HISTORY OF MEDICINE

Societal Biases, Institutional Discrimination, and Trends in Opioid Use in the USA

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History has demonstrated cyclical trends in opioid use in the USA, alternating between high rates of prescribing driven by compassion and marketing and restrictive prescribing driven by stigma and fear of precipitating addiction and other harms. Two under-recognized yet powerful forces driving these trends are societal biases against individuals who use and are addicted to drugs, as well as a recognized social determinant of health, institutional discrimination. In the context of these influential forces, which are often based on racist and classist ideologies, we examine the history of opioid use in the USA from the 1800s when the vast majority of those addicted to opioids were middle- to upper-class women to the present-day white-washed narrative of the opioid crisis. As the demographics of those affected by opioid use and addiction has started to shift from white communities to communities of color, we cannot allow the preliminary success observed in white communities to obscure rising mortality rates from opioids in black and Latinx communities. To do so, we highlight ways to prevent racist and classist ideologies from further shaping responses towards opioid use. It is important to acknowledge the long history that has influenced responses to opioid use in the USA and take active steps towards promoting a sense of compassion towards all individuals who use and those who are addicted to drugs.

J Gen Intern Med 36(3):797–801
DOI: 10.1007/s11606-020-05974-0

INTRODUCTION

The rising rates of opioid use and related harms in the USA,[1] termed an "opioid crisis," is not an entirely new phenomenon. In fact, history has demonstrated cyclical trends in opioid use over the past 200 years, alternating between periods of relatively high prescribing driven by compassion and marketing, and restrictive prescribing driven by stigma and fear of precipitating addiction and other adverse effects of these medications. Although the pharmaceutical industry, medical community, and regulatory agencies are widely recognized as bearing responsibility for perpetuating the most recent, destructive phase of this cycle, explicit and implicit societal biases as well as recognized social determinants of health represent powerful additional influences less often recognized or discussed. To avoid repeating this historical cycle requires rejecting the racialized and classist limits on compassion towards those who use and those who are addicted to drugs and recognizing how racial stereotypes of whiteness have enabled and encouraged under-regulation of markets for pharmaceutical opioids.

In this paper, we first examine the history of opioid use and responses towards such drug use and addiction in the USA from the late 1800s to present time. We then highlight ways to prevent racist and classist ideologies from further shaping our responses towards opioid use and addiction.

Published online June 17, 2020

"IATROGENIC ADDICTION," STIGMATIZATION OF NON-MEDICAL DRUG USE, AND THE WAR ON DRUGS

Opioid addiction first emerged as a serious problem in the USA in the late 1800s.[1] Opioids were widely used to treat many common ailments including diarrheal illness, cough, war-related injuries, and conditions prevalent in women such as menstrual cramping.[2, 3] Over-the-counter availability, lack of ingredient labeling in common remedies, and abundant prescribing by physicians led to rising rates of opioid use and addiction, particularly among middle- to upper-class women.[2] Meanwhile, people with less access to medical care (but who also suffered from the era's many illnesses and injuries) patronized informal markets, the most significant of which were located in neighborhoods where Chinese immigrants were segregated.[2]

Many of the first reactions to the nineteenth century opioid crisis involved building a distinction between individuals who had become addicted during medical treatment and those who started with non-medical use.[4] This effort created long-lasting notions about the "right" and "wrong" kind of people with addiction that persisted into the twenty-first century. In fact, nineteenth century consumers in both medical and non-medical opioid markets faced new risks for similar reasons: traditional forms of consumer protection ("caveat emptor" or let the buyer beware) were simply ineffective amidst the rapid commercial development of the industrial era.[4, 5] Despite this clear parallel, individuals who were portrayed as developing addiction because of medical treatment (often white or otherwise socially favored) were viewed as innocent victims, whereas those developing addiction through non-medical consumption (often poorer, racially marginalized people) were cast as immoral or criminals.[2, 4] For example, middle- to

upper-class white women who used opioids were viewed with compassion by society as a whole, in stark contrast to the negative portrayal of Chinese Americans who used opium (which ultimately led to a ban on opium-smoking "dens" and on Chinese immigration).[2]

