Background/Objective: Antipsychotic Polypharmacy has been widely used in treatment of patients with chronic mental illness. Evidence supporting its use is limited. The purpose of the study was to evaluate the effect of reduction of Antipsychotic Polypharmacy and its usefulness as a treatment.

Method: To objectively measure the impact of this change we used PANSS scale (Positive and Negative Symptoms of Schizophrenia), Patient’s laboratory metabolic parameters as well as weight, height and waist circumference before and after the switch calculated, number of hospitalization 6 m before and after the switch were noted. Paired t-tests and paired Wilcoxon signed ranks tests were used.

Results: Psychiatric symptoms and metabolic indicators were evaluated at baseline and 6 months after being taken off Polypharmacy. 23 patients were interviewed at baseline and 18 of these were interviewed 6 m after being taken off Polypharmacy. Paired t-tests and paired Wilcoxon signed ranks tests were used to compare differences in psychiatric symptoms and metabolic parameters from time 1 to time 2. Results showed no changes in psychiatric symptoms, as assessed with PANSS, after being taken off Polypharmacy. Results also showed that waist circumference was significantly smaller after being taken off Polypharmacy (M = 40.53, SD = 6.74) than at baseline (M = 42.08, SD = 6.43), t(17) = 3.29, p = .004 and that triglyceride levels were marginally significantly lower after being taken off Polypharmacy (M = 134.13, SD = 68.98) than at baseline (M = 154.13, SD = 69.60), t(14) = 1.99, p = .07. Though there were no other significant differences on the metabolic indicators from time 1 to time 2, the changes on the majority of the metabolic indicators showed improvements after patients were taken off Polypharmacy. The same pattern of results was found from analyses using nonparametric tests. Additionally, among the 18 that were followed at both time points there were 4 hospitalizations for 6 m prior to the switch, and one hospitalization within 6 m after the switch. Parametric and non-parametric results both revealed that this was a non-significant difference in hospitalizations before and after the change in medication. Antipsychotic Polypharmacy was reduced from 31% to 23 % when the project was completed.

Discussion:

There have been number of concerns that have been raised due to this practice. Antipsychotic Polypharmacy has been associated with increased side effects, drug interactions, decline in patient’s adherence and increased cost of treatment. The Randomized Controlled Trials and other studies in treatment resistant patients show mixed results and increase in side effects with Antipsychotic Polypharmacy. The control studies were the ones that are more likely to show no better effect of Antipsychotic Polypharmacy in patients without resistance to monotherapy research does not support the use of Antipsychotic Polypharmacy. Almost all studies show no difference in improving clinical outcome. There were more side effects reported.

This study was one of the few done to evaluate the effect of reduction of Antipsychotic Polypharmacy. All patients besides one remained psychiatrically stable and did not change much from their baseline. Their metabolic parameters improved in general although only the improvement of their waist circumference and triglyceride levels was statistically significant.

Limitations

Open label, no control group
Small number of people,24 only 18 were followed
Did not measure all side effects

Conclusions

Antipsychotic Polypharmacy is a proven strategy for patients with schizophrenia. There is a lot of research supporting the use of Antipsychotic Polypharmacy. There are a few clinically appropriate reasons to justify the use of Antipsychotic Polypharmacy in clinical practice. 1. History of multiple unsuccessful trials of monotherapy 2. Augmentation of Clozapine 3. Used in the process of cross taper and discontinuation as an outpatient because of the short time of inpatient stay. More research is needed.