Physical Activity Helps Medical Students Manage Stress and Burnout

Issue
Every year 300-400 physicians commit suicide, which is the size of a small medical school. Depression, anxiety, alcohol consumption, and burnout are common issues among physicians, which often begin in medical school. Depression (27.2%) and anxiety (20.3%) are more common in medical students compared to the general population (7.2% and 2.3%, respectively). Medical students need to learn how to positively cope with stress to foster resiliency, improve personal health, and provide better care to future patients.

In the fall of 2017, an 8-week intervention was conducted with students at the University of South Carolina School of Medicine Greenville (USC SOMG) to measure the effects of physical activity as a positive coping response to stress and burnout. Partnering with the Center for Effectiveness Research Orthopaedics, a comparison group design was used where participants self-selected into either the physical activity group or comparison group.

Intervention
All 41 participants completed questionnaires, and the 15 physical activity group participants attended two classes per week. Graduate student Nicole Senn designed and implemented the weekly physical activity classes, focusing on convenience and flexibility as key factors for success due to the rigorous medical school schedule. Multiple weekly class options were provided on campus that offered practical ways to be physical active. Nicole also provided individual coaching to each physical activity group participant, which included setting goals and accountability over the 8-weeks.

Additionally, resources related to physical activity and stress, depression, and anxiety were provided to all participants throughout the 8-week intervention.

Impact
Although there was not a significant difference between the physical activity group and the comparison group overall, there were improvements in physical activity level, and scores of depression, anxiety, perceived stress, and resiliency in both groups. Positive feedback from the physical activity group included:

- Exercising with other people (social aspect)
- Setting goals
- Learning different forms of exercises
- Well organized classes

The intervention offered insight into the potential of physical activity as a positive coping response for stress and burnout in medical students. Using physical activity as an outlet to manage stress and build resiliency could yield beneficial effects on the medical school experience overall, the students’ health, and have important implications for future physicians to positively impact the health of our nation. Regular physical activity has the potential to be a key factor in teaching self-care to future physicians.

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