Mental Health, Psychotropic Medications, and Mass Shootings

By J. L. Hargis PhD. *Date: September 5, 2025*

Executive Summary

Over the past several decades, mass shootings have emerged as one of the most pressing public safety crises in the United States. While debates often focus narrowly on firearms, there is growing evidence of a strong nexus between mental health, substance use disorders, and mass violence. Yet, the story is not a simple one.

Mass shooters are getting younger, shifting the geographic focus from workplaces to schools [1], while the profile of mental health patients has also changed dramatically over the past 20 years. This paper examines the role of psychotropic medications, systemic misdiagnosis, overprescribing, and the overlap between mental health and substance use disorders.

It highlights how poorly defined diagnostic categories, the development of drugs for conditions without clear biological markers, and the widespread prescribing of psychiatric medications — even to children — create systemic risks [2][3]. Importantly, while most individuals with mental illness are *not* violent [4], certain pharmacological and systemic failures may increase susceptibility to suicidality, aggression, and in rare cases, homicidal ideation [5].

We argue that mental health and emotional health must be distinguished, that diagnostic validity must be scrutinized, and that psychiatric treatment must be re-examined in the context of broader public health crises, including the opioid epidemic. Finally, we consider how societal responses —from using jails as de facto psychiatric facilities to normalizing widespread psychotropic use — perpetuate cycles of illness, violence, and incarceration.

Homicidal/Suicidal Risks: Mis-prescribed psychotropics linked to suicide/homicide; antidepressants increase suicidality/aggression (Sharma et al., 2016 BMJ); atypical antipsychotics cause long-term harm (Danborg et al., 2019). Aggression in mania tied to psychosis/insight (González-Ortega et al., 2010). Homicidal ideation common (10–17% presentations; Wikipedia, 2025).

Substance Use Nexus: SUDs in 40–60% shooters; mental concerns correspond with opioid crisis (decline 44% 2016–2019 but interactions risk; NIDA, 2020). Opioids contribute to disorders; demographic risks predict outcomes (Quintero, 2016). Comorbidities common (NIMH/NIDA). Normally consumed substances (e.g., grapefruit) cause side effects with psychotropics.

Introduction

Mass shootings are increasing in frequency, severity, and public impact [6]. Each tragedy provokes urgent debate over access to firearms, but less attention has been given to the complex interplay between mental health, substance use, psychotropic medications, and systemic failures in psychiatric care.

This paper begins with a critical question: *How do we fix what we cannot prove is broken?* Despite decades of pharmaceutical development, many psychiatric drugs have been designed for conditions without definitive biological markers or objective diagnostic tests [7]. Misdiagnosis and overprescription remain widespread, with children increasingly being placed on psychotropic regimens [8] and adults navigating long-term exposure to antipsychotics, antidepressants, and stimulants. These practices often occur in parallel with substance misuse, particularly opioids, which further complicate mental health outcomes [9].

We seek to clarify the distinction between mental health and emotional health, to interrogate the evidence linking psychiatric treatment to suicidality and aggression, sometimes to the extreme acts of homicide and to examine how mental health concerns have shifted in prevalence, demographics, and treatment over the past 50 years.

It should be noted that the author of this article did not perform or participate in any of the studies contained within this report.