During the early twentieth century, non-medical opioid use was prohibited and prescription opioid use declined.[2] Prohibition of non-medical opioids made smuggling opium (a bulky, smelly substance) a liability. As an unintended consequence, urban, southern, and eastern European immigrant opioid consumers transitioned to the riskier practice of illegally injecting heroin, a new opioid that had initially been introduced to the market in 1898 as a cough suppressant.[2, 3, 6] In contrast to medically sanctioned opioid use among middle- to upper-class white women, authorities viewed this population with contempt.[2, 6] In addition to prohibiting non-medical opioid use, the government implemented several policies intended to rein in medically sanctioned opioid use. These policies included the Pure Food and Drug Act of 1906 (requiring honest drug labeling that specifically named any narcotic), the Harrison Narcotic Tax Act of 1914 (forbidding non-medical narcotic sales by levying a tax on opioids and coca that only medical vendors were allowed to pay), and the Heroin Act of 1924 (prohibiting the production of heroin altogether).[2] Opioid prescribing declined during the early twentieth century; however, non-medical opioid use persisted despite stigmatization and demonization, particularly among immigrant, Latinx, and black individuals with limited access to the medical system.[6, 7]

Over the course of the mid-twentieth century, access to the medical system allowed middle- to upper-class white individuals to shift their substance use from opioids to less stigmatized prescription drugs, such as sedatives and stimulants.[7] Prescription rates of these drugs reached all-time highs in the 1950s and 1960s.[7] Meanwhile, individuals who used non-medical opioids suffered under a series of punitive prohibition policies. Heroin use surged in the 1950s and then again in the late 1960s and early 1970s, mostly among urban-dwelling men who initiated use with heroin rather than pharmaceutical opioids.[3, 8] In response, President Nixon passed the Controlled Substances Act of 1970. This legislation treated addiction as an illness rather than a crime, providing money for addiction research and treatment, but it also ramped up a punitive campaign against "pushers" or "dealers" who sold drugs without medical sanction.[7, 8]

A series of administrative decisions and amendments harshened the Controlled Substances Act over subsequent years, transforming it into the foundation of a draconian "War on Drugs".[9] These strict policies culminated in the 1980s amidst a moral panic over increased use of a smokable form of cocaine, "crack," which was largely sold through markets located (again) in economically marginalized neighborhoods where racial minorities were segregated.[7, 10] During this time, the Reagan-Bush administration implemented several policies that disproportionately penalized black individuals for drug-related crimes, including stop-and-frisk searches, mandatory minimum jail sentencing for drug possession, and significantly harsher penalties for "crack" cocaine compared with powder cocaine.[3, 10, 11] In both expert and popular contexts, addiction came to be understood as a phenomenon concentrated among communities of color. Enforcement of the new "drug war" laws thus contributed to a racially disparate mass incarceration: by 1995, nearly one-third of young, urban black men living in the USA were under the control of the criminal justice system.[12–14]

THE PHARMACEUTICAL INDUSTRY, RISING OPIOID PRESCRIBING, AND RACIAL DISPARITIES IN PRESCRIBING PATTERNS

Cautious opioid prescribing practices persisted for nearly a century, until the pendulum swung back to copious opioid prescribing in the 1990s, marking the beginning of our current crisis.[2, 15] Fueled by pharmaceutical industry marketing campaigns and reformist concerns about improving health care for individuals living with pain, regulations were loosened and physicians were encouraged to provide more opioids with minimal regard for risks.[15] The result was an exponential rise in opioid prescribing and use.[15]

From the mid-1980s until 2001, the pharmaceutical industry aggressively promoted the use and minimized the risks of opioids.[16] As one example, Purdue pharmaceutical's OxyContin® sales grew from $44.7 million in 1996 when it was introduced to the market to $1.35 billion in 2001.[17] To achieve such staggering growth in opioid prescribing, Purdue increased their sales force and physician call list, targeted high-volume opioid prescribers, and incentivized their sales force with performance-based bonuses.[16, 17] The pharmaceutical industry exploited compassionate societal attitudes towards individuals living with pain, particularly white suburban middle-class individuals who were portrayed as having less addiction potential. Ironically, just as negative stereotypes of racial minorities helped drive the "War on Drugs," positive stereotypes of whiteness enabled a calamitous pro-drug marketing boom. Prescriptions quadrupled from 2000 to 2010 and rates of prescription opioid overdose death increased in parallel.[1, 18]

