Barriers to Adopting Lifestyle Behaviors under the Prism of Lifestyle Medicine

JANYLL BARBER[1], ZACHARIAS PAPADAKIS[2], MATTHEW MANIERRE[3], ALI BOOLANI[3], ANDREAS STAMATIS[1] FACSM.

[1]Exercise and Nutrition Science; SUNY Plattsburgh; Plattsburgh, NY
[2]Human Performance Laboratory, Barry University; Miami Shores, FL
[3]Physical Therapy; Clarkson University; Potsdam, NY

Category: Undergraduate

Advisor / Mentor: Stamatis Andreas, astam004@plattsburgh.edu

ABSTRACT

According to the ACSM, lifestyle medicine (LM) is in the top 20 worldwide fitness trends for 2022. The LM pillars of a plant-based diet, physical activity, adequate sleep, stress management, social interactions, and avoidance of risky substances have been proposed as effective strategies for preventing and treating chronic conditions. However, implementing lifestyle behavioral changes to improve noncommunicable chronic disease outcomes has still been problematic. Individuals' mental and physical status has been suggested as a key component in closing the gap between the intention to adopt a healthy lifestyle and actually adopting that behavior. **PURPOSE**: To examine the associations of selected LM pillars with respect to mental/physical energy and fatigue. **METHODS**: This is a secondary analysis of a placebo-controlled, double-blind, randomized cross-over project that examined the effects of energy shot use on mood and cognition in adults older than 18 years old in a small college town. Participants (N=670) completed sleep (Pittsburgh Sleep Quality Index), mood (Profile of Mood Survey-Short Form), mental and physical state energy and fatigue (Mental and Physical State and Trait Energy and Fatigue Scales), physical activity, diet (Food Frequency), and mental workload surveys. The remaining LM pillars were assessed indirectly through the previous surveys. Ordinary least squares regression models examined the associations between the variables, using Python 3.0, $p < .05$. **RESULTS:** Younger individuals with bad sleep habits and high mental workdays, having high confusion and depression were associated with high mental fatigue. Men that consume a plant-based diet, have high mental workdays, and sleep adequately, were high in both state and trait mood scales. Physical fatigue presented the same characteristics as previously described, with the exception of the use of a diet high in caffeine and polyphenols that were associated with trait, but not state, physical fatigue. Physically active, good sleeper males presented significantly high state and trait physical energy levels. **CONCLUSION**: Healthcare professionals who practice the LM therapeutic modality should evaluate individuals' complex psychosocial profiles before a differential diagnosis is conferred on the premise to implement lifestyle behavioral changes.