Medication-related problems during transfer from hospital to home care: baseline data from Switzerland

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Abstract

Introduction:
The shift from inpatient to ambulatory care has resulted in an increase in home care patients. Little is known regarding medication safety associated with patient transfer from hospital to home care.

Objective
To evaluate medication-related problems in patients transferring from hospital to home care in Switzerland.

Setting
A non-for-profit home care organization in the city of Lucerne/Switzerland with 260 employees, treating 1800 patients/year.

Methods
We conducted a prospective observational study, including patients aged ≥ 64 years and receiving ≥4 medications at hospital discharge. Two structured questionnaires assessing the transfer process were completed by home care nurses. Prescription quality was assessed using a PCNE Type 2b Medication Review.

Main outcome measures
The quality of the transfer process was measured comparing agreed-upon with reported parameters. Prescription quality was analyzed assessing the unambiguity of the prescription. Potentially inappropriate medications (Priscus® list), contraindications, duplications and interactions, and clinical pharmacist-identified potential medication-related problems were collected.

Results
Study patients (n=100) received 8.6±3.5 regularly administered medications.
Only 5/100 patients had a complete set of written discharge information. At the time of the first visit, 13/100 patients had no written medication information available. Discharge medication prescriptions were clear to nurses in 62% of patients. In 20 patients, the required medications were unavailable, resulting in 19 medication errors.
Assessment by a clinical pharmacist revealed only 33/100 patients had a clear discharge prescription. Of a total of 984 prescribed drugs, 16% were considered to be ambiguous, 22 (2.2%) were potentially inappropriate. 7/984 drugs were contraindicated, 8 were duplicates.

Conclusion

In addition to the known risk factors in patients transferring from hospital to home care (age, polymedication, multiple providers), 3 major problems impacted upon medication safety: fragmented communication, unreliable medication availability and a poor prescription quality. Clinical pharmacists are an important option to improve medication safety associated with transfer from the acute care to home care setting.

Impacts on practice

- Fragmented communication, unreliable medication availability and poor prescription quality were the most common drug-related problems during discharge from hospital to home care.
- Clinical pharmacists are an important option to improve medication safety associated with transfer from the acute care to home care setting.

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