# Improving Quality of Life and Symptom Management among patients with Bipolar Disorder Type 1:

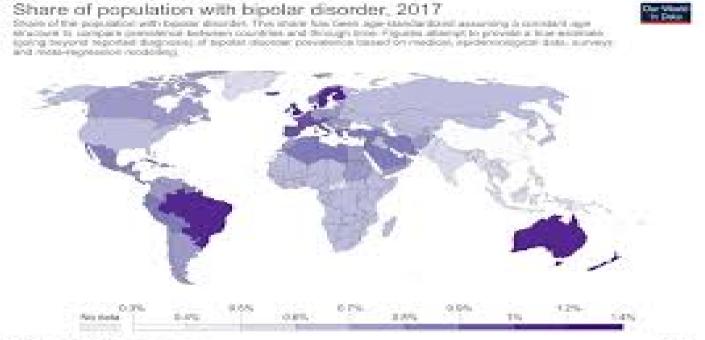
Education about and use of a monthly anti-psychotic injectable medication

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## **Background**

- Bipolar disorder (BD) is a serious mental illness
- BD is a chronic condition that affects social, occupational, and interpersonal functions (Yutzy, Woofter, Abboott, Melhem, & Parish; 2012)
- Individuals with BD die 25 years earlier (NAMI; 2018)
- Number of patients with BD is growing rapidly



- Oral medication is widely used to treat BD patients (Pomerantz; 2005)
- Positive patient outcomes (i.e. good quality of life and good symptom management) are not achieved due to high rates of medication non-adherence (NAMI; 2018)
- Injectable medication may improve medication adherence and clinical outcomes in BD patients (Park et al; 2018)

### **Study Purpose and Aims**

The purpose of this project was to evaluate the effectiveness of education about and use of a monthly anti-psychotic injectable medication on quality of life (QoL) and symptom management in patients with BD.

#### Project Aims:

- 1. To improve the QoL among patients with BD by educating them about and administering a once a month long-acting injectable anti-psychotic medication
- 2. To decrease the rates of manic and psychotic symptoms in patients with BD by educating them about and administering a once a month long-acting injectable anti-psychotic medication
- 3. To decrease in-patient hospitalization occurrences in patients with BD by educating them about and administering a once a month long-acting injectable anti-psychotic medication

#### Methods

The project was done using a pre-post intervention design

Setting: Outpatient clinic in the western United States

Participants: (1) Adult patients aged 18 to 65 years old who met DSM-V criteria for Bipolar Disorder type I; (2) Providers at the clinic were asked to participate in the educational session

Measures: (1) Quality of Life in Bipolar Disorder scale (OoL.BD); (2) General Behavior Inventory scale (GBI); (3) inpatient hospitalizations

Evidence based intervention: (1) Education session for patients and providers that described the risks, side effects, and benefits of long-acting injectable medication for patients with BD (week 1); (2) 3 monthly injections of the long-acting injectable, anti-psychotic medication apriprazole given at weeks 2, 6, & 10

*Survey Instrument*: Surveys that included demographic items, illness related items, QoL.BD (56-item scale), and GBI (73-item scale) were administered through Survey Monkey at week 1 and week 12

*Data Analysis*: SPSS version 25 was used for all analysis and a p-value < 0.05 was used to determine statistical significance

Aim 1: A paired t-test was used to compare QoL.BD scores

Aim 2: A Wilcoxon signed rank test was used to compare GBI scores

Aim 3: McNemar's test was used to compare hospitalization rates

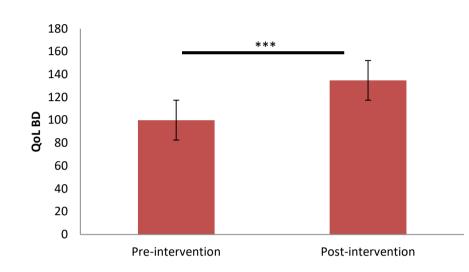
## **Sample Characteristics**

18 participants were recruited for project participation; all participants completed the 1<sup>st</sup> injection, 17 (94.4%) completed the 2<sup>nd</sup> injection, 14 (77.8%) completed the 3<sup>rd</sup> injection:

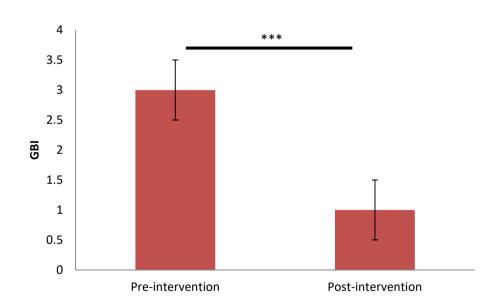
Characteristics	(N=14)
Age, median (IQR)	33.5 (23.25)
Male, n (%)	7 (50)
Race, n (%)	
African American	3 (21.4)
Asian	4 (28.6)
Caucasian	5 (35.7)
Hispanic	2 (14.3)
≥12 <sup>th</sup> grade education level, n (%)	9 (57.1)
Employed, n (%)	6 (42.9)
Past incarceration, n (%)	4 (28.6)
Number of years with bipolar disorder, median (IQR)	6.50 (13.0)
Number of oral medications tried, median (IQR)	3.5 (3.25)

#### Results

Aim 1: Participants had significantly higher quality of life after the intervention than before the intervention (mean QoL.BD score of 100 vs. 134.8, difference = 34.8, t(13) = 4.46, p<0.001)



Aim 2: Participants had significantly fewer symptoms after the intervention than before the intervention (median GBI score 3.0 vs. 1.0, difference = 2, Z = 3.21, p = 0.0001)



Aim 3: The rate of hospitalizations did not significantly differ between pre and post intervention (50% vs. 21.4%, p = 0.13)

#### **Conclusions**

Education about and use of a once a month long-acting injectable antipsychotic medication improves quality of life, reduces symptoms, and reduces inpatient hospitalizations in patients with BD

#### Dissemination

- Report to Alameda County Behavioral Health
- Poster presentation at APNA's 2020 national conference
- Journal article submitted to the Journal of the American Psychiatric Nurses Association (JAPNA)