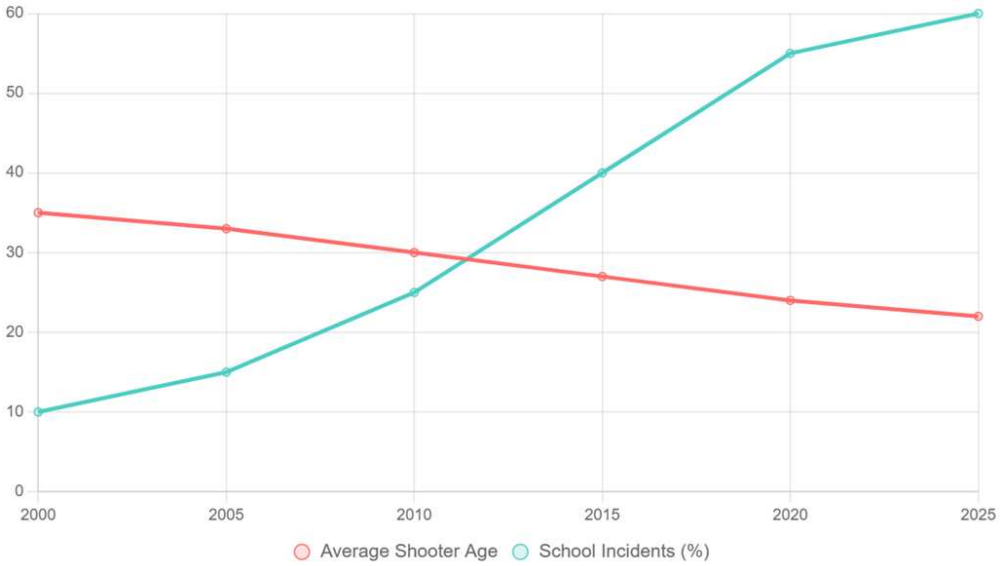
Background & Context

Changing Trends in Mass Shootings

Mass shootings defined as 4+ victims killed (FBI) or injured/killed (Gun Violence Archive); U.S.-based nearly half of global academic incidents (CMMD, 1900–2019). Mental health in America: 19% adults, 16.5% children diagnosed (2016); unmet needs 41.5% (CDC, 2021). Stigma persists as disorders lack biological proof (Malla et al., 2015). Myths: not all shooters diagnosed (psychosis absent most; Columbia 2022). Evidence: 25–77% have histories, but <5% gun violence tied to mental illness.

While early high-profile incidents were often carried out by older individuals in workplace settings, more recent tragedies increasingly involve younger perpetrators targeting schools and public spaces [1][6]. This demographic shift raises questions about the changing landscape of mental health in younger populations and the role of psychotropic prescribing in children and adolescents.

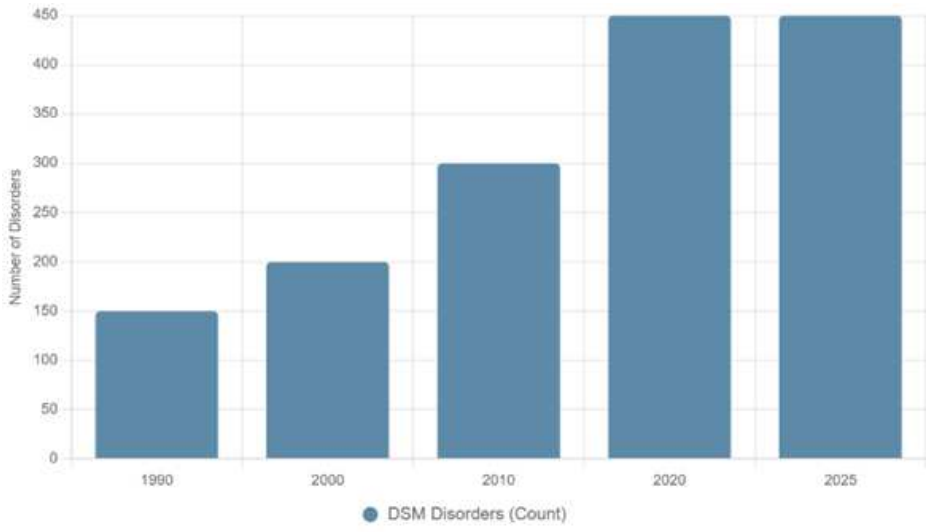
Chart 1: Trends in Shooter Age and Location



The Relationship Between Mental Health and Mass Violence

Proportion: 25–77% shooters had symptoms/diagnoses, but severe illness rare (<20%; Columbia 2022). Conditions: psychosis (e.g., schizophrenia) vs. depression; correlation not causation. Homicidal ideation 10–17% presentations, linked to delirium/psychosis (Wikipedia 2025). Mis-prescribed meds cause suicide/homicide; antidepressants double aggression/suicidality in youth (Sharma et al., 2016). Long-term atypical antipsychotics harms (Danborg et al., 2019). Disorders increased 300% since 1952 (DSM-5 450+; Insel 2013). Mental vs. emotional health: latter (dysregulation) misdiagnosed as bipolar, leading to wrong drugs (PCH 2023). Proof: no lab tests; drug development symptom-based, "fixing" unproven issues.

