Utilizing the Mood Disorder Questionnaire (MDQ) for Early Diagnosis of Bipolar Disorder

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Introduction:
- Bipolar Spectrum Disorder (BSD) is present in approximately 2.8%-4.4% of the United States (U.S) population
- BSD often goes unrecognized, with delays in proper diagnosis between 8-10 years

Problem:
- Misdiagnosis of BSD is very common, with as much as 69% of patients initially misdiagnosed
- Missed, or underdiagnosis of BSD can result in a more significant burden of illness, greater utilization of the healthcare system, disability, and suicide
- Inappropriate prescription of psychotropic medications may result in poor treatment outcomes, increase the cycling of manic/hypomanic phases, increase disease severity and utilization of the healthcare system
- The Mood Disorder Questionnaire (MDQ) is a screening instrument to detect BSD with a sensitivity of 73% and specificity of 90% and can be used in the outpatient and inpatient psychiatric setting

Purpose/Aim:
- Evaluate if the Mood Disorder Questionnaire (MDQ) will increase the ability of providers to diagnose BSD in new patients presenting for an initial evaluation

Objective:
- The MDQ administered at all new patient evaluations over nine weeks will increase the ability of Providers to diagnose BSD by 25 percent or greater compared to the current practice of clinical interviews and expert opinion
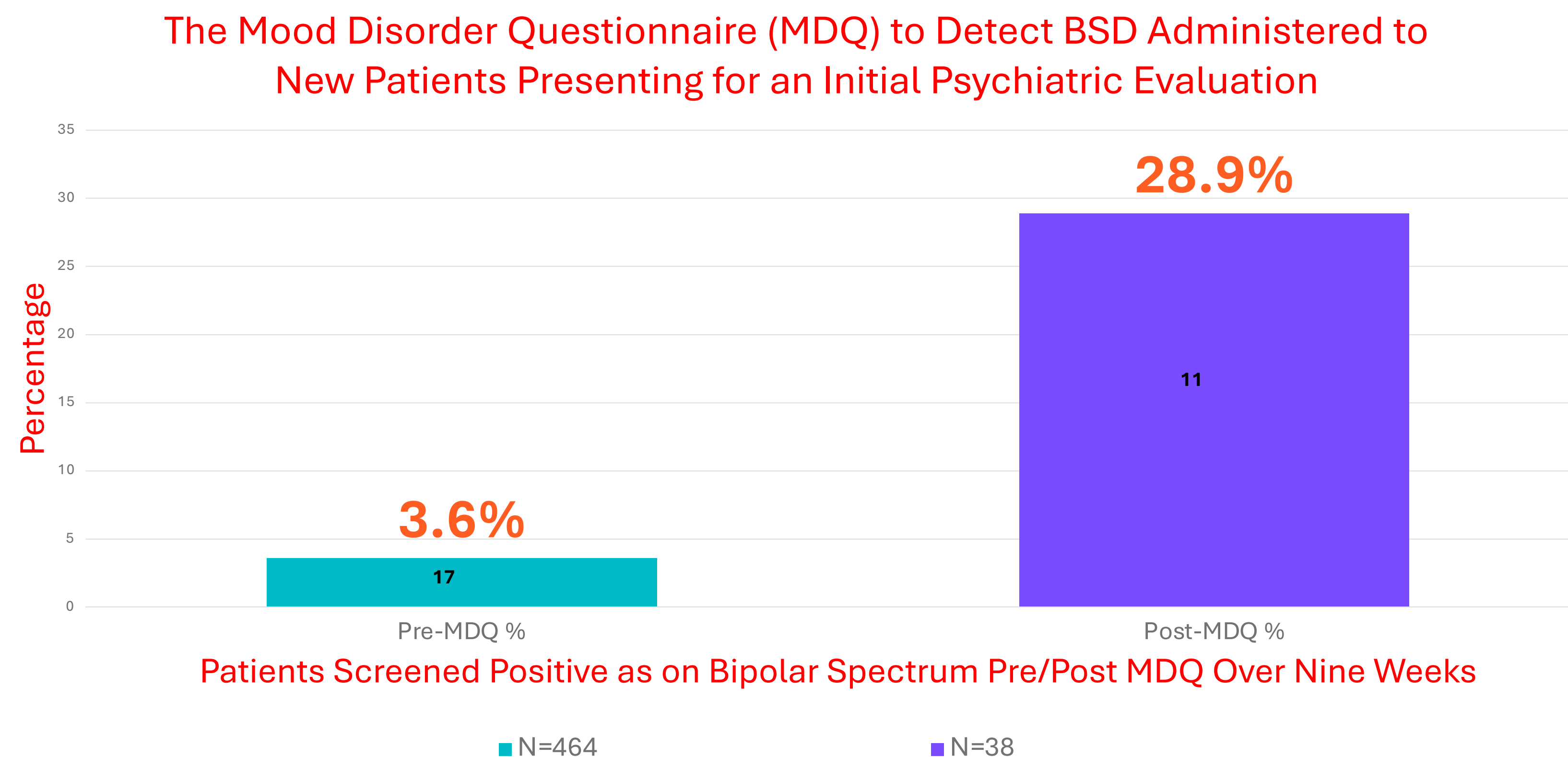
Practice Setting:
- Primary site for project implementation is an outpatient psychiatric office in Southern California
- Privately owned corporation with 100 outpatient office settings offering psychiatric, therapy, and Transcranial Magnetic Stimulation (TMS) services in seven states across the U.S.

Methods: Plan/Do/Study/Act (PDSA) Cycle

PLAN:
- The provider will administer the MDQ to all new patients presenting to the outpatient psychiatric office over nine weeks

The Mood Disorder Questionnaire (MDQ)
INCREASED
the ability to Diagnose
BIPOLAR SPECTRUM DISORDER
by
8 X TIMES

DO:
- The MDQ was administered to 38 new adult and adolescent patients ages 13yo-65yo, presenting for an initial psychiatric evaluation over nine weeks
- Typical time to complete MDQ < 5 minutes

STUDY:
- Data collection included totaling the score for the 13 symptoms questions, one question pertaining to the presence of concurrent symptoms, and one severity of symptoms to personal functioning question
- Patients screened positive for BSD if they responded YES to 7 out of the 13 symptoms questions, YES to the presence of concurrent symptoms, and "MODERATE" or "SEVERE" to the severity of concurrent symptoms to functioning
- Data Analysis: Total number of participants screened positive for BSD divided by the total participants (N=38), expressed as a percentage

ACT:
- The MDQ as a screening instrument for BSD will be adopted for use by all providers based upon results of the PDSA cycle over the nine-week project implementation

Results:
- 11 of 38 (28.9%) of the new patients screened positive for BSD, N=38
- The MDQ resulted in an eight-fold increase in the percentage of patients screened positive for BSD from the previous percentage of patients screened positive 17(3.6%), N=461

Implications for Practice:
- The MDQ administered to new patients demonstrated a significantly higher ability to diagnose BSD compared to a clinical interview or expert opinion alone
- The MDQ as a screening instrument to diagnose BSD provides early detection of BSD, allowing for earlier treatment, potentially mitigating disease burden, disease severity, and will ultimately decrease morbidity and mortality

Limitations: Small sample size. No control group for confounding variables and co-morbidities

The Mood Disorder Questionnaire (MDQ) to Detect BSD Administered to New Patients Presenting for an Initial Psychiatric Evaluation

28.9%
11

3.6%
17

Percentage

Pre-MDQ %   Post-MDQ %

Patients Screened Positive as on Bipolar Spectrum Pre/Post MDQ Over Nine Weeks

■ N=464   ■ N=38

References
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