Antipsychotic polypharmacy at hospital discharge from mental health units

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Background

According to the National Quality Use of Medicines (QUM) Indicator 7.5, current guidelines for the management of schizophrenia and related psychoses recommend the use of one antipsychotic at a time. There is limited data to support antipsychotic polypharmacy and it is associated with an increased risk of non-adherence, adverse effects, morbidity and mortality.¹,²

Aim

To determine the percentage of patients prescribed two or more regular antipsychotic medicines at the time of hospital discharge from inpatient mental health units across Central Adelaide Local Health Network (CALHN), and to identify the proportion with a documented rationale for the use of multiple antipsychotics. Additionally, data on the most common antipsychotic combinations prescribed was collected as a secondary outcome.

Method

Ethics approval was granted by the CALHN Human Research Ethics Committee. All patients discharged to home or residential care from mental health units across three metropolitan hospitals during June 2016 were identified retrospectively using a list produced from the data coding center in each hospital.

Exclusion criteria: transfer to another hospital, self-discharge, and patients less than 18 years old. For patients who had multiple admissions during the study period, only the most recent admission was included. Different formulations of the same medication were counted as one medication.

Data (including patient demographics, details of all antipsychotic medications, and documented reasons for antipsychotic polypharmacy) was reviewed and collected from medical and pharmacy records.

Results

A total of 234 patients were initially identified and of these, 151 patients were included into the study:

- 86 (57%) male patients
- 65 (43%) female patients
- Median age = 38 years (18 – 95 years)
- 41 (27.2%) not prescribed regular antipsychotics
- 82 (54.3%) prescribed one regular antipsychotic
- 26 (17.2%) prescribed two regular antipsychotics
- 2 (1.3%) prescribed three regular antipsychotics

- Of those prescribed multiple antipsychotics, 8 (28.6%) had a clear plan or rationale documented.
  - The majority (87.5%) of these intending review and/or cessation of one or more agents after a specified period of time.
  - No “stand-out” combination (17 different combinations with olanzapine + paliperidone, olanzapine + risperidone and aripiprazole + quetiapine being the most common). Antipsychotic polypharmacy at hospital discharge was more common in males with 17 of the 28 patients (60.7%) prescribed more than one regular antipsychotic.

Limitations

- Did not audit if the patients had a specific indication for antipsychotic treatment.
- Did not audit the dose appropriateness and did not identify if the use of different formulations of one antipsychotic was appropriate.
- Snapshot audit – true incidence of antipsychotic polypharmacy cannot be extrapolated to the whole population as a judgement sample size estimation was utilised due to resource and time constraints.

Conclusions & Recommendations

This audit demonstrated that 18.5% of all included patients were prescribed multiple regular antipsychotics at discharge from the selected mental health units, with the majority lacking adequate justification for the use of multiple antipsychotics. However, another multi-centre audit in the UK found that 48% of inpatients were prescribed more than one antipsychotic.³ Our study has provided a snapshot of discharge antipsychotic prescribing patterns from mental health wards across CALHN.

Feedback of the results to the respective wards is recommended to highlight the scope of the issues identified. Clinical pharmacist intervention by discussing and rationalising antipsychotic polypharmacy with prescribers, ensuring adequate documentation of the indication and plan for the monitoring and review of multiple antipsychotics at hospital discharge is required to improve the appropriateness and safety of antipsychotic polypharmacy. More detailed prospective audits should also be conducted in the future across other local health networks with additional data collected including antipsychotic indication and dosing appropriateness.

References