## Medication prescribing errors in the Cardiology department in a tertiary hospital: their incidence and clinical significance



Medical errors occur commonly among hospitalized patients, with adverse events occurring in an estimated 3.7% to 16.6% of hospital admissions.

We conducted a prospective observational study of all inpatients under the Cardiology teams of general cardiology and heart failure for a period of 30 days.

Information was collected on a standard data form every day from the medication chart, pharmacist review chart and the hospital database.

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### Results

There were total of 443 patient episodes in the 30-day period with **32** medication errors. In this cohort of patients, all patients had polypharmacy.

The types of errors included medication not charted (n=12), frequency missing (n=12), overdose (n=3), under dose (n=2), duplicate therapies, wrong drug or dose (n=1).

The most common medications omitted were inhalers and anti-hypertensives.

Of these medication errors, there were 44% potentially **serious**, 38% potentially **significant** and 19% **insignificant** errors.

Types of errors	Number of errors
Medication not charted	12
Frequency missing	12
Overdose	3
Underdose	2
Duplicate therapies	1
Wrong drug ordered	1
Wrong dose error	1
Total number of errors	32

There were no significant complications requiring further intervention from the medication errors for the 30 day period.

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#### **Conclusions**

Medication safety in the acute care setting continues to be a significant challenge especially in Cardiology patients where polypharmacy is prevalent.

Understanding where medication errors occur and the contributing factors can assist in the development of strategies to improve medication safety with coordinated efforts from government, health services and health professionals.