Efficacy of Long Acting Injectable Antipsychotics in Early Onset Schizophrenia
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Significance of Issue
- Schizophrenia is a serious chronic mental illness that affects approximately one percent of the world population.
- Cognitive and social issues developed early in life associated with this disorder can significantly impact the functioning of a person throughout their lifetime.
- Life expectancy for a person with this disorder can be 10 to 25 years less than the normal population, resulting from increased physical health issues and a higher suicide rate.
- Untreated schizophrenia often results in poor quality of life. Many patients are unable to take care of the basic necessities of life such as food, shelter and providing for themselves.
- Non adherence with medication is associated with symptom relapse and re-hospitalization.
- Each time a person relapses with psychotic symptoms, returning to prior functioning is more difficult to achieve.

Theoretical Definition
Schizophrenia is a severe, chronic mental disorder that is characterized by delusions, hallucinations, disorganized speech and behavior and can cause social or occupational dysfunction.

Operational Definition
According to the DMS-5, Criteria A: two or more of the following symptoms have been present for a significant portion of time during a 1 month period. At least one symptom should include 1-3.
- Delusions
- Hallucinations
- Disorganized speech
- Grossly disorganized or catatonic behavior
- Negative symptoms (i.e. diminished emotional expression or avoidance).

Criteria B: Continuous social or occupational dysfunction for at least 6 months.

Research Question
Do patients with early onset schizophrenia receiving long acting injectable antipsychotics versus oral antipsychotics result in greater improvements of symptom reduction, hospitalization, remission and quality of life?

Population & sample
Population: Patients with first episode psychosis and comparable patients with longer disease history meeting predefined criteria.
Sample: Patients with first episode psychosis and patients with longer disease history meeting illness duration 10 to 17 years.

Exclusion criteria: Antipsychotic no longer in use, augmentation therapy, elderly patients, comorbid substance abuse and depression.

Inclusion criteria: The long term effects of oral or long-acting injectable antipsychotics on measures of relapse, remission, or cognition in patients with first episode psychosis or early schizophrenia. The effects of antipsychotics in patients with longer disease history for comparison.

Summary of the Evidence
- Viala et al 2012 Qualitative and Quantitative Compliance of LAI decreased the level of severity of the illness and improved functioning.
- Ng et al. 2012 Randomized Controlled Studies Improved symptom reduction, sustained remission, decreased readmission and medication compliance rates higher for LAI.
- Duffy et al. 2016 Randomized and Nonrandomized Increase remission rates, improved cognition, reduced risk of relapse and LAI more effective in preventing relapse.
- Schreiner et al. 2015 Randomized Controlled Time to relapse significantly higher, greater symptom improvement, functional health and wellbeing, quality of life scores higher, patient and physician treatment satisfaction scores higher for LAI.
- Das et al. 2014 Qualitative Patients given information of treatment option of LAI and involved in shared decision-making with physician are more likely to begin LAI treatment.
- Tihonen et al. 2011 Cohort Study Significantly lower risk of re-hospitalization compared to oral antipsychotics and antipsychotic medication use was associated with lower mortality rates.

Conclusion
Patients receiving LAI antipsychotics have improved symptoms reduction, decreased hospitalizations, improved stabilization and increase quality of life.

Recommendations
- Encourage involvement of patient by using a patient centered care approach to treatment planning to optimize goals of treatment as set by patient and provider mutually.
- Educate patient on the use of LAI and oral antipsychotic medications discussing the benefits of adherence to medication.
- Discuss the risk of relapse with nonadherence of medication and how it can impact functioning abilities across the lifespan and determine quality of life.

References