So You Think You Can Dance

Dance as Therapy for Adult Patients with Inflammatory Bowel Disease
A Pilot Study

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INTRODUCTION

Patients with Inflammatory Bowel Disease (IBD) often struggle with psychosocial issues of depression and anxiety with poor quality of life. Dance therapy may be a beneficial untapped resource to address these concerns. Dance therapists believe that mental and emotional problems are held in the body in the form of muscle tension and constrained movement patterns. They believe the body can affect attitude and feelings, both positively and negatively.

AIM

This study is a pilot study to determine the effectiveness of dance as therapy in adult IBD patients

METHODS

The study was conducted in a single university IBD practice, nine patients were recruited, ages 22-55 years old with IBD, all are non-smokers, seven (7) females, two (2) males, to partake in a 6-week dance class. Among the participants, four has ulcerative colitis (UC) and five with Crohn's disease, seven patients were in clinical remission. Twenty two percent were diagnosed with depression and 33% has generalized anxiety disorder from the disease. A dance class was held for 1.5 hours and occurred once a week with different varieties of classes including ballet, jazz, lyrical, latin ballroom, hip hop, african and liturgical. Before, during, and after each class, participants were asked to complete questionnaires that explore their emotional and psychological status, their opinions about the experience, disease activity, and quality of life using previously validated scales.

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STATISTICAL ANALYSIS

For this pilot study, multiple questionnaires were administered at baseline (Week 0), end of dance therapy (Week 6), and 4 weeks post-therapy (Week 10). The scores evaluated include Simple Clinical Colitis Activity Index (SCCAI) for patients with Ulcerative Colitis, Harvey-Bradshaw Index (HBI) for patients with Crohn's disease, The Short Inflammatory Bowel Disease Questionnaire (SIBDQ), The SF-36 Health Survey (SF-36, 8 health concept scales and 2 summary scales), Work Productivity (4 scales), Brief COPE (15 scales), Pittsburgh Sleep Quality Index (PSQI, 7 component scores and 1 total score), and The Perceived Stress. The linear mixed model (LMM) was used to evaluate if the above scores at primary time point, Week 6, and the secondary time point, Week 10, was different from Week 0, accounting for correlation between repeated measurements form the same subject. The false discovery rate (FDR)[1] multiple testing adjustment method was applied to adjust the p-values of all scores performed at the primary time point, Week 6, and the level was set at 0.05. Demographics and medical information are presented with mean and standard deviation (SD) or frequency and percentage. Summary statistics for questionnaires are mean and SD or median and range (minimum, maximum). Summary statistics was obtained using JMP 11 (SAS Institute Inc., Cary, NC) and the LMM was performed using SAS 9.4 (SAS Institute Inc., Cary, NC).

RESULTS

Mental health component survey results showed a significant improvement beginning the third week of the study to the sixth week . All nine patients enjoyed the group activity and gave a positive outlook in life and can turn to dance as a tool. However, there is no significant decrease in disease activity, work productivity and sleep quality based on the scales used.

CONCLUSION

Though there was no significant difference in disease activity, work productivity and sleep quality, there was a trend in improvement according to the mental health component health survey, specifically in the vitality score. The subjective opinions about the experience were positive. Dance may improve self-esteem, reduce stress, decrease isolation, and increase feelings of well-being. The negative results of this study may owe to the small sample size. Further research is warranted to look at dance as a component of a multidisciplinary management for IBD.