Although opioids became the treatment of choice for chronic pain nationwide in the twenty-first century, significant racial differences in the use of prescription opioids have been well-documented for this condition.[19] On a regional level, states with predominantly white populations, such as Maine, West Virginia, Kentucky, and Virginia, have OxyContin® prescribing rates five to six times higher than the national average.[16] On an individual level, opioid prescribing rates are 2-fold higher for white patients compared with black or Latinx patients.[20, 21] A recent study in California demonstrated significant racial, ethnic, and income disparities in opioid prescribing with the highest prevalence among low-income, white

patients.[22] These racial differences in pain management have been in part attributed to health care provider biases and unequal access to care.[19] Despite lower opioid prescribing for pain, a recent study found that black patients who receive opioids for pain are nearly twice as likely to undergo urine drug testing compared with whites, and if found to be positive for illicit drugs, are two to three times more likely to have their prescription opioids discontinued.[23]

A WHITE-WASHED EPIDEMIC, PUBLIC HEALTH EMERGENCY, AND CHANGING DEMOGRAPHIC

With headlines reporting an unprecedented decline in US white life expectancy due in part to fatal prescription drug overdoses, the popular media largely portrayed the opioid overdose crisis as a problem afflicting white communities.[10, 12] In stark contrast to authorities' harsh response to "crack" cocaine use in the 1980s, the response to the current crisis has been relatively sympathetic, as reflected in the declaration of a national public health emergency.[24] Rather than criminalizing the problem by increasing law enforcement and jail sentencing for drug-related crimes, there has been an unusually consistent focus on reigning in provider opioid prescribing.[24] However, it is important to note that the methods used to reduce opioid supply have focused on medical providers (i.e., limiting opioid prescribing and mandating use of prescription drug monitoring programs[25]) rather than the pharmaceutical industry (i.e., controlling fraudulent marketing and irresponsible prescribing).

In addition to decreasing the supply of prescription opioids, authorities now place a greater emphasis on increasing the availability of addiction treatments. In the early 2000s, the partial opioid agonist buprenorphine became available for office-based addiction treatment, offering the potential to change the landscape of addiction care.[3] This treatment option facilitated more convenient office-based medication therapy rather than daily observed methadone dosing in opioid treatment programs that often stigmatize those pursuing addiction treatment.[10, 12] However, due to selective advertising, limited insurance coverage, and information on buprenorphine-certified prescribers being available exclusively through internet searches, buprenorphine was largely targeted to white people with private insurance and access to a computer.[10, 12] Since buprenorphine's introduction to the market, the fastest rise in buprenorphine use has been in higher income and predominantly white communities.[26] In fact, the vast majority of individuals treated with buprenorphine in the USA are white, employed, and have private health insurance.[10, 27]

Even as the leading cause of opioid overdose mortality shifted from prescription opioids to heroin in 2010 and fentanyl in 2013,[1] the public response has remained more compassionate than during the turn-of-the-twentieth-century surge of opium use by Chinese Americans, heroin use in southern and eastern European immigrant communities in the early twentieth century, or the rise in "crack" cocaine sales in inner-city neighborhoods in the 1980s. Although harm reduction and addiction treatment programs remain under-resourced and insufficient to meet clinical demand, popular public discourse has focused on harm reduction strategies over punishment far more than when less socially favored communities (e.g., communities of color) were perceived as most affected by addiction.[12] These strategies have included expansion of naloxone availability, discussion of supervised opioid consumption sites, and provision of medication for addiction treatment.[12] Recent studies published by the CDC have revealed that the efforts to thwart this public health emergency may have started to pay off with overdose death rates beginning to decline in some regions for the first time in over 15 years.[28] Yet, overdose death rates among black and Latinx populations continue to rise across the USA.[28]

WE ARE NOT DOOMED TO REPEAT IT: HOW TO OVERCOME OUR CENTURY-LONG TRAP OF SEEING DRUG USE THROUGH THE LENS OF RACE AND CLASS