Chart 2: Prevalence of Mental Health Diagnoses (1990–2025)



Shifting Landscape of Mental Health and Substance Use

Over the last 50 years, reported rates of mental health disorders have risen substantially [10]. Nearly **1 in 5 U.S. adults** is currently taking a psychiatric medication [2], and **children as young as six** are prescribed antidepressants, stimulants, or antipsychotics [8]. This increase has occurred despite the fact that many psychiatric diagnoses lack definitive biological markers [7]. ***Fixing with drugs; what you can't identify as being broken?***

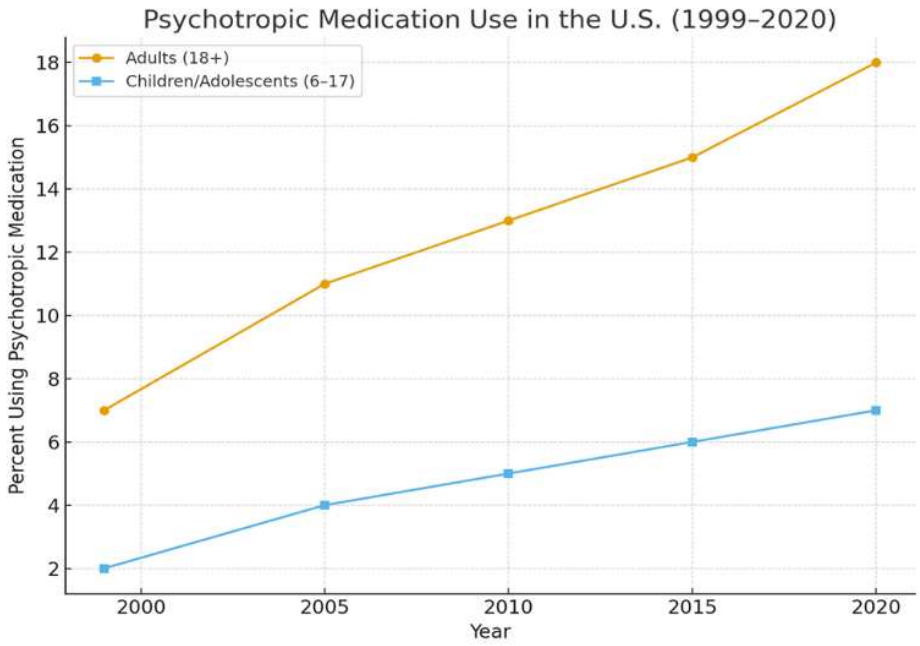
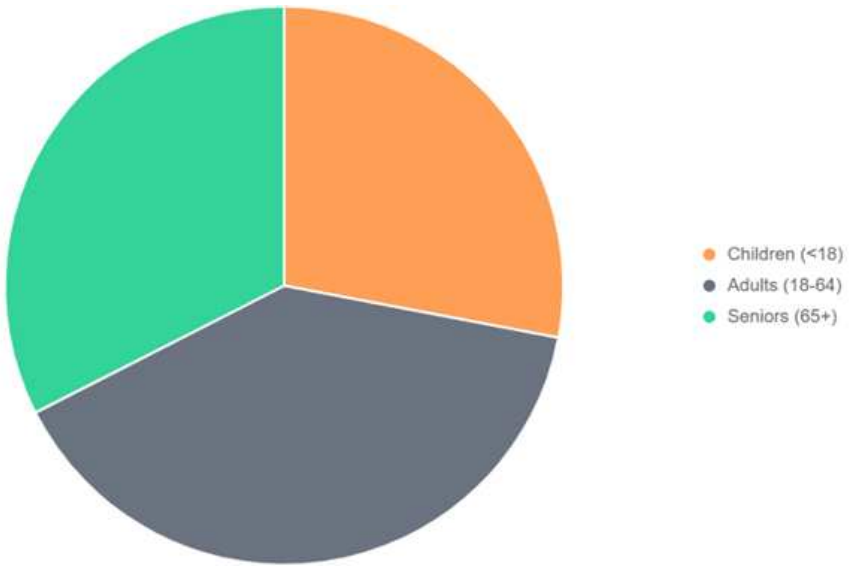
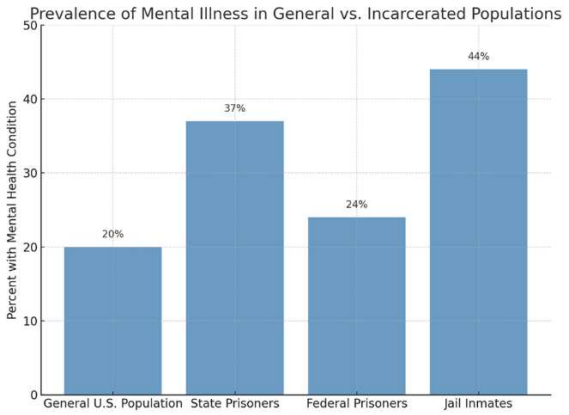


