

EDITORIALS

Tighter prescribing regulations drive illicit opioid sales

The predictable consequence of cutting supply without tackling demand

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Overdoses claimed 63 632 lives in the United States in 2016, and two third of deaths involved opioids.¹ The dynamics of overdose have shifted over time. During the first decade of the US crisis, prescription opioids contributed to most fatalities. As opioid prescribing rates fell after 2010, deaths involving heroin—and more recently, fentanyl—have skyrocketed. Even as opioid prescribing has reached its lowest level in a decade, these less expensive, more available, and highly potent illicit market alternatives continue to drive the surge in fatal poisonings,^{2,3} with prescription opioids now contributing to only one in four overdose deaths.^{1,4}

Policies that suppress access to prescription opioids without reducing demand are known to fail. In a linked paper, Martin and colleagues (doi:10.1136/bmj.k2270)⁵ consider the unintended consequences of one such supply side intervention, the 2014 rescheduling of hydrocodone combination products from schedule III to schedule II by the US Drug Enforcement Administration.⁶ This seemingly obscure regulatory shift has far reaching consequences. Patients can only obtain refills for a schedule II drug through a visit in person to their provider and pharmacist, creating barriers to medication access that disproportionately affects individuals with limited mobility and those in rural areas. Schedule II prescribing and distribution practices also receive closer scrutiny by state and federal regulators, chilling access across the board.⁷

Predictably, prescriptions for hydrocodone combination products decreased markedly after the 2014 rescheduling.⁸ Martin and colleagues found, however, that darknet sales of prescription opioids spiked. The darknet, an encrypted network built on top of the existing internet accessible only through specially configured software that allows users to remain anonymous, is host to numerous illicit online marketplaces (“cryptomarkets”) that match buyers and sellers of illicit goods, including scheduled substances.⁹ In Martin and colleagues’ interrupted time series analysis, cryptomarket sales of prescription opioids increased more rapidly after 2014 in the US than elsewhere. The authors also observed that by 2016, fentanyl had become the second most purchased opioid on the darknet, having previously been the opioid least purchased online before 2014.

This analysis illustrates the unintended but foreseeable consequences of supply side interventions concerning drugs. Since hydrocodone combination products were the most commonly prescribed opioids in 2014, restricting access was deemed an appropriate policy response. However, illicit markets clearly mobilized to meet the unaddressed demand. Similarly, the introduction of formulations to deter misuse and prescription drug monitoring programs seems to have facilitated opioid users’ transition to heroin and fentanyl obtained from illicit sources.^{7,10,11}

Given the historical over-reliance on law enforcement to solve American addiction crises,¹² the current federal response to rising cryptomarket opioid sales is unsurprising; the US Department of Justice recently announced it is doubling resources allocated to combatting drug sales through the darknet. This approach is unlikely to succeed. When large cryptomarkets are shut down, the number of online sellers drops temporarily but then rapidly recovers and marketplaces fragment.¹³ Attempts to disrupt darknet sales are therefore likely to cause an endless game of “whack-a-mole” in which new cryptomarkets surface to replace old ones, and sellers and buyers simply migrate from one site to another. At the same time, fragmentation of these markets reduces their harm reduction potential because site closures erase accumulated consumer generated information (and warnings) about products and sellers.

Demand for opioids in the US will decrease sustainably only when high quality, evidence based prevention and treatment programs are broadly implemented, robustly funded, and universally accessible. Several youth prevention programs have been shown to reduce the incidence of substance use problems and deserve widespread investment (see <http://samhsa.gov/nrepp>). Standard-of-care addiction treatment that includes buprenorphine, methadone, or naltrexone—drugs that promote and sustain recovery—should be available throughout healthcare and criminal justice systems. Harm reduction services, including syringe exchanges, overdose education, naloxone distribution, and safe injection facilities, are also needed to prevent overdose and facilitate health improvement.

The work by Martin and colleagues reminds us that even as policymakers pursue additional regulatory approaches to reduce opioid prescribing—including prescription drug monitoring programs, dose or duration limits on prescriptions, and prescriber sanctions, among others—the overdose crisis will likely worsen so long as supply side interventions are not coupled with evidence based measures to cut demand and reduce harm. More fundamentally, this analysis raises questions about drug scheduling as a tool of public health regulation. The US scheduling scheme inexplicably holds such disparate substances as cannabis, heroin, and psilocybin to be equally dangerous. It is high time to rethink how, why, and when this regulatory framework is deployed to curb drug related harms.

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