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Commentary

What would it really take to solve the overdose epidemic in the United States?

Bianca D. Rivera a, Samuel R. Friedman b,*

- a SUNY Downstate Health Sciences University School of Public Health, Brooklyn, NY, USA
- ^b Center for Opioid Epidemiology and Policy, Department of Population Health, NYU Grossman School of Medicine, USA

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The high overdose mortality rates in the United States poses several questions: Why have they been increasing exponentially since 1979? Why are they so high? And how can they be greatly reduced? Building on past research, the causes of the increase seem to be deeply rooted in US social and economic structures and processes, rather than due only to opioid prescription patterns or the advent of synthetic opioids. Given this, we consider what changes might be needed to reverse the exponentially-increasing overdose mortality. We use a path dependency argument to argue that the United States political, economic, and public health systems have helped create this crisis and, unfortunately, continue to heighten it. These same systems suggest that proposals to expand harm reduction and drug treatment capacity, to decriminalize or legalize drugs, or to re-industrialize the country sufficiently to reduce "communities of despair" will not be enacted at a scale sufficient to end the overdose crisis. We thus suggest that in the United States serious improvements in overdose rates and related policies and structures require massive social movements with a broad social change agenda.

Overdose mortality rates in the United States increased by more than ten-fold since a 1980 rate of 2.87 per 100,000 population (with 6100 total overdose deaths) to reach 32.6 per 100,000 population (107,941 total drug overdose deaths) in 2022 (Spencer et al., 2024). This fatal overdose rate is uniquely high, and US rates have been among the highest in high income countries for many years (Baumgartner et al., 2022). In this article, we make a path dependency argument that suggests that a series of actions, choices, and conditions that arose early in US history, and later actions that were taken, constrain the possible choices and actions that are available to resolve the overdose crisis. Specifically, we conclude that "normal politics" cannot resolve this crisis and that stopping the rise in overdose mortality will only be possible if mass social movements can change the political, economic, social, and cultural forces that underlie the exponential increase in fatal overdose.

The history of overdose mortality in the United States gives some insights into the problem. Many analysts have pointed to the huge increase in non-medical use of prescription opioids in the late 1990s as the basis for the overdose increase (Cerda et al., 2021; Understanding the Opioid Overdose Epidemic, 2023). They argue that when legal and other policies reduced access to prescription opioids, many people switched to heroin and other "street" opioids. Overdose mortality got another boost in about 2013 when increasing availability of fentanyl and other synthetic opioids with extremely high potency caused an additional spike in overdose mortality. In the last few years, mortality rates have increased among those using non-opioids, with some controversy over the extent to which these deaths were due to people using stimulants or other drugs also including fentanyl or other synthetic opioids sufficient to kill them (Ciccarone, 2021).

E-mail address: samuel.friedman@nyulangone.edu (S.R. Friedman).

^{*} Corresponding author.

On its face, this description might suggest that the reason for the large overdose epidemic in the US is the combination of loose regulation and corporate profit seeking that led to the increase in prescription opioid use. We argue in this paper that this interpretation both misinterprets the history and fails to answer the question of how the overdose epidemic can be ended. This description also oversimplifies the history, in part by neglecting the fact that overdose rates had been increasing before the upsurge in prescription opioid use. Jalal and colleagues in a series of articles have shown that national overdose mortality rates very closely fitted a curve showing an exponential increase from 1979 through 2020. This curve, representing deaths due to a time-and geographic-varying mélange of different drugs, thus suggests that this increase is the result of deeper causes (Burke & Jalal, 2022; Jalal et al., 2018, 2020; Jalal & Burke, 2022). As Jalal et al. phrased it in the first of these articles:

"Understanding the forces that are holding multiple subepidemics together into a smooth exponential trajectory may be important in revealing the root causes of the epidemic, and this understanding may be crucial to implementation of prevention and intervention strategies. Economic and technological "push" factors may be at work to increase supply, such as improved communications and supply chains, efficiencies in drug manufacturing, and expanding drug markets, leading to lower prices and higher drug purities (Mars et al., 2015; Unick et al., 2014). Sociological and psychological "pull" forces may be operative to accelerate demand, such as despair, loss of purpose, and dissolution of communities (Case & Deaton, 2017; Stein et al., 2017). Elucidation of the dynamics of the "deep" drivers of the overdose epidemic may provide valuable new insights." (Jalal et al., 2018)

A National Academy of Sciences report made a related point.

