Illicit drug use leads to disease progression and early death in kidney disease patients

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Carolyn Scofield

cscofiel@tulane.edu

(504) 247-1443

Dr. Jiang He is the Joseph S. Copes Chair of Epidemiology and professor in Tulane’s School of Public Health and Tropical Medicine.

A study by researchers at Tulane University found persistent drug use, especially substances like cocaine and heroin, increases the risks of disease progression and early death in patients with chronic kidney disease (CKD). The results are published in the Clinical Journal of the American Society of Nephrology (CJASN).

Researchers say the findings could inform the battle against opioid addiction, as well as efforts to decriminalize illicit drug use and the debate over the medical use of marijuana.

“The U.S. is in the midst of an opioid epidemic, which has led to increases in the use and abuse of heroin. Additionally, efforts for the decriminalization and legalization of illicit drugs, especially marijuana, are gaining traction—for example, more than half of US states currently allow medicinal
and/or recreational use of marijuana,” said the study’s lead author Dr. Jiang He, Joseph S. Copes Chair of Epidemiology and professor in Tulane’s School of Public Health and Tropical Medicine.

“It is important to try to quantify the long-term health consequences of substance use, especially among vulnerable populations such as patients with chronic conditions like CKD, who are at high risk for poor health outcomes.”

Chronic kidney disease is common in the United States, and patients are at higher risk for poor health outcomes such as end-stage renal disease, cardiovascular disease and premature death. Identifying the lifestyle factors that contribute to worsening kidney function and death is important for helping patients improve their health. A team led by He and Joshua Bundy of Tulane University School of Public Health and Tropical Medicine investigated whether these factors might include tobacco, alcohol and illicit drug use.

The researchers looked at information provided by nearly 4,000 participants with chronic kidney disease. The patients self-reported their use of tobacco, alcohol, marijuana and illicit drugs such as cocaine, heroin or methamphetamine.

Among the team’s findings:

- Persistent tobacco smoking was linked with an 86 percent increased risk of dying.
- Persistent alcohol drinking was linked with a 27 percent reduced risk of dying.
- Persistent marijuana use was not significantly linked to chronic kidney disease progression or death.
- Persistent hard drug use was linked with a 25 percent increased risk for chronic kidney disease progression and a 41 percent increased risk of dying.