Evaluation of the Impact of a Pharmacist-Led Medication Group on Medication Adherence in Psychiatric Inpatients

Purpose: Adherence to medications as prescribed is an important element in preventing hospitalizations and improving clinical outcomes. Psychiatric patients are at high risk for nonadherence due to perceived and experienced lack of efficacy or tolerability in psychotropic medications. A previous study at our institution showed that a pharmacist-led medication group improves patients' perceived knowledge of medications and that readmission rates decreased. To expand on analyzing the impact of medication group on the patient past the inpatient stay, this study was designed to compare medication adherence rates following discharge in patients who attended a pharmacist-led medication group to those who did not attend medication group.

Methods: This is a descriptive, retrospective chart review of psychiatric inpatients who were admitted to a large, regional hospital from 08/01/2019 to 09/30/2020. Documentation of group attendance was placed in every patient's electronic medical record and used to identify patients who did and did not attend group. Adherence data was obtained through CyberAccess℠, which is an electronic health record for Medicaid patients. Patients were included if admitted to the psychiatric adult-inpatient unit for which pharmacist-led medication group is available, were ages 18 years and older, publicly insured with Medicaid, received a psychotropic medication, and were diagnosed with a psychiatric illness based on Diagnostic and Statistical Manual of Mental Disorders-V (DSM-V) criteria. Patients were excluded if available adherence data were for less than 3 months before or after admission or were not given the option to attend group. Sixty-three patients per group was needed to achieve 80% power with an alpha of 0.05. The primary outcome is medication adherence rates as calculated by the Proportion of Days Covered (PDC) for patients who attended group versus those who did not. Secondary outcome measures include medication adherence at PDC >80% as defined by the Centers for Disease Control (CDC) and baseline characteristics. The statistical test for adherence rate at 3 months was a student t-test. For secondary outcome measures, a chi-square test was used to measure adherence and a t-test for baseline characteristics. This study was approved by the Institutional Review Board.

Results: Preliminary data was collected for a total of 94 patients with 36 patients who attended pharmacist-led medication group and 58 who did not attend. Three patients who have not yet met the 90-day post-discharge date for inclusion in CyberAccess℠ will be reviewed later. Medication adherence rates, as determined by PDC, for patients who attended medication group was significantly higher at 82.3% compared to patients who did not attend medication group at 68.6% (p=0.047). Patients who met medication adherence with a PDC greater than 80% was higher in those who attended medication group (75%; n=27) compared to those who did not attend medication group (51.7%; n=30; p=0.02). This study did not meet power.

Conclusions: Preliminary results from this study suggests patients who attended PMEG had statistically significant higher adherence rates overall and achieved a PDC greater than 80% in comparison to those who did not attend PMEG. Although the study did not meet power, the adherence outcomes were found to be statistically significant. Further investigation may be warranted to study PMEG's effect on other variables.