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

Garrett Rossi, MD
PGY-3 Psychiatry Resident, Cooper University Hospital, AtlantiCare Regional medical center

Objectives
- There’s increasing interest in alternative methods to treat depression
- Current Methods include psychopharmacology and psychotherapy
- There’s a growing body of evidence in the literature to support lifestyle interventions for the treatment of depression and other psychiatric disorders
- Lifestyle interventions include 4 key components
  1. Diet
  2. Exercise
  3. Sleep
  4. Stress reduction
- This poster describes the evidence to support lifestyle interventions and illustrates the implementation of these interventions with a proof of concept case study.

Patient Information
- 24 year-old male college student
- Diagnosis of major depressive disorder
- Currently taking Duloxetine 60 mg/day
- Baseline HAM-D score 18
- Baseline weight 208 lbs. at a height of 5 feet 8 inches
- Baseline BMI 30.4

Methods
- Systematic review of the literature with the following key words, psychiatry, depression, lifestyle, diet, exercise, sleep, and stress
- Review yielded 40 articles of which 30 were selected for review.
- A patient who expressed interest in lifestyle interventions was selected from the outpatient service
- An initial psychiatric and medical examination was conducted. Psychiatric diagnosis, medications, and routine laboratory results were reviewed
- Baseline Hamilton depression Scale was recorded
- Diet interventions included creating a basic Mediterranean diet plan and tracking daily food intake and calories with the application my MyFitnessPal
- Created a daily fitness routine that included 60 minutes of daily activity. Using the fundamentals of weight training from the textbook Starting Strength we created a 4 day per week resistance training program
- Based on the evidence we focused on shorter duration but higher intensity for resistance training and cardio session of 45-59 minutes.
- Education about sleep hygiene was provided at the initial evaluation and reinforced at each subsequent follow up
- A daily mindfulness practice for stress reduction was implemented using the application Headspace
- Follow up Was conducted weekly for 6 months
- Primary outcome measure was a reduction in HAM-D score
- Secondary outcome reduction in Antidepressant medication

Results
- After Weekly Follow Up for 6-months
  - The patient achieved a 50% reduction in HAM-D score from 18 to 9
  - The patient reduced duloxetine dose from 60 mg/day to 30 mg/day a 50% reduction in dose
  - The patient reduced his body weight from 200 lbs. to 185 lbs. while adding lean muscle
  - BMI was reduced from 30.4 to 28.1
  - The patient reported an overall increase in energy and well-being

Conclusion
- These results indicate there is evidence to support the use of lifestyle interventions as treatment for depression
- Lifestyle intervention is safe, easily implemented into the treatment, and non-stigmatizing
- It has added benefits of improved general health, improved body composition, and increased overall sense of well-being
- Additional randomized controlled trials are required using a control group and comparing the current standard of care.