"While increased opioid prescribing for chronic pain has been a vector of the opioid epidemic, researchers agree that such structural factors as lack of economic opportunity, poor working conditions, and eroded social capital in depressed communities, accompanied by hopelessness and despair, are root causes of the misuse of opioids and other substances and [substance use disorders] SUD." (National Academies of Sciences et al., 2017)

Similarly, in an article reviewing the consistent increases demonstrated by Jalal et al., Wilson Compton of the US National Institute on Drug Abuse said, "This consistency suggests that broad-based factors are the fundamental drivers of the overdose epidemic, and thus broad-based interventions are likely needed to bend this menacing curve for good (Compton et al., 2022).

Recognizing that overdose deaths are caused by a variety of individual, socioeconomic, and cultural conditions at a variety of different geographic and social network scales, several researchers have developed socioecological models to understand this phenomenon (Cowan et al., 2021; Jalali et al., 2020; Park et al., 2020; Saloner et al., 2018). In keeping with Emile Durkheim's perspective that suicide (and other) rates are the result of social processes (Durkheim, 1897), and not simply

the sum of a number of actions by individuals, we do not focus on the predictors of individual overdose mortality. (Some socioecological models, such as that proposed by Krieger, do focus on rates rather than individual outcomes (Krieger, 2021)). Thus, this article addresses the deeper social causes of the massive increase in overdose mortality rates at a population level across different drug eras and geographic areas and despite time- and locality-varying policy approaches to drug use and drug-related harms. On this basis, we consider what needs to be changed to reverse it.

In doing this, we build on an earlier paper that analyzed the immediate causes of the growth of overdose mortality in the US since 1979 in terms of a "one-sided class war" (a quote from an autoworkers' union president who was also on the board of Chrysler Corporation) that devastated working-class lives and minority communities through what have come to be called neoliberal policies (Cerda et al., 2021; S. R. Friedman et al., 2020). These changes led to more hours of work for those who had jobs, with less government oversight of working conditions, and to immense psychological damage to people without jobs and to people who were unhoused or unstably housed. This pressure led to a widespread increase in the number of people with physical and psychic pain that opioids might relieve. It led to weakened government regulatory capacity, and to ideologies of individual problems rather than social ills being the source of pain, which made it easier for pharmaceutical companies to prescribe powerful prescription opioids. It also led to whole working-class communities undergoing cultural and social despair as jobs, schools, and religious institutions were undermined, and generations of youth had no clear paths to successful or even normatively adequate lives (Dasgupta et al., 2018; Ikeler, 2018; Sered, 2019).

Much of the literature on this issue has focused on working-class White communities, partially because of research by Case & Deaton showing that all-cause mortality among White, non-Hispanic, middle-aged men had increased markedly between 1999 and 2015 (Case & Deaton, 2015). They and others have argued that one major cause of this mortality was drug overdose. Many analyses have focused primarily on the prescription opioid crisis that developed out of pharmaceutical companies' deliberately marketing prescription painkillers to White populations (Hansen et al., 2023). However, similar community despair, heightened by the racism of police, schools and, welfare institutions, hit racially oppressed populations first and continues to do so (Friedman et al., 2022b; Hansen et al., 2023). As a result, many racialized youth and adults have engaged in risky drug use, historically shaping racial/ethnic variations in overdose mortality rates. Alexander and colleagues show that opioid mortality rates were higher for Black than for White people in the US from 1979 until the White-oriented prescription opioid campaign raised White rates above those for Blacks circa 2000 (Alexander et al., 2018). More recently, with the fading effects of that campaign and with the increases in openly expressed racism by high elected officials in the US, overdose rates for racially oppressed groups surpassed the still-high rates for Whites (Friedman et al., 2022a; Furr-Holden et al., 2021).

Additional sources for widespread individual and community despair should also be discussed. To some extent, these have grown worse since Friedman (2020) (S. R. Friedman et al., 2020). First, despair over the environmental crisis, particularly over climate change, is growing and may be strong among youth, including working-class and racialized minority youth, given that many of the ill effects of climate change hit them worse (Chowkwanyun, 2023; Deivanayagam et al., 2023; Motairek et al., 2023). Second, the resurgence of overt racial hatred and its political acceptance (and aggravation) by powerful political actors, together with the dysfunctionality and impasse of American politics as a way to address and solve the problems that create community and individual despair, in themselves also act to increase that despair.

