NIPA Abstract Poster Competition

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**Title:** Effectiveness of Lifestyle Interventions in Psychiatry: Diet, Exercise, Sleep, Stress Reduction

**Objectives:**
There is an increasing interest in alternative methods to treat depression within the psychiatric community. The primary methods for the treatment of depression is psychopharmacology and psychotherapy. There’s a growing body of literature on the subject of lifestyle interventions for the treatment of depression and other psychiatric disorders. Lifestyle intervention includes four key components diet, exercise, sleep hygiene, and stress reduction. This poster will describe (1) the evidence base of the use of lifestyle interventions in patients with depressive symptoms. (2) Identify the methods for implementation of these interventions through a proof of concept case study.

**Methods:**
A systematic literature search was conducted with the following key words: lifestyle, psychiatry, diet, exercise, sleep, and stress which yielded 40 total articles for review. Out of the 40 articles identified, 30 were selected for review to develop an evidence-based lifestyle intervention. A patient was selected from the outpatient psychiatric service who expressed interest in learning how lifestyle modification could improve psychiatric symptoms and quality of life. An initial psychiatric and medical evaluation was conducted which included basic demographics, psychiatric diagnosis, relevant medications, dosage before intervention, review of laboratory results, and baseline Hamilton Depression scale was performed. The patient was medically cleared for exercise by a primary care physician. The lifestyle interventions included creating a specific diet and tracking progress using the application My Fitness Pal. Education and implementation of an exercise routine that included strength training and cardiovascular training. Education regarding sleep hygiene was provided during the initial evaluation and each subsequent follow up. Stress reduction was conducted using the mindfulness-based application Headspace. Follow up occurred on a weekly basis for the duration of 6 months. The primary outcome measured was reduction in Hamilton Depression scale. Secondary outcomes included reduction in body weight/BMI, reduced medication requirements, and improved subjective sense of well-being.

**Results:**
After weekly follow up for 6 months the patient’s Hamilton depression scale score reduced from 18 to 9. The patient was able to reduce medication dose by 50% at the 6-month mark. The patient’s body weight was reduced by 15 pounds, a reduction of 6.98%. The BMI was reduced from 30.8 to 28.7. The patient reported overall increases in energy and sense of well-being at the completion of the study.
Conclusion:
The results indicate there is evidence within the medical literature to recommend basic lifestyle interventions for the prevention and treatment of depression. Lifestyle modification provides a safe, non-stigmatizing treatment for patients. These interventions are easily incorporated into the patient’s life, and have the potential to prevent depressive episodes, or reduce the severity of an ongoing depressive episode. Additional randomized controlled trials comparing the current standard of care and a control group are required to move beyond proof of concept.

References:


27. Helena Hönder, Lena Johansson, XinXin Guo, Gunnar Grimby, SilkeKern, Svante Östling, Ingmar Skoog; *Midlife cardiovascular fitness and dementia*, Neurology Apr 2018, 90 (15) e1298-e1305; DOI:10.1212/WNL.000000000000529