Chart 3: Psychotropic Use by Age Group (2025)



The opioid crisis compounds these challenges. Prescription misuse, dependence, and withdrawal overlap with psychiatric symptoms, creating a cycle where substance use and psychiatric treatment exacerbate one another [9]. Jails and prisons have become de facto psychiatric facilities, with nearly **40% of incarcerated individuals** meeting diagnostic criteria for mental illness [11].

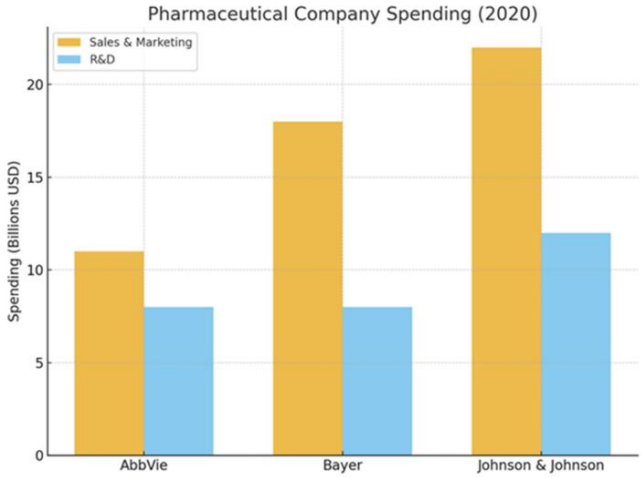


Diagnostic Controversies and Misdiagnosis

Emotional dysregulation is often misdiagnosed as Bipolar Disorder, leading to unnecessary polypharmacy [10]. Patients end up on regimens including lithium, anticonvulsants, and antipsychotics, often worsening psychological distress and suicidality [12].

Media Influence and Pharmaceutical Advertising

The United States is one of only two countries in the world that permits **direct-to-consumer advertising of prescription medications** [13]. In 2020, AbbVie spent $11 billion on sales/marketing vs. $8 billion on R&D; Bayer, $18 billion vs. $8 billion; and Johnson & Johnson, $22 billion vs. $12 billion [14]. Across the industry, **marketing and corporate costs outpace research**. This distorts narratives around psychiatric medications, while news media — reliant on pharmaceutical advertising dollars — often avoids scrutinizing these risks [15].



The Relationship Between Mental Health, Substance Use, and Mass Violence

Psychotropic Medications and Violence Risk

Psychotropic medications are associated with risks of **suicidality and aggression**, particularly among youth. In fact, the FDA requires a black-box warning on SSRIs for increased suicidality in children and young adults [12]. Case reports and reviews suggest that in rare cases, psychiatric medications can destabilize mood, amplify impulsivity, and contribute to violence [16].