Third, the COVID-19 pandemic increased feelings of hopelessness and social disconnection among tens of millions of people in the United States and increased elements of irrational belief among many. Notably, between 2019 and 2023, overdose rates increased greatly (+49 %)

¹ If opioid prescriptions were the primary cause of the increase in overdose mortality, there would be reason to hope that such mortality would go down due to restrictions on such prescribing. In this regard, we should note that the proportion of people taking up opioid use via prescribed opioid use has decreased greatly, from approximately 80% a decade ago to 43.3% in 2020 (*U. S. Opioid Dispensing Rate Maps*, 2022). Over time, as this cohort ages, quits drug use, or dies, the number of overdose deaths from this group will decrease, which will in itself tend to decrease overdose mortality. Unfortunately, this process will be limited to the extent that people initiate drug use with street drugs. Jalal & Burke (2020, 2022) find that overdose mortality in younger age cohorts is increasing rather than decreasing, which suggests both that community learning is not preventing overdose mortality and that the combination of increasingly toxic drug supplies and other socioecological forces are increasingly putting youth at risk (Burke & Jalal, 2022; Jalal et al., 2020).

(Chen & Shen, 2022), as did alcohol-related deaths (+25 %) (White et al., 2022) and suicide (+4 % after declining trends) ("Suicide Rates Rise, Spotlighting Pandemic's Mental Health Toll," 2022). It is unclear as of this writing whether COVID-19 will evolve into new socially- and personally-disruptive strains or whether another pathogen, such as influenza H5N1, will become a major pandemic. It seems likely that if this should occur, the US response would be even more dysfunctional than with COVID (COVID Crisis Group, 2023; S. Friedman, 2023; S. Friedman & Kay, 2023).

Countervailing programs—and their limitations

A number of programs or other changes have been proposed to reverse the overdose epidemic that are less sweeping than those we fear are needed. These include expanding and improving harm reduction and drug treatment programs; decriminalization or legalization of drug use; and reversing the economic trends that were one contributor to creating communities of despair. Although we support these changes, this paper argues that the nature of American politics makes it very unlikely that these changes will take place, at least on a scale large enough to reverse overdose mortality rates.

Many efforts to reduce overdose using harm reduction methods have been developed and seem to be effective at the individual level. These include medications for opioid use disorder such as methadone and buprenorphine programs, community-based distribution of naloxone, overdose prevention centers (OPCs)/Safe Injection Facilities, and Good Samaritan Laws. These approaches are often most successful when designed and implemented through working collaboratively with and listening to people who use drugs, including having them drive forward research to uncover new approaches (Cowan et al., 2021; Park et al., 2020; Simon et al., 2021).

Large-scale expansion of harm reduction programs might reduce overdose rates. It is undoubtedly true, for example, that naloxone distribution programs have led to many "reversals" of overdose and thus saved many individual lives. However, the effect of these programs on reducing mortality rates seems to be limited. For example, in neighboring British Columbia, Canada, harm reduction programs have prevented many fatal overdoses. Yet, overdose fatality rates have been increasing and were 43 per 100,000 in 2022 (Statistical Reports on Deaths in British Columbia - Province of British Columbia, 2024)—a number higher than the US average. What this suggests is that reversing overdose fatality rates would require a massive increase in programs such as drug treatment, Safer Injection Facilities, and naloxone programs (Humphreys et al., 2022).

Is the United States likely to expand harm reduction sufficiently to reverse overdose mortality significantly? The history of the US in implementing sterile syringe programs is discouraging, as is its having been glacially slow to accept Safer Injection Facilities, even though it has been reported that no one has ever fatally overdosed at one of these sites (Armbrecht et al., 2021) and that facility-neighborhood crime has not increased (Chalfin et al., 2023).

Decriminalization and legalization if conducted as successfully as in Portugal might prove a game-changer (Drug Decriminalization in Portugal: Learning from a Health & Human-Centered Approach, 2023), particularly if accompanied by measures to assure a safe drug supply. However, it seems unlikely that these changes will occur. The US continues to arrest approximately 1.6 million people for drug-related crimes each year (*Persons Arrested*, 2019). Although recent decriminalization laws in Oregon were promising (Davis et al., 2023; Joshi et al., 2023) and fueled in large part by the desire to end overdose deaths, they were reversed in 2024 in spite of news coverage stating that reversing decriminalization would exacerbate racial disparities. Even before this reversal, it seemed unlikely that many other states would decriminalize drug possession.

One trend that may make decriminalization less likely is the increasing proportion of opioid deaths among racialized minorities. This

may weaken the belief that overdose is a White problem—which in a racist country means that legislation to reduce drug-related harm is likely to become harder to pass (Hansen et al., 2023). Moreover, potentially effective policies are undercut by structural racism, as in the case of Good Samaritan Laws (Pamplin et al., 2023). In addition, there is some evidence that police may sabotage the implementation of such laws by finding other ways to punish PWUD (Smiley-McDonald et al., 2023). Furthermore, the United States, like much of the world, has seen a resurgence in overt organized racism, and historically, such racism has fueled wars on drugs. The only ways we can see to reverse it will involve massive social mobilization and deep social change.

