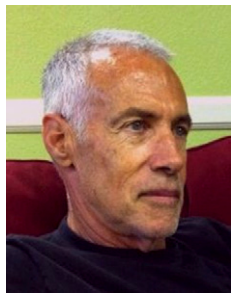
EDITOR'S CHOICE



Self, Medicated

In the late 1990s, new medical practice guidelines intended to address undertreatment of pain coincided with the initiation of Oxycodone marketing, followed by increased use of various opiate products for analgesia. While heroin use remained essentially unchanged during the following decade, prescribed and nonmedical (used without a prescription) opioid consumption increased fourfold. By 2007, enough opiates were in circulation in the United States to dose every citizen with the equivalent of a typical (five mg) dose of Vicodin every four hours for three weeks. In 2009, drug poisoning–accelerated by the rise in prescription painkillers–became the leading cause of death from injury. Strategies introduced to reverse this trend included modification of practice guidelines—notably, in 2006 to address challenges in safe initiation of or switching to methadone from other opiates, and in late 2013 to curb overzealous prescribing of opiate analgesics—and dissemination and optimization of prescription drug monitoring programs to detect "pill mills," curb "doctor shopping" and other forms of drug-seeking behavior, and reinforce the application of effective prescribing practices.

As with supply-side efforts to contain the use of illicit drugs, these laudable systemic reforms may have only limited impact on opioid consumption. Unlike the concentrated and traceable supply chains for illicit drugs, medicine cabinets in US households constitute a distributed warehouse for psychoactive pharmaceuticals used nonmedically. Friends and relatives supply two thirds of pain relievers used nonmedically; adolescents report that opiates are easier to obtain than alcohol; and between one quarter and two thirds of opiate-related deaths occur in people without prescriptions. Compared with 335 000 heroin users, 4.9 million Americans used nonmedical painkillers in 2012; compared with 442 000 users of illicit methamphetamine, 1.2 million used nonmedical stimulants.

From a global perspective, the United States is the most drug-addicted nation on earth. Considering only medically indicated uses, with seven percent of the world's population, the United States absorbs nearly the entire global production of hydrocodone and methylphenidate, four fifths of its oxycodone, more than two thirds of its buprenorphine, and nearly three quarters of its total production of stimulants. Why?

Manufacturers are loath to lose sales and eager to find new diagnoses for existing drugs: "sluggish cognitive tempo" is a recent example. The rise in nonmedical use of prescription painkillers coincided with the expansion of direct-to-consumer drug advertising and a decline in federal authority and capacity to regulate it. Although prescription painkillers were not heavily promoted, the implicit principle is evident: there is a pill for whatever ails you, and some sort of ailment(s) to be found for whatever pills can get regulatory approval. Payers favor medication and typically deny coverage for nonmedical interventions for pain. Physicians are responsive to patient demands and find it more cost-efficient to write a prescription than to manage pain nonpharmaceutically.

Among those exposed to a psychoactive drug, only a fraction persistently abuse or become chemically dependent upon it. Determinants may include as yet unidentified genetic factors. But we know that childhood neglect, abuse, and trauma are strongly predictive of addiction. Trauma also increases sensitivity to pain. Ominously, compared with people older than 45 years, those between 18 and 34 years have experienced double the rates of exposure to multiple adverse childhood experiences. Retraumatization—notably via repeated cycles of arrest and incarceration—accelerates relapse. Stigmatization further exacerbates recovery and impairs access to recovery-related assets including housing, health care, and employment. Treatment and community-based mutual aid programs work; prisons and jails fail.

Seventy-five years ago, the authors of *Alcoholics Anonymous*—founders of the 12-step fellowship of the same name—poignantly described the condition of people who were substance-dependent:

> We were having trouble with personal relationships, we couldn't control our emotional natures, we were a prey to misery and depression, we couldn't make a living, we had a feeling of uselessness, we were full of fear, we were unhappy, we couldn't seem to be of real help to other people.

And they promulgated a "design for living" to address these bedevilments: for resentment and entitlement, substitute an attitude of gratitude and acceptance (i.e., humility); abandon social isolation and shame, or the mutual exploitation society of other users, for a peer group that offers mutual affiliation, tolerance, and encouragement; counter the anomie of selfishness and self-centeredness by discovering a sense of purpose through selfless service. This simple regimen encapsulates the principal ingredients of recovery, but by no means is it easy: a quick fix is what we crave.

Sources for this column are available on request. ■

Michael Gross, PhD
Former Associate Editor AJPH

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