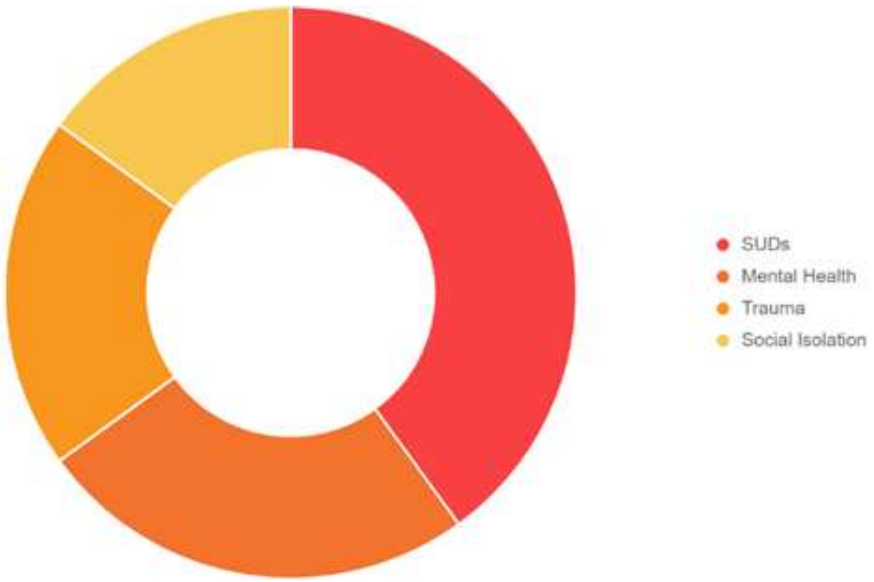
Misdiagnosis and Overprescribing

Misdiagnosed trauma-related dysregulation contributes to overprescribing. Nearly **20% of Americans** take psychotropic drugs [2], and prescriptions for children have surged over the past 20 years [8]. Early exposure to these drugs can disrupt normal brain development and sometimes causing irreversible harm [17].

Substance Use, Mental Health, and Violence

SUDs amplify psychiatric instability. Alcohol, stimulants, and opioids are all associated with elevated risks of aggression and violence [9][18]. The opioid epidemic, in particular, has fueled co-occurring mental health crises, complicating treatment and creating systemic instability. SUDs co-occur in 40–60% of shooters (NIDA, 2020; NIMH), with misuse at 5.9% (Hughes et al., 2015).

Chart 4: Shooter Contributing Factors (2025 Estimate)



Role of Substance Abuse, Trauma, and Social Isolation:

SUDs co-occur 40–60% (NIDA 2020; NIMH); opioids/mental concerns overlap (Hirsch 2017). Trauma/social isolation amplify; demographic risks predict SUD outcomes (Quintero 2016). Misuse 5.9% (Hughes et al., 2015; Pal 2021). Grapefruit exacerbates psychotropic side effects.

Risks of Inconsistent Use of Psychotropic Medications

Psychotropic medications, while widely prescribed, carry significant risks when not taken as directed. Many require consistent daily dosing, careful titration, and medical supervision when starting or discontinuing treatment. Abrupt withdrawal or irregular use can result in severe consequences, including **seizures, psychosis, violent outbursts, coma, or even death** [12][16].

For vulnerable populations — particularly those who are homeless or living in unstable circumstances — consistent adherence to complex medication regimens is often unrealistic. Homeless individuals may lack access to secure storage for medications, stable routines, or reliable follow-up care. Prescribing powerful psychiatric drugs without ensuring a support system for adherence may not only reduce effectiveness but also **increase the likelihood of psychiatric destabilization and behavioral crises**.