A final potential countervailing process is economic. One source of despair has been the decline of industrial and mining employment and the wrecking of the communities where they were located (Case & Deaton, 2015; Ikeler, 2018; Sered, 2019). What if this process could be reversed? Both Trump and Biden have supported bringing manufacturing back to America, a goal reinforced by the disruption of supply chains by the COVID pandemic and the growing confrontation between the United States and China. Biden also supported an Industrial Recovery Plan to increase manufacturing, specifically "Green" industry, in the United States.

There are, unfortunately, serious reasons to doubt that these efforts will solve the economic problems that have helped to cause overdose. First, even if the steel industry could be brought back, increases in productivity mean that it would support far fewer jobs than it did before the Rust Belt. Second, hopes for an industrial policy or a Green New Deal depend upon US politics overcoming the deadlock and hostility that cut the Biden recovery plan to a fraction of its original size. Third, capitalism on a global scale has seen anemic growth since 2008, and there is little reason to expect this to change in the near future (Xing et al., 2021). This pattern of slow growth and limited reinvestment of profits into the "real economy" created deindustrialization in the first place. Finally, the "good jobs" that were lost in the 1980s and since were unionized jobs that had relatively good health care and other benefits—and widespread recreation of such jobs would require the kinds of mass struggle discussed below.

What might be needed?

As a preface to this section, we want to clarify that our argument is meant to apply primarily to the United States, where pathways to reduce overdose face challenging obstacles. We will leave others to discuss other countries. Here, the findings in Aziani & Caulkins are suggestive. They find a similar exponential pattern of increase in Northern Ireland, though at a much lower level (<10 per 100,000 population in 2020), and a less-clearly exponential but extremely rapid rise in overdose mortality in Scotland (approximately 24 per 100,000 in 2020). Lastly, they find slower and non-exponential rises in England or Wales. Northern Ireland and Scotland, like the United States, have sizable proportions of their populations who have felt national or other subordination by the UK/England and have engaged in various forms of struggle against this (Aziani & Caulkins, 2023). This suggests that the issues of racial/national or similar oppression and related struggles may be a factor beyond the United States, but we offer this only as a speculation.

The dynamics of drugs, overdose, and drug policy in the United States may only be those of one country, but they nonetheless have considerable international significance. The United States, due to its large though declining economic and cultural power, has had an outsize weight on drug policies, economic policies and even cultural patterns globally (Bartilow, 2019; Fordham, 2021; Ghiabi, 2019).

This paper focuses on the "far upstream" causes of overdose mortality rates at a population level. Since little research has addressed these issues in ways that tie them directly to overdose rates, we are basing our argument on historical analysis and studies of relationships among subsets of variables, processes, and structures we discuss. Underlying

some of our argument is an appreciation, but also a critique, of the observations of Antonio Gramsci in his *Prison Notebooks*: "The crisis consists precisely in the fact that the old is dying and the new cannot be born; in this interregnum a great variety of morbid symptoms appear." The great expansion of overdose deaths is one among many morbid symptoms at this moment.

We and others have argued that there are many probable causes of the large and increasing overdose mortality of the last 40+ years. These include deindustrialization, a regulatory context that subordinates human health to corporate profitability, a medical system that excludes many people from adequate care, community despair with many roots and forms, loneliness, resurgent racism, a Federal government too paralyzed to find solutions to major structural problems, a War on Drugs based on racist division, and a culture of individual blame ("personal responsibility") that feeds both self-blame and attacks on the dignity of those defined as "failures" or criminals (S. R. Friedman et al., 2021; Ikeler, 2018; Sered, 2019).

To address these will require wide-ranging political change. A critical issue is whether this can be accomplished through reform from above based on the workings of the political system and elites, or whether radical change powered by mass social movements is the only way change can occur. Our argument in this paper is that significant reform from above is not possible in the United States in the foreseeable future and thus, the root causes of the overdose crisis cannot be addressed successfully by anything other than mass disruption and reconstitution of the social order. At this point, we are making this argument only for the United States, based on a path-dependency argument that the US is faced with a situation in which everyday politics and modest social change cannot resolve the overdose (or many other) problems.

