Non-medical use of prescription drugs (NMUPD) is a serious public health concern in the U.S. Investigators from the Centers for Disease Control and Prevention (CDC) and the U.S. Public Health Service Commissioned Corps have identified significant associations between the non-medical use of prescription drugs and unhealthy weight management practices. They suggest that health educators in the school setting, as well as other health professionals who provide services to adolescents, should focus on healthy weight management strategies and other substance-specific messages. Their findings are published in the *American Journal of Preventive Medicine*.

About 17% of U.S. students in grades 9-12 have engaged in NMUPD according to the latest Youth Risk Behavior Survey, a nationally representative cross-sectional survey published by the CDC. Reasons include pain relief, getting high, improving concentration, and weight loss. This study is the first to investigate the association between NMUPD and unhealthy weight management practices (UWMP) among high school students using nationally representative data.

"Nearly 1 in 5 high school students say they've used prescription drugs without a prescription - so it's important to understand other behaviors associated with this drug use to better target interventions for young people," said lead investigator Heather B. Clayton, PhD, MPH, of CDC's Division of Adolescent and School Health. "NMUPD for weight loss is
of particular concern as it and other unhealthy weight management practices - such as fasting, vomiting, and using diet pills or laxatives - can all have adverse health and behavioral outcomes."

Investigators combined data from the 2011 and 2013 cycles of the Youth Risk Behavior Survey. They restricted the analytic sample to students who reported a weight loss goal of either staying the same weight or losing weight, resulting in a sample of 7,482 male and 10,941 female students.

The study assessed UWMP by asking participants whether they had gone without eating for 24 hours or more; taken any diet pills, powders or liquids without a doctor's advice; or vomited or used laxatives during the previous 30 days in order to lose weight or keep from gaining weight. NMUPD was assessed by asking participants how many times in their life they had taken a prescription drug (such as OxyContin, Percocet, Vicodin, Codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription. The data were analyzed in 2016.

Female students were more likely to engage in unhealthy weight management practices than male students, with twice as many females engaging in fasting and vomiting/laxative use and taking diet pills/powders/liquids. All unhealthy weight management practices were significantly associated with NMUPD in female students.

Among male students, there were significant associations between NMUPD and two of the three UWMPs: fasting and vomiting or taking laxatives.

While the study examines the non-medical use of prescription drugs in general, findings were consistent with previous studies that explored UWMPs and non-medical prescription stimulant use in adult populations.
"One explanation for the association between UWMPs and NMUPD is that both behaviors reflect a constellation of adolescent health risks," Clayton said. "These behaviors may be attributed to stressors, which could be caused by a host of factors that affect adolescents."

"All parents should educate their children about the dangers of nonmedical use of prescription drugs and make sure their children do not have easy access to these substances. Parents concerned that their child is engaging in substance-use behaviors or unhealthy weight management practices should immediately consult their health care provider. Health educators can consult the CDC's Registries of Programs Effective in Reducing Youth Risk Behaviors for suggestions on substance abuse prevention," she concluded.

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