Good news, bad news on dental pain care seen in new study

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Americans who have a tooth pulled or another painful dental procedure...
in the United States today are far less likely to get opioid painkillers than they were just a few years ago, a new study shows.

That's good news, since research shows that opioids are not necessary for most dental procedures.

But the COVID-19 pandemic seems to have thrown a wrench into the effort to reduce opioid use in dental care—and not just in the few months after dentists and oral surgeons started providing routine care again after a pause in spring 2020.

The decline in opioid prescriptions filled by dental patients was much faster in the pre-pandemic years 2016 through 2019, compared with the rate of decline from June 2020 to December 2022, the study shows.

In all, dental opioids dispensed to U.S. patients of all ages declined 45% from 2016 to the end of 2022, according to the new findings published in *PLoS One* by a team from the University of Michigan Medical School and School of Dentistry.

But even with the decline, 7.4 million dental patients of all ages filled opioid prescriptions in 2022.

Fortunately, opioid prescriptions to teens and young adults—who face especially high risks related to opioids—kept declining at a rapid rate after the pandemic pause in dental care, the study finds. But for other groups, the rate of decline slowed after June 2020.

In all, the researchers estimate, 6.1 million more dental opioid prescriptions were dispensed between June 2020 and December 2022 than would have been if pre-pandemic trends had continued.

And American dentists and oral surgeons were still prescribing opioids
in late 2022 at four times the rate that another study showed British dentists were in 2016.

"These data suggest the dental profession has made major strides in reducing opioid prescribing, but also suggest that progress is slowing," said Kao-Ping Chua, M.D., Ph.D., the senior author of the new study and an assistant professor of pediatrics at U-M. He worked with first author and former U-M research assistant Jason Zhang, who is now in medical school at Northwestern University.

"We know from research that dental pain in most patients can be controlled with non-opioid medications, avoiding the risks of opioids," said co-author Romesh Nalliah, D.D.S., M.H.C.M., professor and associate dean for clinical affairs at the U-M School of Dentistry. "While it's reassuring that dental opioid prescribing is declining, the recent slowing in the decline suggests the dental profession must redouble its efforts to reduce unnecessary opioid prescribing."

The researchers couldn't determine the procedure that led to each opioid prescription, nor could they determine the exact reason for the slowing of the decline in dental opioid prescribing during the pandemic. However, there are some likely culprits.

"One reason for the slowing might be that dentists were more likely to prescribe opioids just in case they were necessary, out of concerns that patients couldn't easily follow up with their dentist during the pandemic," said Zhang.

**Right-sizing prescribing**

Chua, Nalliah and their colleagues have studied dental opioid prescribing multiple times, and worked with the Michigan Opioid Prescribing Engagement Network (OPEN) to develop prescribing guidelines for
dental and oral surgery care available at michigan-open.org/dentistry.

Reducing the number of opioids dispensed to dental patients, especially young ones, is thought to reduce the risk of opioid misuse and diversion of pills to other people besides the patient.

Poisoning of others in the household, and interactions between opioids and other substances including alcohol and prescription drugs, are other reasons to focus on non-opioid dental pain care.

But no studies have examined dental opioid prescribing trends using pandemic-era data.

**Differences by provider type, insurance type and region**

The new study is based on data from a company called IQVIA that tracks prescriptions dispensed at 92% of U.S. pharmacies. The researchers excluded data from March through May of 2020, when routine dental care in the U.S. stopped temporarily.

The study revealed pandemic-associated changes in dental opioid prescribing varied widely. For instance, the rate of decline in opioid prescribing by oral and maxillofacial surgeons—who perform more complex procedures on people with advanced dental conditions—slowed during the pandemic to a lesser degree than for general dentists and dental subspecialists.

For low-income patients covered by the Medicaid program, the number of dental opioid prescriptions during June 2020-December 2022 was 57% higher than predicted than if pre-pandemic trends had continued. For privately insured patients, this percentage was 30% higher than predicted.
The authors speculated that worsened access to dental care in Medicaid patients—who have already have poor access to begin with—may have increased the number of painful dental emergencies and the need for opioids.

People living in the Southern U.S. made up nearly 46% of all people with dental opioid prescriptions in 2022, higher than any other region. But the researchers found that the decline in dental opioid prescribing to people in the Northeast slowed to a greater degree than in other regions. This meant that by the end of 2022, dental opioid prescribing was 69% higher in the Northeast than it would have been if declines had continued at pre-pandemic rates, compared with 23.8% in the South.


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