

## Psychiatry 2020 : Effectiveness Oral Antipsychotic Versus Long-Acting-Injectable Antipsychotics: a Comparison of Suicidality, Relapse, and Recidivism

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Long acting injectable antipsychotic (LAI) medication has been shown extensively to reduce relapse rates in schizophrenic patients previously treated with oral antipsychotics (OA). This study seeks to determine whether the long acting injectable mechanism, despite the drug-type being administered, is an effective treatment for all mental health (MH) disorders associated with psychosis; and moreover, whether it has the potential to improve patient suicidal ideation and overdose rates. **Methods:** This was a retrospective chart review conducted on all patients being treated for a MH disorder with OA medication at a mid-sized community hospital in Oshawa, Ontario, Canada. Patients who switched from OA to LAI regimens between June 2014 and June 2015 were identified and included in the study. Relapse rates and patient outcomes were measured by a means of hospitalizations (ward admissions and emergency room (ER) visits) due to relapse, suicidal ideation, or intentional drug overdose. Data was collected in the form of frequencies for consecutive one-year periods on OA and LAI medications and then compared using descriptive statistics. **Result:** Collectively, 92 patients met the inclusion criteria. The number of patients who were hospitalized at least once (ER visits and ward admissions) decreased by 54%, the frequency of suicidality by 60% and the number of drug overdose events by 71%. The median number of patients who visited the ER at least once decreased from 2 (0-16), to 0 (0-19), and the median number of patients who were admitted to the hospital at least once decreased from 1 (0-12), to 0 (0-10). **Conclusions:** This study found that the LAI drug-delivery mechanism,

in comparison to OA treatment, is associated with reduced relapse rates, and frequencies of suicidal ideation and overdose events in patients with MH disorders associated with psychosis.

This article investigates the relationship between antipsychotic delivery methods (OA and LAI) with respect to hospitalization rates and suicidal ideation to better determine methods for improving patient prognoses. Specifically, patients were switched from OA to LAI treatment regimens, and to our knowledge, this is first investigation of its kind to examine health services outcomes associated with suicidality in such a population.

**study:** age, sex, diagnosis, medication type and date of LAI initiation. Data were collected by chart review of the following information in the health system: 1) health care utilization of inpatient, emergency and outpatient services; 2) notes in charts about patient self-reports of suicidal ideation and attempts; and 3) medication type and date of LAI initiation. Utilization was computed by manual chart review - this included MH and non-MH services. Patients who met the inclusion criteria had been formally diagnosed with a MH disorder associated with psychosis upon routine clinical assessment by multiple psychiatrists at LHO. Schizophrenia, schizoaffective disorder, bipolar disorder, and other disorders consistent with psychotic features were included in the study population. Patient privacy was maintained by removing patient identifiers. An independent data collector, a registered nurse on the hospital's Mental Health and Crisis Intervention Team.

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