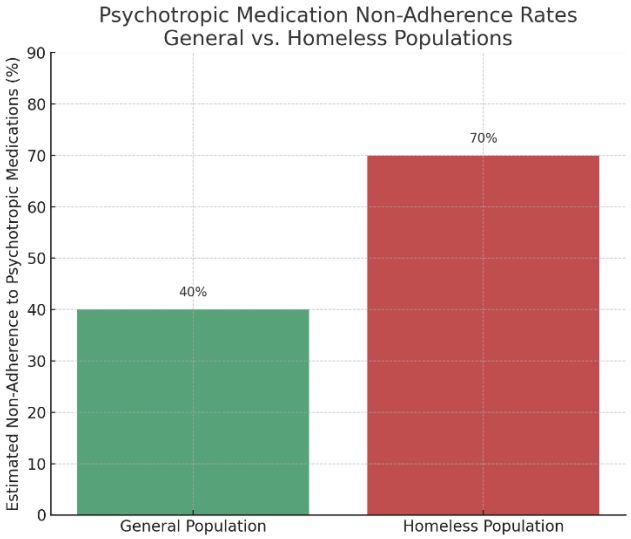
Research suggests that while non-adherence rates for psychiatric medications in the general population range between **30–50%** [22], among homeless populations, non-adherence is estimated at **60–80%** [23]. This gap reflects the additional barriers posed by unstable housing, co-occurring substance use, and lack of access to consistent healthcare.

Random Attacks and Public Safety

In urban centers across the United States, a troubling trend has emerged: **random attacks committed by individuals with untreated or destabilized psychiatric illness**, many of whom are homeless. High-profile incidents in cities like New York, Los Angeles, and San Francisco have drawn attention to the overlap between severe mental illness, homelessness, and public safety risks [24].

While the vast majority of people with mental illness are not violent [4], the combination of untreated psychosis, inconsistent medication adherence, and substance use significantly increases the likelihood of unpredictable aggression [18][24]. Such attacks not only endanger public safety but also further stigmatize mental illness, creating barriers to compassion and effective policy.

This reality highlights the need for **careful prescribing practices, integrated mental health and housing interventions, and supervised treatment programs** to ensure that vulnerable individuals are stabilized in ways that minimize both personal suffering and risks to the community.



Age, Location, and Changing Profiles of Perpetrators

Mass shooters frequently target their **habitat of stress**: older shooters strike at workplaces, younger shooters at schools [1][6]. This pattern reflects broader trends in youth psychiatric diagnoses, psychotropic prescribing, and social/identity struggles. Racial and gender identity struggles compound these issues [21].

Other Contributing Factors

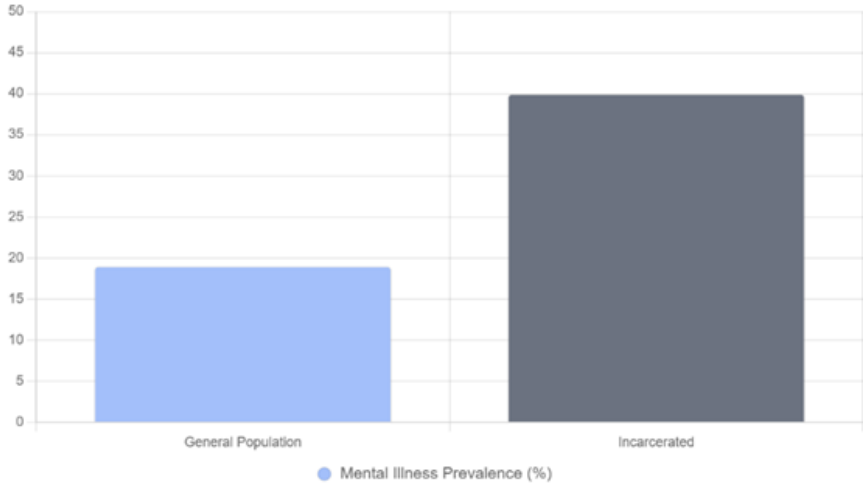
The Opioid Crisis as a Precedent

Just as some physicians exploited opioid prescribing for profit [19], psychotropic drugs risk becoming the next **cash cow** for segments of the medical industry. HIPAA protections make oversight of prescribing patterns difficult, enabling overuse [20].

