

Using an Occupation-Based and Interdisciplinary Approach to Functional Neurological Disorder: A Case Study

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PURPOSE: This study investigated effectiveness of an interdisciplinary 8 week walk and run training program for functional neurological disorder (FND) using the Canadian Occupational Performance Measure (COPM). Prior literature on FND is limited but supports the role of OT in interdisciplinary management and contributing to the evolving body of evidence to establish best practice (Gardiner et al., 2017, Nicholson et al., 2020). Case study research has value to the profession of OT by providing a richer understanding of a phenomenon through context and advancing future OT practice (Hercegovac et al., 2020).

DESIGN: A single subject case study design was used. The participant was recruited through direction solicitation by an OT and certified athletic trainer (ATC) after seeking community-based training to return to participation on a K9 search and rescue team and completing 5k races. Inclusion criteria included the ability to read, write, and speak English, communicate via phone or Zoom®, and no history of hospitalization or falls within the last year. The participant was a 56-year-old male diagnosed with FND in 2013 after being hospitalized for wandering, unsteadiness, and an inability to speak. Since initial diagnosis, chronic fatigue and decreased functional mobility had prevented participation in volunteer roles and hobbies that provide socialization.

METHOD: The COPM was administered and scored by an OT at preintervention, postintervention, and 60 days postintervention. A self-reported change in either performance or satisfaction scores that was two or more points above baseline was deemed clinically meaningful (Law et al., 2019). The narrative section of the COPM provided additional context about occupational performance at each measurement point. The 8 week walk and run program was led by the ATC for 24, 20-90 minute sessions three days a week. Program activities included strengthening exercises, timed walking and jogging drills, postural photography for education on normalization of movement, and self-management for fatigue such as adequate nutrition and hydration before, during, and after each session and self-directed rest periods.

RESULTS: COPM change scores from baseline to postintervention indicated an increase in performance in 4/5 goals (average post-pre = 4.4 points) and an increase in satisfaction in 5/5 goals (average post-pre = 6.2 points). Average change scores exceeded criteria for clinically meaningful change. The greatest change in performance and satisfaction postintervention was for a goal of completing a 3.1 mile walk and run which was met on the final week of the program. COPM change scores at 60 days postintervention indicated a decrease in performance in 2/5 goals (average 60 day-post = -0.8) and a decrease in satisfaction in 4/5 goals (average 60 day-post = -3). The decrease in satisfaction 60 days post program was clinically meaningful. Performance and satisfaction scores for the 3.1 mile walk received the highest rating of 10 and was the only goal that did not change through 60 days post program.

CONCLUSION: These results support an interdisciplinary approach and use of the COPM to understand the effectiveness of a program on perceived quality of life in FND. We believe the open dialogue inherent to the COPM interview was instrumental in providing context of occupational performance, informing a need for enhanced follow up care, and learning lessons for improving future programming.

IMPACT: Given the chronic and variable presentation of FND, it is important OT practitioners advocate for understanding the context of self-perceived occupational performance for goal setting, measuring progress, and encouraging self-management behaviors during and after intervention to sustain progress.

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