Over the past decade, prescription drug abuse has cut a destructive path through Appalachia. I’ve been a close witness to that destruction. I’ve seen friends and acquaintances struggle and die, youth and young adults turn to theft and prostitution, families weakened and destroyed, and whole towns transformed because of crime and violence.

One spring afternoon in 2002, I drove to Richwood, West Virginia, to do a focus group with teachers and community leaders on inhalant abuse—the huffing of gas, paint, and solvents to get high. I was a professor at the West Virginia University School of Medicine, and I had chosen to study inhalant abuse since West Virginia had the highest rate of youth “huffing” in the nation, about 40 percent above the national average. Over the course of the afternoon, the group provided some polite interest and some pretty good answers to my questions. All was going well, and I was going on about the risks and long-term consequences of huffing when one of the participants raised his hand and said, “You know, huffing paint and gas is a problem for a few kids around here. I have known one or two that had that problem. But, if you really want to help, you’ll come to the local Narcotics Anonymous meeting with us this evening and hear about our real problem.”

And so I went. At that meeting I heard stories that defy logic, tradition, culture, stereotypes, and sanity. Stories of housewives selling everything they own, including their bodies; stories of rural kingpins, invisible networks, and trips to Florida, Mexico, and Baltimore; and stories of friends and acquaintances whose lives ended tragically.

I spent the two-hour drive back to Morgantown that night in silence. If what they said was happening in their community was true, then we had a coming storm on our hands.

Truth be told, the storm was already raging. On the national level, celebrity pill addiction and overdose were beginning to be popular news stories. But our Appalachian story was altogether different. I started paying attention to the news in our region and started seeing dozens of articles about pill diversion, pharmacy theft, and overdoses. Meanwhile, my childhood friend, with whom I kept up regularly on the phone and with whom I visited frequently when home, dropped the bomb that he had a serious problem and needed help. We started spending more time on the phone. Indeed, over the next few years we would spend dozens of nights talking about his addiction, and it was a shocking education for me. My friend had become a full-time doctor shopper and pill trader. He had an enormous physiologic need for pills, taking at least sixty a day, in carefully regimented sequences, to offset or enhance effects and side-effects. He was brilliant, and he was desperate. We talked about treatment and counseling. We talked about the effect his addiction was having on his family. We talked about risks and desperation. In retrospect, I wish I had driven to his house, put him in the car, and gone with him to the hospital myself. I didn’t hear from him for several weeks, and I assumed all was going well after a recent
commitment to sobriety. When I got the call . . . and my father told me he had died, my academic curiosity instantly became a personal mission.

Epidemiology

According to the National Household Survey of Drug Use and Health, more than 30 million Americans have abused prescription pills in their lifetime, about 15 million have done so in the past year, and about 7 million are current, past-month abusers. Pills are the second most frequent “new” substance adults choose when they use drugs illicitly. They are the first most frequent new substance for youth. While the use of other drugs like marijuana and cocaine has decreased or stayed the same, illicit use of pills has increased by at least 30 percent in the past decade. The most frequently abused are pain pills such as oxycodone and hydrocodone, followed by sedatives, stimulants, and tranquilizers. Other regions of the country suffer from the same problem, to be sure; however, pill abuse is more prevalent in rural areas and in areas where there is more poverty and unemployment.

In one study of the problem in Appalachia, funded by the Appalachian Regional Commission (ARC) and performed by the National Opinion Research Center and East Tennessee State University, about 22,000 of the 19.4 million residents of the region were surveyed about their drug use. Researchers found that the region is consistent with the rest of the country in the misuse of pills: 5.6 and 5.9 percent respectively. But the Central and Southern Appalachian areas are higher: 6.4 and 6.2 percent respectively. Pockets of the region are incredibly hard-hit—especially coal-mining country (Figure 1). Rates of painkiller abuse in coal-mining regions approach 7.7 percent, and treatment rates for opiates are higher than the rest of the nation. Heroin use is presently lower than the rest of the country, but it is rising, specifically in coal-mining areas. While the phrase “Hillbilly Heroin” is used to describe OxyContin, Appalachia is increasingly having to contend with the real thing.

Admission to treatment from 2000 to 2004 for heroin abuse in people age twelve and older showed a steady decline nationally, dropping from 15 percent to 14 percent. However, treatment centers in Appalachia reported a steady increase in heroin treatment admissions from 4 percent to nearly 10 percent over the same period.

One reason is cost. Prescription drugs run between fifty cents and one dollar per milligram, for pills ranging from two to eighty milligrams per dose, whereas heroin is five dollars to ten dollars per dose, depending on its quality and the local market. A recent report in the *Los Angeles Times* indicated that black tar heroin syndicates seek out areas of the country where the pill problem is greatest and therefore have the highest capacity for heroin market growth. One method used by the heroin dealers is to find the local Suboxone or methadone clinics and approach the clientele as they enter and exit.

