Patients receiving clozapine; closing the gap between community and hospital pharmacists. (Abstract No. 4CPS-196)

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Background
In Ireland, the antipsychotic clozapine can only be dispensed from hospital pharmacies that have registered to provide this service. Therefore patients receive their clozapine from a hospital pharmacy but receive all other medications from their community pharmacy. Studies have shown that continuity of care for this patient cohort is suboptimal as community pharmacists are largely unaware that their patients are receiving clozapine. Research demonstrates that this can result in a high incidence of drug-drug interactions (DDIs) and an increased prevalence of metabolic syndrome (MetS) relative to those who do not receive clozapine.

Our Service & Our Study Aim
At the time of the study, the Mercy University Hospital (MUH) Pharmacy Department dispensed clozapine to 154 patients. The aim of this study was to examine the continuity of care for these patients.

Methodology
This study was conducted in the MUH Pharmacy Department and the Clozapine Clinic in Cork North Lee Mental Health Services. A retrospective audit of those receiving clozapine assessed demographic information, comorbidities, physical health characteristics, medications, and side effect profile. Community pharmacist’s knowledge of prescribed clozapine was reviewed, they were formally informed & re-assessed post intervention. DDIs between clozapine and co-prescribed medicines were assessed using Lexicomp and Stockley’s Interaction Checker (SIC). Prevalence of MetS was determined using the International Diabetes Federation (IDF) criteria. Patients were eligible for inclusion if aged 18 years or more, registered with the clozapine patient monitoring service, and had the capacity to provide informed consent. Microsoft Excel and R were used for data collation and analysis.

Results
Of the 148 eligible patients, three patients did not agree to participate, leaving 145 patients (32% female, median age 43.8 years) who provided consent. 116 patients had regular medicines other than clozapine on their prescriptions. Pharmacists were aware of co-prescribed clozapine for over a third (n=44). Post intervention, community pharmacists were aware of co-prescribed clozapine for 99.1% (n=115) of these patients. They were prescribed a total of 615 medicines in addition to clozapine. Using Lexicomp it was found that 58.3% had DDIs with clozapine, while SIC found 54.3%. In 32 of these cases advice stated that the combination should be avoided or was contra-indicated. The prevalence of metabolic syndrome was 61.4% (n=86) and univariate results in subjects with (n=86) and without (n=59) metabolic syndrome showed statistically significant differences in waist circumference, current weight, systolic and diastolic blood pressure, triglycerides, HDL-C, fasting plasma glucose and HbA1c.

Conclusion
This study demonstrates the need for improved communication between primary and secondary care and highlights the requirement for regular physical health checks, monitoring drug-drug interactions and the side effect burden for patients who are prescribed clozapine.

References: On request
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