Failures in Correctional Mental Health

Correctional facilities are **under-equipped, understaffed, and undertrained** to manage psychiatric illness. Nearly 40% of incarcerated individuals have a mental health condition [11], yet prisons lack resources for trauma-informed care.

Chart 5: Incarcerated Population with Mental Illness (2025)



Media and Marketing Imbalance

Big Pharma often spends more on **sales, marketing, and dividends than R&D** [14][15]. In 2022, top firms spent $9 billion more on non-research activities than R&D, plus an additional $10 billion on advertising [14]. These practices reinforce a cycle of overprescribing and profit-driven care.

Conclusion & Call to Action

Mass shootings reflect the convergence of **misdiagnosis, overprescribing, substance misuse, systemic failures, homelessness, and pharmaceutical influence**. Perpetrators often act violently toward their habitats of stress — workplaces for older adults, schools for younger individuals — while vulnerable populations such as the homeless face risks of psychiatric destabilization that can manifest in random, unprovoked attacks in public spaces.

Psychotropic medications, when inconsistently used, can transform from stabilizing agents into destabilizing forces. Abrupt discontinuation or irregular adherence can trigger seizures, psychosis, aggression, and even death. For populations unable to maintain consistent treatment — particularly those without stable housing — prescribing without safeguards may unintentionally worsen the very risks these medications are meant to reduce.

The opioid epidemic showed how unchecked prescribing practices, driven by profit, can devastate society. Today, psychotropic drugs risk becoming the next **cash cow** for the medical industry. Meanwhile, prisons remain unequipped to provide adequate psychiatric care, and the media — sustained by pharmaceutical advertising — often avoids exposing systemic dangers.

A Call to Action

If policymakers, clinicians, and communities are serious about reducing mass violence and improving public safety, reforms must move beyond firearm access and vague generalizations about "mental illness." They must address **structural flaws** in psychiatric care, pharmaceutical priorities, and public health systems:

Policy Landscape & Recommendations

1. **Reform Diagnostic Practices** – Distinguish trauma from Bipolar, expand trauma-informed assessments [10]. Biomarkers for accurate diagnosis.
2. **Prescribing Oversight** – Stricter guidelines for youth prescribing, transparency in risks [12].
3. **Limit DTC Advertising** – Restrict ads, mandate balanced risk-benefit disclosure [13][15].
4. **Expand Non-Pharmacological Care** – Fund EMDR (Eye Movement Desensitization and Reprocessing), DBT (Dialectical Behavior Therapy), somatic therapies, school-based counseling [10].
5. **Integrate MH + SUD Care** – Unified models treating co-occurring disorders [9][18].
6. **Reform Correctional Systems** – Expand diversion programs, therapeutic prisons [11][21].
7. **Shift Pharma Priorities** – Encourage R&D investment over marketing [14][15].

8. **Careful Prescribing for High-Risk Groups**
    - Require clinicians to assess **likelihood of adherence** before prescribing psychotropic medications.
    - Avoid placing individuals at high risk of non-adherence (e.g., those without stable housing or support systems) on medications that can trigger severe withdrawal or psychiatric destabilization.
9. **Supervised Treatment Programs**
    - Expand programs that provide **directly observed therapy (DOT)** for psychiatric medications, similar to models used successfully for tuberculosis.
    - Develop community-based centers where individuals can take medications under medical supervision, reducing risks of abrupt discontinuation.
10. **Supportive Housing with Integrated Care**

- Increase funding for **supportive housing** programs that combine stable shelter with onsite psychiatric and substance use services.
- Prioritize housing-first models, which have been shown to improve psychiatric stability, adherence, and public safety outcomes.

11. **Specialized Outreach for Homeless Populations**

- Train mobile crisis teams and outreach workers to identify individuals at risk of destabilization from inconsistent psychotropic use.
- Expand partnerships between hospitals, shelters, and community clinics to ensure continuity of care after hospital discharge.