Most alarming is the fact that youth perceive prescription drugs to be much safer than other forms of drugs. For example, according to the Partnership for a Drug-Free America, about 40 percent of youth think prescription pills are safer than “illegal” drugs, and about 30 percent find nothing wrong with using prescription pills to get high. Each day, over 2,500 youth try prescription drugs for non-medical reasons for the first time. The National Institute on Drug Abuse estimates that in 2005, annual abuse of Vicodin was 9.5 percent among high school seniors, making it the most commonly abused drug by that age group. Additionally, OxyContin use has
significantly increased among high school seniors since 2001. The ARC-funded study shows that Appalachian adolescents have a proportionally higher reported rate (10.6 percent) of pill abuse than their counterparts in the rest of the U.S. (8.7 percent).

In a 2008 article in the *Journal of the American Medical Association*, Aron Hall and colleagues report a 550 percent increase in overdose deaths in West Virginia from 2002 to 2006. Their comprehensive review of death records revealed that pharmaceutical diversion (prescription drugs obtained illegally using a variety of methods, including theft, deception, and trade) was associated with 63 percent of deaths, and “doctor shopping” (going to multiple doctors to seek pills) was implicated in more than 20 percent of the cases. The authors also found that 93 percent of those who died had used prescription opioids, and 40 percent had taken methadone, a synthetic, often-abused opioid employed in the treatment of drug addiction. Only 44 percent had a prescription for the drugs they used.

We know where the pills come from—the supply side of the dilemma. They follow a clearly defined and regulated path from manufacturer to shelf. It would seem, then, that the problem could be corrected by clamping down on doctors and pharmacists, training them well, and making sure there is a good system in place to monitor prescriptions and their delivery. Regrettably, it is not that easy.

Around 2001 state-level Prescription Monitoring Programs (PMPs) began emerging in the fight against pill abuse. The presence of a state PMP was touted as a deterrent to diversion. Now, over thirty states have them, and they are providing good information. For example, we know that in 2008 more than 272 million hydrocodone pills were prescribed in Tennessee. That equates to 43.87 pills for each of the state’s 6.2 million residents. We also know that it takes several minutes for a provider to get online and double-check the history of a patient suspected of angling for an illegitimate prescription.

If a provider is legitimate and the attempt to obtain an illegitimate prescription is careful, some pills will wind up in the wrong hands. But the market for pills is not being satisfied by “unwitting” physicians or even a few sloppy clinical care providers. Many pills do come from rogue physicians or “candy-man” doctors, but casual abusers of pain pills acquire most of their pills from friends or family. Only after a person is pretty highly addicted does he or she begin going to the “candy-man” doctors or the streets. In one survey, more than 58 percent of respondents reported getting prescription drugs from friends or family, and only about 7 percent said they obtained pills from “doctor shopping” or the streets. About 14 percent of callers to the West Virginia Quitline, arguably a more addicted clientele, reported getting their drugs from “doctor shopping” at least sometimes. In the Hall study, some 21 percent of the people who died from overdoses had been “doctor shoppers.” Clearly, as the addiction progresses, the propensity to spend time acquiring the drugs intensifies.

Authorities believe most of the pills now on the street in Appalachia have come up the “pill pipeline” from pain clinics in Florida, resulting in an increase in street-level availability.

**What to do**

Prevention of diversion and treatment for pill addiction are desperately needed, but local efforts should be focused on prevention of pill abuse, beginning in the home: Educate yourself about the type of pills you and your family have been prescribed; monitor the exact number of pills that have a psychoactive effect (including pain pills with hydrocodone and oxycodone, sedatives, stimulants, tranquilizers, and many others); secure such pills with lockboxes; and if you have older pills that are potentially risky, put them in an old peanut butter jar, tape the lid shut with duct tape, and put them inside a bag in the trash. Do not flush them down the toilet, since they can wind up in the drinking water down the river or in the water table. Occasionally, pharmacies will hold pill drop-off days when you can dispose of them properly.

In your community, counsel people to monitor their prescription drugs, secure those drugs, and carefully dispose of unused doses. Encourage doctors to use prescription monitoring software. Engage in conversation with friends and family to dispel the myth that prescription drug misuse is safe.

Such measures are necessary to combat the threat that prescription drug abuse poses to our heritage, our culture, and our way of life in Appalachia.

---

Dr. Robert Pack is associate professor of community health and associate dean for academic affairs at East Tennessee State University’s College of Public Health. Caleb Lewis, a graduate student in public health at ETSU, assisted with this article.