Preventing dependency when patients first receive opioids: say no to refills

Data used from Oregon, the US state with the highest rate of non-medical opioid use in 2012

Clinicians should think twice when prescribing opioid medication to patients for the first time to relieve pain, migraines or severe coughs. To prevent possible addiction, doctors and pharmacists should err on the side of caution when considering dosages or subsequent refills. This was highlighted in a study¹ led by Richard Deyo of Oregon Health and Science University in the US, in the *Journal of General Internal Medicine*², published by Springer.

A substantial increase in opioid prescriptions over the past two decades in the US has gone hand-in-hand with a significant rise in overdoses and addiction treatment. These trends have prompted calls for the more selective use of opioids for medical reasons.

Deyo’s team wanted to shed light on how much and for how long opioids can be prescribed for the first time to so-called opioid-naïve patients without their inadvertently becoming long-term users. They focused their attention on Oregon, the US state with the highest rate of non-medical opioid users in a 2012 survey. One year’s data was obtained from Oregon’s prescription monitoring program about outpatient prescriptions filled for controlled substances, including opioids, at all non-state or non-federal retail pharmacies. Data from Oregon vital records and a statewide hospital discharge registry were also included.

Deyo’s team began with data from 3.6 million opioid prescriptions filled for 874,765 patients. Of these, 536,767 people (61.4 percent of the total study group) were opioid-naïve patients. After analyzing this first-time user group further, it was found that 26,785 (5.0 percent) became long-term opioid users who received six or more opioid fills within a year. This trend was higher among rural than urban residents (6.1 percent versus 4.4 percent respectively), while the likelihood of long-term use increased with age.

The researchers then analyzed the information of patients younger than 45 years old who did not die within one year of receiving their first opioid prescription. This excluded most cancer or palliative care patients, but still left the research team with 243,427 patients. Among those with a single prescription fill, just two percent became long-term opioid users.

The odds ratio of becoming a long-term opioid user was 2.25 higher among patients who received two prescription fills compared to one. It was also 2.96 higher for those initially receiving between 400 and 799 cumulative morphine milligram equivalent dosages within 30 days, compared to patients on lower doses. Long-acting opioids were associated with a higher risk than short-acting drugs.

Data from this study show that the risk of long-term use can be minimized by starting off a patient with a single prescription of a short-acting opioid with no refills. Its cumulative dose should be less than 120 morphine equivalents.

“The increasing risk of long-term use even at low cumulative doses supports the Centers for Disease Control recommendation of limiting therapy to three to seven days for most patients,” Deyo notes. “Our data suggest the value of attention to high-risk prescribing, over which clinicians have greater control,” he adds. “This in part reflects concern that we are dealing with risky drugs, not risky patients.”

References:
2. The *Journal of General Internal Medicine* is the official journal of the Society of General Internal Medicine.

The full-text article is available to journalists on request.

Contact: Joan Robinson | Springer Nature | tel +49-6221-487-8130 | joan.robinson@springer.com