

Academic Activity: Summary Abstract Samples
Resident: Dr. Jane Doe, PGY1 Psychiatry
Supervisor: Dr. Wile E. Coyote, Dept. Psychiatry

A: Project: First episode psychosis and comorbid cannabis use disorder: a potential role for cannabidiol

Background: Cannabis use is common in younger first episode psychosis (FEP) patients. Cannabis may worsen symptoms, decrease functioning, increase risk of relapse and blunt antipsychotic efficacy (1-3). Cannabidiol (CBD) and Δ^9 -tetrahydrocannabinol (THC) are the most prevalent compounds detected in cannabis, and its' proportions vary depending on the cannabis strain. THC is psychoactive and may trigger psychosis in some patients. CBD is non-psychoactive and has little effect on cognition (4). CBD may counteract THC effects and offer potential benefits. Individuals using strains of cannabis containing a higher percentage of CBD relative to THC have fewer positive symptoms of psychosis than those using cannabis with a lower percentage of CBD (5). These data suggest that CBD may have an antipsychotic effect which may counteract some of the psychoactivity of THC. While the evidence supports CBD in the treatment of patients with schizophrenia spectrum disorders, most studies have excluded psychosis patients who concurrently have a cannabis use disorder (CUD). Given that chronic THC use exacerbates psychosis, it is predicted that daily CBD leads to an improvement in overall functioning and fewer psychotic symptoms in patients with concurrent psychotic disorder and CUD.

Study Design: Double-blind longitudinal study.

Hypothesis: In patients with a recent first psychotic episode and comorbid CUD, daily oral CBD administration will be associated with improved functioning, fewer psychotic symptoms and fewer presentations to hospital.

Methods: Participants (N=90) will be recruited through the Vancouver outpatient Early Psychosis Intervention program between Jan. 2021-Dec. 2023. Participants will (1) have experienced a first episode of psychosis within the previous year (2) are being prescribed appropriate antipsychotic medications and (3) meet the DSM-5 criteria for a moderate to severe cannabis use disorder at entry. Only patients with a Urine Drug Screen (UDS) positive for cannabinoids and negative for other substances at entry will be included.

Treatment groups: Participants will be randomly assigned to one of two groups. The first group will receive a CBD capsule at a dose of 600 mg per day for 6 months. The second group will receive a placebo capsule once daily for 6 months.

Measures (Baseline, 3 month and 6 month): Participants will complete a survey characterizing their cannabis use, detailing aspects of method of consumption, quantity and type of cannabis used. Symptom severity will be assessed with the Positive and Negative Symptom Scale (PANSS), and an assessment of functioning will be performed using the Global Assessment of Functioning (GAF). Patients will also be monitored for acute episodes requiring hospital assessment or admission.

Analysis: Linear repeated-measures ANCOVA models will be used.

Clinical Value: Currently, no clear behavioural intervention has been effective in reducing cannabis use in FEP patients with CUD (6). However, multiple studies suggest

a role for CBD in both improving psychotic symptoms and countering the negative impact of THC on mental health (7). These data may provide clarity on the efficacy of CBD to alleviate symptom severity and counteract the adverse effects of THC in early psychosis patients with a history of comorbid CUD.

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Academic Activity: Summary Abstract Samples
Resident: Dr. Guy Everyman, PGY1 Psychiatry
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B). Project: : UBC Resident Level of Well-Being

Rationale: Resident wellness is an increasingly critical concern. Resident wellness improves quality of life and has been associated with greater empathy and may result in better care for patients (1). Many studies have illuminated factors contributing to resident well-being; however, there is currently no consolidated survey utilizing all these influences. Factors correlated with greater resident well-being include workplace environment characteristics, autonomy, competence, and social relatedness during residency (2). Residents perceive increased wellness when there is a sense of control, pursuit and achievement of goals, opportunities for learning, increased confidence, positive feedback, and positive colleague relationships. Greater personal time availability has been linked with more positive experiences and emotions, less negative experiences and emotions, higher career choice satisfaction, and less perceived stress (2). More recreational time allows for more opportunities to engage in wellness habits, including sleep and exercise. (3). The opposite of the wellness is burnout, which is characterized a triad of emotional exhaustion, depersonalization, and a sense of decreased personal accomplishment, and may be experienced by up to 75% of residents (4). Many efforts have been made to address this alarming rate of resident burnout via various interventions including wellness education, workload modifications, stress management training, emotional intelligence training, and wellness workshops. However, there is little evidence that these interventions are making a positive impact. There is a paucity of comprehensive survey data with respect to resident's well-being. An in-depth broad survey would highlight residents' wellness challenges to garner funding and support for interventions that otherwise would be met with resistance.

Hypothesis: Residents in various specialties training through the University of BC (UBC) are not maintaining wellness in their residency programs as measured by standard wellness measures.

Research design: Qualitative surveys.

Methods: Two complimentary validated assessment tools will be used to survey resident wellness. The Lifestyle Assessment Questionnaire/Testwell Wellness Inventory for Adults (<https://nationalwellness.org/testwell/pdf/QSetSA50Sample.pdf>) and the Perceived Wellness Survey (5) will be disseminated to residents across disciplines in UBC Faculty of Medicine. Residents will be invited by email via a Faculty of Medicine department-wide email campaign to complete the surveys anonymously online. Residents who have been in residency for 6-36 months in any discipline in UBC Medicine will be invited to take part. Surveys will be sent and collected between Jan 2022 and Dec 2023. Emailed reminders will be sent quarterly to UBC residents with the intent to collect 120 questionnaires.

Data analysis: Both multi-component questionnaires are based on a 5-point Likert scale. Data distributions will be analyzed using subtotal and total scores. Cross-discipline differences will be explored via independent T-tests. Factor analyses of scales' subcomponents will be conducted via Principal Component Analysis. Concordance between scales will be measured with linear regression modelling.

Summary: The proposed research survey will provide an in-depth examination of resident wellness. With the hypothesized resident's deteriorated well-being, funding and support for another study could be pursued to improve a UBC resident's ability to maintain wellness.

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