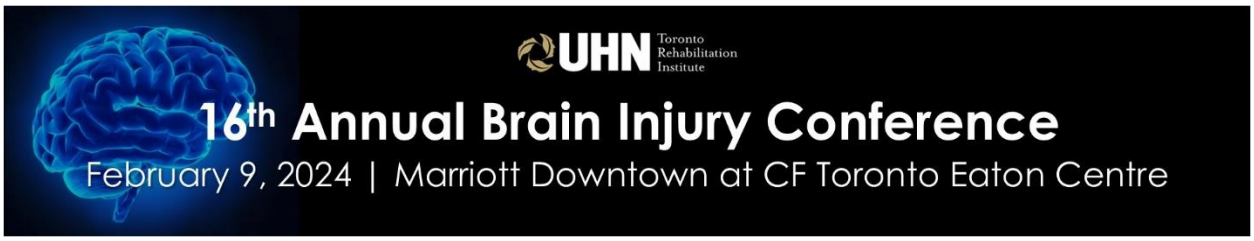

Poster #: 14

Abstract Title: Group Intervention for Patients experiencing Prolonged Symptoms following mTBI: A Proof of Concept Study

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ABSTRACT:

Abstract Theme: Mild TBI / Concussion

Topic(s) of Interest: Clinical Interventions

Purpose of Project: Due to the multifactorial nature of symptoms and the lack of robust evidence-based treatment recommendations, patients with persistent symptoms following an mTBI are often challenging to treat effectively. We developed a group-based intervention targeted to the many patients seen in our hospital-based outpatient TBI clinic that are experiencing chronic symptoms following a concussion/complex mTBI.

Methods, Procedure, Results/Outcome, Conclusion: Following established treatment guidelines (e.g., Ontario Neurotrauma Foundation, 2018) and incorporating interdisciplinary clinical expertise on TBI recovery, we designed an intervention program to treat lingering symptoms in a group format. This was a quality improvement project and did not require further REB review. Participants were recruited from Sunnybrook's TBI clinic and screened for eligibility. Eligible participants were between 18-64 years old, >3 months post-injury, currently experiencing at least two post-concussive symptoms, and confirmed to have likely sustained an mTBI based on clinical interview and chart review. All participants were involved in MVA claims and endorsed symptoms of PTSD on a short screener. Questionnaires assessing symptom severity, functional status, mood, fear avoidance, and self-efficacy were administered pre- and post-treatment, and at 1-month follow-up. The intervention was delivered virtually, and consisted of six 90-minute weekly sessions, and a booster session one month later. Topics included mTBI education and evidence-based interventions for energy conservation, tolerance building, stress management, sleep dysregulation, mood issues, symptom-related anxiety, and cognitive difficulties. Education was reviewed weekly, with specific application to goal setting, action planning, and problem-solving challenges. Our proof of concept cohort was small (n = 5), with a high attrition rate (40%). There were no evident predictors of attrition in terms of questionnaire scores or demographics. Participants who completed the program (n = 3), showed improvement across all measures, with the exception of depressive symptomatology (PHQ-9 pre-Tx: M = 20, 1-month f/u: M = 18). There was a notable reduction across all participants on the functional impact of their symptoms (Rivermead Head Injury Follow-Up Questionnaire pre-Tx: M = 34, 1-month f/u: M = 23). There was also clinically meaningful change in terms of anxiety. Initially, all participants scored in the severe anxiety range, while 66% of participants ended the program in the mild-to-moderate range. We did not use inferential statistics due to small sample size. Qualitative participant feedback empathized validation, hope, and interpersonal connections. Future directions include expanding the program to develop a full pilot study, incorporating the learnings from the current proof of concept, with the aim of eventually carrying out an RCT on the finalized intervention.