

Low Testosterone Linked to Chronic Disease in Younger Men

Thu, 04/19/2018 - 10:13am

by [Seth Augenstein](#) - Senior Science Writer -
[@SethAugenstein](#)



Low testosterone, a condition that affects several million men in the United States alone, is linked to chronic health conditions in younger men, according to a new study.

Multimorbidity of nine conditions - Type 2 diabetes, arthritis, cardiovascular diseases, strokes, pulmonary disease, high triglycerides, hypercholesterolemia, hypertension and clinical depression - were all associated with low testosterone levels, and especially among the oldest and youngest participants, report the doctors in the journal *Scientific Reports*.

"This study showed a robust association between testosterone and multiple medical morbidities that could influence the way we think about testosterone in general

practice," said Aleksandr Belakovskiy, one of the authors, from the University of Michigan. "While these findings cannot prove causation, it does spark the need for better clinical awareness and more research."

The 2,161 men who participated in the study had complete demographic information, including ethnicity and household income, and cardiometabolic disease risk factors. The participants also had their total testosterone and grip strength on file, according to the paper.

Testosterone deficiency was 30.8 percent for the entire sample; it was 22.6 percent for the youngest group, 35.8 percent for the middle-aged, and 34.6 percent for the oldest group.

The results were cross-referenced with the presence, or non-presence, of the nine chronic conditions. The researchers found significant statistical correlations, they report.

"Our results suggest a much higher prevalence of testosterone deficiency occurs in men across the adult age-span than what has been previously reported, and that young and elderly men with testosterone deficiency exhibit a significantly higher multimorbidity risk than their eugonadal counterparts," conclude the scientists.

"We also found a large dose-response relationship between the age-specific low total testosterone and moderate total testosterone levels and multimorbidity, even after adjusting for obesity and muscle strength capacity," added Mark Peterson, the study's lead author, assistant professor of physical medicine and rehabilitation at Michigan Medicine. "Which means that men should be concerned about declining total testosterone, even if it has not reached a level to warrant a clinical diagnosis."

Peterson and the other doctors posit that the declining levels of testosterone could be driving health impacts in ways yet unseen at a population level.

"Declining levels could be contributing to a silent decline in overall health and increased risk for chronic disease," he said.