Does participation in a weekly day wellness program improve overall quality of life for a person living with multiple sclerosis?

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Introduction

The MSAC, a program of Dignity Health Neurological Institute, conducts day wellness programs to address physical, cognitive and social well-being. Program activities include individualized and group exercise, brain training, education, socialization, and community outings. Empirically, program members indicate improvement in physical fitness, cognitive function, emotional wellness and quality of life.

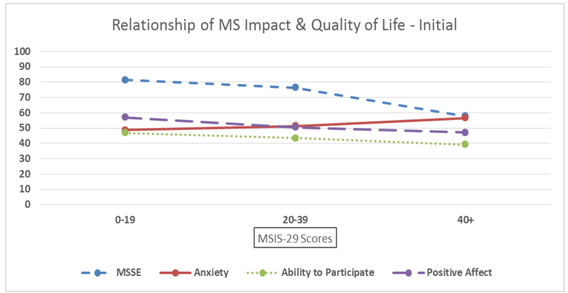
The objective of this analysis was to determine, through the use of PRO measures, if members of these day wellness programs improve in areas of self-reported disease impact and quality of life.

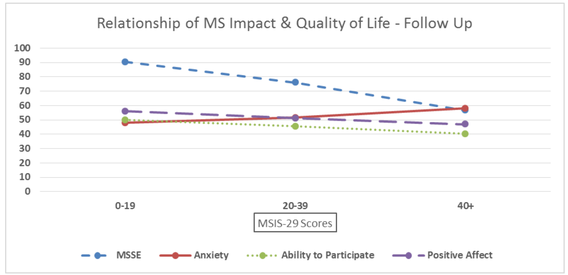
Methods

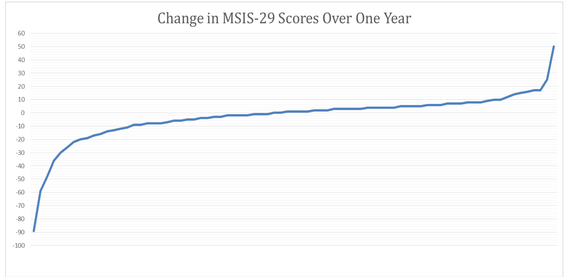
95 PwMS completed a series of paper/pencil outcome measures between December 2016 and August 2017 as part of their initial enrollment or annual participation in the MSAC's programs. Follow-up data was collected one year later. Members were asked to complete outcome measures, which included the MSNQ, MSIS-29[1], MSSE[3], GLTEQ, and Neuro-QoL (Anxiety, Depression, Emotion & Behavior, Positive Affect, Cognition, Ability to Participate, and Social Roles sections were used)[2]. All outcomes were completed onsite at the MSAC as part of the members' initial intake or weekly participation in the program.

The analysis included data from the MSIS-29, MSSE, Neuro-Qol. Separate analysis of MSNQ and GLTEQ are not included in this report.

Results







Results (cont.)

Individual results were calculated by MSAC staff at the time of completion. Baseline measures demonstrate NeuroQoL scores for the MSAC members within one standard deviation of the Mean General Population Norm (Anxiety=52.99, Depression=49.39, Emotion & Behavior=47.54, Positive Affect=40.17, Cognition=43.78, Ability to Participate=42.35, Social Roles=42.72)[2]. The mean MSIS-29 scores fall into a category of 'moderate problems' (x=37.65)[1]. The MSSE (x=70.54)[2] is within published population norms. Comparison data indicates a correlation between reports of Self-Efficacy, Anxiety, Ability to Participate, and Positive Affect (per MSSE & Neuro-QoL). Decreased scores of self-efficacy, and increased scores of anxiety, correlate with an increased impact of MS. This correlation was consistent with both baseline and follow-up measures. Overall, a slight decline of disease impact is indicated by one year comparison data from MSIS-29 scores (average change -2.56).

Key

GLTEQ – Godin Leisure-Time Exercise Questionnaire
MSAC = Multiple Sclerosis Achievement Center
MSIS-29 = Multiple Sclerosis Impact Scale – 10 item
MSNQ = Multiple Sclerosis Neurological Questionnaire
MSSE = Multiple Sclerosis Self-Efficacy Scale
PRO = patient reported outcome
PwMS = person/people with MS

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Conclusions

Many PwMS who participate in a once a week day wellness program report improvements in activity levels, socialization and well-being. Self-efficacy and quality of life data from participants in the MSAC program show maintenance or improvements over a one year period. The magnitude of change was not significant, which may be due to average or above average baseline scores in most measures. For many participants, baseline quality of life measures were collected, for this analysis, after more than one year of program participation, perhaps skewing a true baseline. The inverse correlation between MSIS-29 and quality of life measures (MSSE, Positive Affect and Ability to Participate) provides an opportunity for more specific individual and group interventions, through participation in day wellness programs, to minimize the emotional impacts of MS.

Overall, participation in a day wellness program for one year maintains, with slight improvements noted, the self-reported disease impact and quality of life for PwMS.

Bibliography

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