

Poster Title: Assessing motivational stages of change for substance use in patients with Schizophrenia

Hospital: William Osler Health System

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Topic:

Among patients with schizophrenia, around half also present concurrent substance or alcohol use. Concurrent patients have higher hospitalization rates paired with poorer long-term prognoses, which puts a combined burden on the healthcare system. Motivational interviewing and other in-patient programs at William Osler Health Systems (WOHS) aim to increase patient motivation towards addressing their substance use behaviours after discharge. While effective in theory, there has been limited evaluation of the efficacy of in-patient programming on substance use motivations in patients with schizophrenia.

Methodology:

Our study relied on the transtheoretical model of behaviour change where individuals progress through distinct stages of change regarding maladaptive behaviours (precontemplation, contemplation, preparation, action, and maintenance). Thirteen patients met the criteria of a diagnosis of schizophrenia or a related psychosis spectrum disorder with concurrent substance or alcohol use. Motivations around substance use were measured using a 24-item version of the University of Rhode Island Change Assessment Scale (URICA-24). Patients completed the URICA scale upon admission to the in-patient units at Brampton Civic Hospital and a second time prior to discharge after participating in in-patient programming. A readiness to change score was calculated at each time point using criteria provided by the Habit Lab at UMBC. Scores were also used to categorize patients within the stages of change. Changes in readiness scores and stages of change were analyzed for each patient.

Discussion:

Understanding changes in patient motivation to address substance use between hospital admission and discharge provides a quantifiable evaluation of the efficacy of in-patient programming. In our study, there were no significant differences despite a positive trend in average patient motivation between the two measured times with the

average in-patient stay of 7 days. Four patients made positive progress across the stages of change moving from either precontemplation to contemplation or from contemplation to preparation/action. At an individual level, however, we found that motivation to change was greater for patients who attended a greater number and diversity of programming sessions. This suggests that while in-patient programming is effective for some, more systemic improvements are needed to promote meaningful improvements in substance use behaviours for patients with concurrent disorders.

A study by Kavanagh and colleagues (2004) of patients with concurrent disorders found that brief motivational interventions correlated to higher abstinence rates at a 6-month follow-up. A more recent meta-analysis was conducted by Wang and colleagues (2022) investigating outpatient interventions for individuals with schizophrenia and substance use. Researchers found that the reduction of substance use was greatest among patients receiving motivational interviewing in conjunction with psychiatric management and self-help training. While limited, existing literature demonstrates the relationship between motivational interventions and substance use behaviours. Our results suggest that more robust combination interventions are required to meaningfully improve patient motivation to address substance use behaviours upon discharge from the WOHS.

Conclusion/Summary:

Our study has established the methodology for embedding a standardized assessment to assess the efficacy of in-patient programming specific to schizophrenia and substance use. This study will guide changes in programming at the in-patient psychiatric unit at WOHS and advocate for more interventions specific to the concurrent population to improve patient health outcomes and reduce burdens on the healthcare system.