

OP 6

Impact of a ward based clinical pharmacy service on drug-related hospital re-admissions: Evidence from a controlled clinical trial in a tertiary care hospital in Sri Lanka.

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Objective: To determine the impact of a ward-based clinical pharmacy service on drug related hospital re-admissions.

Methods: This was a part of a controlled trial conducted in a tertiary care hospital in Sri Lanka to evaluate the clinical pharmacy service. The control group received the standard care whereas the intervention group received a ward-based pharmacist's service in addition to the standard care. The pharmacist performed a prospective medications review of patients with chronic non-communicable diseases during their hospital stay and made recommendations to the health care team when appropriate. At discharge reconciliation of discharge prescription was done. Patients were educated about discharge medicines to improve knowledge and compliance. Both groups were followed up monthly for six months to identify drug-related hospital re-admissions.

Results: Of 137 drug-related re-admissions, 93 (involving 87/356 patients) were from the control group, and 44 (involving 42/361 patients) were from the intervention group ($P < 0.001$). Non-compliance was the main reason for re-admissions in the control group and it was significantly higher in the control group (control vs. intervention: 53.8% vs. 34.1%; $P = 0.013$). Adverse drug reactions were the most common reason for re-admission in the intervention group (23/44; 52.3%). There was a significantly larger percentage of re-admissions in the control group due to unintentional omission of drugs on discharge prescription (control vs. intervention: 17.2% vs. 2.3%; $P = 0.012$).

Conclusion: Ward based clinical pharmacy service was useful to reduce drug related hospital re-admissions in patients with chronic non-communicable diseases. Establishing a ward based clinical pharmacy service is recommended.