This is partly due to the nature of the American Constitution and the political-economic processes that both helped create it and shaped later change. Here, the theory of combined and uneven development is useful (Anievas & Nisancioglu, 2015). This theory holds that capitalism developed as a global process, and that late-comers learned from countries that developed capitalism earlier. For our purposes, it is important to see that the US political system developed as part of this process.

At the end of the Revolution that won political freedom of the former colonies from British rule, several years of conflict over the currency, the treatment of veterans and debtors, and many other issues took place. This included several instances of armed confrontation between "rebels" and state governments. The emerging elite classes saw this as an excess of democracy and created the US Constitution as a way to prevent the "evils of faction," that is, the success of the poor in ruling the wealthy (Research Guides, n.d.; Ovetz, 2022; Post, 2011). Although not all scholars agree with us, our interpretation of the language of the Federalist Papers (Federalist Papers, n.d.) that were written as part of the campaign to get the new Constitution accepted and of a vast literature written since is the following: The underlying logic of the Constitution was to create a wide range of checks and balances to preserve wealth and the control of government by the wealthy. These included a strong Executive Branch and a political system that would build on the great economic and social diversity of the country to prevent poor farmers, artisans, seamen, enslaved people, and other subaltern groups from uniting against the rich. The governmental structure, including one house of Congress with membership proportional to population and the other allocating two seats to each state regardless of population, and an electoral system based on majority votes (rather than proportional representation), was carefully designed to allow elites to pit different groups against each other to retain elite control (Research Guides, n.d.; Ovetz, 2022; Post, 2011; Young et al., 2020).

We will not present the history since then to show how varying combinations of structural and other upstream causes, together with elite initiatives, have arguably divided farmers from workers, cities against rural areas, slave states against free states, Blacks against Hispanics against American Indians against Asians and all of these against

Whites, different ethnic groups among Whites (and among Hispanics) against each other, men against women, the abled against those with disabilities, white-collar workers against blue-collar workers, private employees against public employees, and on and on. The result is that American politics seem to us to be dominated by the corporate rich and their allies (Domhoff, 2013; Gilens & Page, 2014; Young et al., 2020). This political system has long served to weaken challenges to corporate control and to coopt social movement challenges. For example, the two-party system seems to have induced antiracist and labor movements to be "realistic" by supporting Democrats as "lesser evils" rather than building a Labor or Socialist Party. Arguably as a result, the United States has not developed a national health program, programs against structural racism (rather than programs that "uplift" individual members of racialized groups), or a social environment in which community social ties are strong rather than torn asunder as described by Putnam, Sered, and Ikeler (Ikeler, 2018; Putnam, 2000; Sered, 2019).

Unfortunately, as we see it, the roots of the overdose epidemic are so deeply rooted in American social structure, culture and economics that the dysfunction of the American political system means that politics as usual will almost certainly not be able to reduce overdose rates without being forced to by mass social movements. Any program to solve this problem needs to address a number of deeply-embedded sociopolitical problems. These include the one-sided class war, the domination of regulatory agencies by corporations with support from the courts, the loneliness and alienation that are the reverse of the long-standing neighborliness of US communities (Klinenberg, 2018; Putnam, 2000), deindustrialization, resurgent racism, the quality of jobs that do get produced, and a climate crisis that is being ignored. The last time the American political system was able to tackle any problems remotely so deep was due to the large social movements of the late 1960s and early 1970s, and it did not do a good job of confronting the problems then—which is one reason that overdose mortality rates have risen ever

Thus, to answer the question raised by the title of this paper, what would it really take to end the overdose epidemic, we propose that mass social movements are needed that are larger, have more ability to learn, and are more socially rooted than those of the 1930s or the 1960s. Workers and the poor of all races, genders, and sexualities, public health activists, climate and other environmental health activists, and many others will have to find ways to work together and force the political system, the corporations, and the rich to change profoundly. Alternatively, the movements will have to find ways to uproot capitalism and the current state and to invent new and better ways to run human affairs.

There is no way to know if such movements can be built. There is also no way to know if such movements can succeed, given the strength of those against it and the social and cultural forces that operate to induce passivity or fatalism in the population.

On the other hand, without such a movement, it is not only the overdose epidemic that will continue. Overdose is a symptom of a profound crisis that threatens not only the United States but human cultural continuity and, perhaps, human survival.

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Bianca D. Rivera: Writing – review & editing, Writing – original draft, Supervision, Funding acquisition, Conceptualization. **Samuel R. Friedman:** Writing – review & editing, Writing – original draft, Supervision, Funding acquisition, Conceptualization.

Declaration of competing interest

There are no conflicts of interest.

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