We cannot allow the preliminary success observed in white communities obscure rising mortality rates from opioids in black and Latinx communities. Whereas the current response to the opioid overdose crisis has sparked a growing movement towards harm reduction and addiction treatment, the carceral infrastructure remains in place with the potential to ramp up harsh drug approaches if we fail to preempt stricter policies towards drug use that have occurred in the past as the demographics of individuals using and addicted to drugs evolves. An ominous sign is the proliferation of drug-induced homicide laws criminalizing drug deliveries that result in death.[29] There has been an exponential rise in drug-induced homicide charges over the past several years with longer sentencing for people of color compared with white defendants.[30] As opioid-related morbidity and mortality becomes more prevalent in communities of color, it is crucial that we understand and address the role of bias and institutional discrimination in motivating prior political and medical responses to drug crises in order to narrow opioid-related inequalities.

To address societal biases towards those with addiction, society needs to stop viewing addiction through a divided lens. Clinicians need to better frame addiction as a chronic illness that can affect all people, rather than as a chronic illness when it happens among socially privileged groups and a moral failing when it occurs among minorities and other marginalized groups. Clinicians must also be clear that many people who use drugs never develop addiction—an important point that is often lost in an over reliance on the medical model that presents all non-medical drug use as pathological. Clinicians must destigmatize addiction care and emphasize that it is a necessary aspect of health care, with harm reduction services being an important component of this care. The medical community needs to implement interventions to counterbalance the effects of racial inequalities in medication prescribing

and drug policy and develop culturally competent and welcoming treatment settings for black and Latinx individuals.[31]

Disparities in buprenorphine prescription and availability by race, socioeconomic status, and geographic location reinforce the need to address institutional discrimination. Buprenorphine prescribing should be normalized in day-to-day clinical practice through the removal of the waiver requirement as well as the ongoing adoption of required buprenorphine training during medical school and residency.[32] In addition, health care systems and providers in low-income communities and communities of color should receive targeted incentives for prescribing buprenorphine. Potential models for this include higher reimbursements for improved addiction treatment outcomes and loan forgiveness programs for medical students who engage in buprenorphine prescribing.[33]

Prescription monitoring programs (PMPs) have had mixed results.[34] While these programs may decrease opioid prescribing,[35] they have not been found to decrease opioid overdose mortality.[34] This may be because PMPs are not designed to address many important underlying social and political forces known to play a role in addiction and drug overdose. In addition, PMPs may actually hurt people who use drugs by pushing individuals from the licit to the illicit drug market.[34] These dynamics must be addressed to mitigate morbidity and mortality, by broadening access to addiction treatment and improving harm reduction programs, including syringe service programs, non-prescription naloxone availability, and supervised opioid consumption sites across the country.

Finally, a comprehensive political strategy targeting the underlying risk factors for substance use and addiction are necessary. These include policies and programs that address poverty and discrimination, improve access to housing, provide opportunities for employment, and facilitate treatment for early exposure to physical and psychological trauma.

Each of these many recommended responses shares something in common: they recognize and address the important but under-recognized social and political forces that drive trends in opioid use and our medical and political responses to these trends. Any successful response to the current opioid crisis will address underlying biases, often based on racist and classist ideologies, as well as institutional discrimination. Implementing compassionate and effective responses to drug use will require an acknowledgement of this painful history which has been shaped by stigma and discrimination rather than science. It is crucial that we take active steps to address and repair the harms caused by these approaches and prevent these forces from further shaping our responses to opioid and other drug use in the USA.

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Authors' Contributions *Study concept and design: Dr. Fine and Dr. Wakeman. Acquisition, analysis, or interpretation of data: All authors. Drafting of the manuscript: Dr. Fine. Critical revision of the manuscript for important intellectual content: All authors.*

Funding Information *Dr. Fine receives funding support from an Institutional National Research Services Award (T32 2015D006913), the Ryiochi Sasakawa Fellowship Fund, and the Division of General Medicine at Massachusetts General Hospital.*

Compliance with Ethical Standards:

Conflict of Interest: *The authors declare that they do not have a conflict of interest.*

Disclaimer: *The funding sources had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.*

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