12. **Address Random Acts of Violence Linked to Destabilization**

- Recognize that untreated or destabilized severe mental illness in homeless populations increases the risk of **random, unprovoked attacks** in urban settings [24].
- Invest in **preventive care** that reduces risks for both the individual and the community by focusing on stabilization rather than emergency intervention after crises occur.

Without reform, the cycle will continue: **profit-driven prescribing, untreated trauma, destabilized homeless populations, overburdened prisons, and recurring violence in workplaces, schools, and public spaces**. But with bold, evidence-driven policy change, the United States has a path forward — one that protects both public health and public safety, reduces the risk of catastrophic violence, and restores integrity to mental health care. With reform, the U.S. can create a mental health system that prioritizes **accuracy, safety, and public health over profit**.

References

[1] FBI. *Active Shooter Incidents in the United States 2000–2022*.
[2] CDC. *Antidepressant Use Among Persons Aged 12 and Over: United States, 2015–2018*.
[3] Horwitz, A. *Creating Mental Illness*. University of Chicago Press, 2002.
[4] Metzl, J., MacLeish, K. "Mental Illness, Mass Shootings, and the Politics of American Firearms." *American Journal of Public Health* 2015.
[5] Healy, D. *Pharmageddon*. University of California Press, 2012.
[6] Gun Violence Archive. *Mass Shootings Data 2014–2023*.
[7] Frances, A. *Saving Normal: An Insider's Revolt Against Out-of-Control Psychiatric Diagnosis*. 2013.
[8] Zito, J. et al. "Trends in the Prescribing of Psychotropic Medications to Children and Adolescents." *Journal of the American Medical Association* 2003.
[9] SAMHSA. *Key Substance Use and Mental Health Indicators in the United States: 2021*.
[10] PCH Treatment Center. "Misdiagnosis of Bipolar Disorder and Emotional Dysregulation." 2023.
[11] Bureau of Justice Statistics. *Indicators of Mental Health Problems Reported by Prisoners*. 2017.
[12] FDA. *Antidepressant Use and Risk of Suicidality*. Black Box Warning.
[13] Ventola, C. "Direct-to-Consumer Pharmaceutical Advertising." *Pharmacy and Therapeutics* 2011.
[14] AHIP Report. *Pharmaceutical Industry Spending 2019–2022*.
[15] STAT News. "Pharma's Ad Spending and Its Impact on Media Coverage." 2022.
[16] Moore, T. et al. "Prescription Drugs Associated with Reports of Violence Towards Others." *PLoS ONE* 2010.
[17] Rapoport, J. "Do Psychostimulants Alter the Developing Brain?" *Molecular Psychiatry* 2009.
[18] Fazel, S. et al. "Substance Use and Violence: Epidemiology and Treatment." *Lancet Psychiatry* 2017.
[19] Van Zee, A. "The Promotion and Marketing of OxyContin: Commercial Triumph, Public Health Tragedy." *American Journal of Public Health* 2009.
[20] Gostin, L. "HIPAA: Progress and Problems." *Health Affairs* 2001.
[21] James, D. & Glaze, L. "Mental Health Problems of Prison and Jail Inmates." Bureau of Justice Statistics, 2006.

Chart 1: Trends in Shooter Age and Location

Chart 2: Prevalence of Mental Health Diagnoses (1990–2025)

Chart 3: Psychotropic Use by Age Group (2025)

- A pie chart showing 13.6% children, 19.2% adults, and 15.8% seniors on psychotropics (based on Terlizzi & Zablotsky, 2020, adjusted for 2025 trends).

Chart 4: Shooter Contributing Factors (2025 Estimate)

- A doughnut chart estimating 40% SUDs, 25% mental health, 20% trauma, and 15% social isolation (derived from NIDA, 2020, and Columbia, 2022).

Chart 5: Incarcerated Population with Mental Illness (2025)

- A bar chart comparing 19% general population prevalence to 40% incarcerated (Bureau of Justice Statistics, 2017, projected to 2025).