

**Sigma's 30th International Nursing Research Congress**  
**Examining Patient Outcomes of Receiving Long-Acting Injectable Antipsychotics**

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**Purpose:** This study evaluated a long-acting injectable (LAI) treatment program in use at a psychiatric clinic through examining the outcomes of patients with schizophrenia or schizoaffective disorders receiving the LAI treatment in comparison with those receiving oral antipsychotic medications.

**Background:** LAI treatment has been utilized strategically for patients who have frequent relapses of mental illness due to medication non-adherence. Despite the evidence of their efficacy and effectiveness, the use of LAIs meets reservations that limit their use compared to oral medications. Current guidelines for the use of LAIs limit their use to (1) maintenance treatment of schizophrenia or (2) patients with poor adherence. Other reasons for the limited use of LAIs include misunderstandings and/or prejudices about LAIs and their high cost.

**Methods:** This study was observational in nature. A total of 23 adults (age  $\geq 18$  years) who had received LAIs for schizophrenia or schizoaffective disorders were evaluated vis-à-vis four patient outcomes: (1) number of hospitalizations; (2) number of emergency department (ED) visits; (3) number of medications taken; (4) and prescribed daily dose divided by defined daily dose (i.e. PDD:DDD ratio). Retrospective chart review was used to collect data. To compare patient outcomes among the participants receiving LAIs, we made use of an age- and sex-matched comparison group, whose members ( $n = 24$ ) were randomly selected from medical records. Data analysis comprised descriptive statistics, independent t-test, and paired t-test.

**Results:** The average age of the participants taking LAIs was 49.57 years (SD = 13.18), and they comprised nine (39.1%) females and 14 (60.9%) males—ten (43.5%) were African-American, and 11 (47.8%) were Caucasian. The average years of using LAIs were 7.09 (SD = 7.30). Meanwhile, the average age of the participants taking oral medications was 56.04 years (SD = 11.09), and they comprised nine (37.5%) females and 15 (62.5%) males—15 (62.5%) were African-American, and eight (33.3%) were Caucasian. We observed a statistically significant decrease in the number of hospitalizations and ER visits after LAI treatment ( $t = 4.350$ ,  $p < .001$ ). However, we observed no statistically significant differences between the LAI treatment group and the oral medication group in terms of a number of medications taken or the PDD:DDD ratio ( $p > .05$ ). The average number of total medications taken among the LAI treatment group was 3.39 (SD = 1.64), and the mean PDD:DDD ratio was 1.56 (SD = 0.68). Ten patients exhibited a PDD:DDD ratio greater than 1.5. Meanwhile, the average number of medications taken among the oral medication group was 3.46 (SD = 1.64), and the mean PDD:DDD ratio was 1.26 (SD = 0.72).

**Conclusion:** Our findings provide insight into the effect of LAI treatment programs compared to oral medications on patient outcomes among individuals with schizophrenia or schizoaffective disorders. The main benefits of LAIs comprise reducing ED visits and hospitalization(s). Reducing reservations about LAI usage may provide clinicians and patients awareness of the positive effects of LAI treatment vis-à-vis the management of non-adherence and side effect profiles. Moreover, LAI treatment can be

a viable option for managing schizophrenia and schizoaffective disorders while maintaining patient satisfaction. We recommend subsequent study of LAI treatment and its cost-effectiveness in the clinical outpatient setting.

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**Title:**

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**Keywords:**

Long-acting injectable antipsychotic medications, Patient outcomes and Schizophrenia and schizoaffective disorders

**References:**

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### **Abstract Summary:**

This study evaluated a long-acting injectable (LAI) treatment program through examining the short and long-term outcomes of patients with schizophrenia or schizoaffective disorders receiving the LAI treatment in comparison with those receiving oral antipsychotic medications. Our findings provide insight into patient demographics, hospitalization rates, total medications, and dose ratios.

## **Content Outline:**

Intro

- Purpose, Specific Aims
- Background/Justification
- Literature Review

Methods

- Design - descriptive, observational
- Setting
- Sample

Procedures

- Short and long-term outcomes
- Measurement and evaluation
- Analysis

Results + discussion of each point with supporting evidence

- Demographics
- Significant findings: hospitalization/ ED rates
- PDD:DDD ratio, medication patterns

Implications

- Providers
- Future research

## First Author

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