Risky opioid prescriptions linked to higher chance of death
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When patients are prescribed opioids in risky ways, their chance of dying increases and their odds of death go higher as the number of risky opioid prescriptions increase, according to a new RAND Corporation study.

Studying prescription records for residents of Massachusetts over a five-year period, researchers identified six types of risky opioid prescriptions and found that all were linked to a higher chance of death, including fatal opioid overdoses. The study found more than 6 percent of Massachusetts adults received a risky opioid prescription during the study period.

"Most people who misuse opioids are first exposed to the drugs through prescriptions so improving prescribing may be one way to reduce the risk of opioid misuse," said Dr. Adam J. Rose, the study's lead and a physician scientist at RAND, a nonprofit research organization. "Our study suggests that state prescription monitoring programs may help identify inappropriate prescribing in real time."

The study is the first to examine such a broad array of subtypes of risky prescribing of opioids and link such prescribing to a wide array of fatal outcomes. The findings are published online by the Journal of General Internal Medicine.

Opioid use disorders affect an estimated 9 out of every 1,000 Americans and opioid overdose-related deaths have quadrupled over the past 15 years. Public health campaigns are underway to educate prescribers and patients about the danger of high-dose opioids, and the importance of keeping first prescriptions low in dose and limited in duration.

The RAND study makes use of a unique database maintained by Massachusetts that tracks prescriptions and can be linked at the patient level to other information such as mortality, demographics and ambulance records. The database includes information about more than 98 percent of the state's residents.

The study looked for evidence for six different types of risky prescribing of opioids: high-dose opioid prescriptions; prescribing of opioids along with the anti-anxiety medication benzodiazepines; opioids prescribed to an individual by four or more prescribers in a calendar year; filling opioid prescriptions at four or more pharmacies in a year; paying cash for an opioid prescription three or more times over a three-month period; prescribing opioids without documentation of a pain diagnosis.

Researchers linked these six types of risky prescribing with nonfatal opioid overdoses, fatal opioid overdoses and all other causes of mortality.

Receiving a risky prescription was more common with increasing age, with more than 13 percent of patients age 80 and older receiving at least one. Researchers say the finding is at odds with the public image of the opioid crisis as a problem of young people, but researchers say older adults simply may receive more medications.

The strongest association for any cause of death was receiving a high-dose prescription for opioids and lacking a documented pain diagnosis. Five of the six kinds of risky prescriptions were associated with a fatal opioid overdose. The exception was making cash payments for opioids.

"Our findings underscore the importance of potentially inappropriate prescribing of opioids as a contributing factor for fatal opioid overdoses and may help guide efforts to address the problem," Rose said. "This could provide the basis for a
system that could flag providers in real time when they are writing a potentially inappropriate prescription for opioids."

Provided by RAND Corporation


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