection form was developed, validated and tried out in preliminary study for the final version. Dispensing errors were classified by the following criteria; (1) dispensing to wrong persons, (2) wrong medication, (3) wrong dosage form, (4) wrong strength, (5) wrong dose, (6) wrong administration, (7) wrong number of items, (8) wrong amount of each item, (9) expired medication, (10) inappropriate container, (11) incorrect labeling, (12) no drug counseling, and (13) others. Data were descriptively analyzed.

Results: Out of 256 patients, one dispensing to wrong person was identified. Approximately 15% of patients didn’t receive drug counseling from pharmacist. Out of 1,015 drug items dispensed, 10 (0.99%) drug items were erroneous. One incorrect administration route, dosage form, improper containers, bad condition and two of erroneous dose and strength were detected. Eight incorrect quantity of drug dispensed were identified.

Conclusion: Overall, 3.91% of 256 prescriptions were identified at least one of those dispensing errors. The most frequently found dispensing error was incorrect drug item.

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