Weak Upper and Lower Body Physical Performance Associated With Depression and Anxiety

New study confirms elevated depressive and/or anxiety symptoms in midlife women with limited physical strength and activity

CLEVELAND, Ohio (June 5, 2019)—Physical fitness is associated with a number of key health outcomes, including heart disease, cognition, mortality, and an overall feeling of well-being. A new study from Singapore now links physical performance with mental health and emotions, suggesting that weak upper and lower body fitness can cause more serious depression and anxiety in midlife women. Results are published online today in *Menopause*, the journal of The North American Menopause Society (NAMS).

Although several studies have previously linked depression in midlife women with self-reported low physical activity, this new study is the first known (even in Western populations) to evaluate objective measures of physical performance in relation to depression and anxiety in premenopausal, perimenopausal, and postmenopausal women.

Depression and anxiety are prevalent symptoms experienced by midlife women. This latest study of more than 1,100 women aged 45 to 69 years found, in fact, that 15% of participants, especially those of younger age, reported depression and/or anxiety. Because depression can cause disability, reduced quality of life, mortality, and heart disease, the researchers felt it was important to identify potentially modifiable risk factors that could reduce morbidity and mortality.

The researchers observed significant associations of objective physical performance measures with depression and anxiety. Specifically, they found that weak upper body strength (handgrip strength) and poor lower body strength (longer duration to complete the repeated chair stand test) were associated with elevated depression and/or anxiety symptoms. Future trials will be needed to determine whether strengthening exercises that improve physical performance might similarly help reduce depression and anxiety in midlife women.

Findings were published in the article “Objective measures of physical performance associated with depression and/or anxiety in midlife Singaporean women.”

“Strength training has been shown to lead to a significant reduction in depressive symptoms,” says Dr. JoAnn Pinkerton, NAMS executive director. “Both strength training and aerobic exercise appear to improve depression, possibly as a result of increased blood flow to the brain or improved coping with stress from the release of endorphins such as norepinephrine and dopamine.”

For more information about menopause and healthy aging, visit [www.menopause.org](http://www.menopause.org).

Founded in 1989, The North American Menopause Society (NAMS) is North America’s leading nonprofit organization dedicated to promoting the health and quality of life of all women during midlife and beyond through an understanding of menopause and healthy aging. Its multidisciplinary membership of 2,000 leaders in the field—
including clinical and basic science experts from medicine, nursing, sociology, psychology, nutrition, anthropology, epidemiology, pharmacy, and education—makes NAMS uniquely qualified to serve as the definitive resource for health professionals and the public for accurate, unbiased information about menopause and healthy aging. To learn more about NAMS, visit www.menopause.org.