David Puder, M.D., Michael Cummings, M.D.



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In this short episode of The Psychiatry and Psychotherapy Podcast, I interview Dr. Cummings, a forensic psychiatrist, on the topic of the correlation of mental illness and violent crime, and what causes violent crime. I start out with reviewing some studies and then subsequently interview Dr. Cummings, a leading psychiatrist at one of the largest forensic psychiatric jails in the United States. We discuss his thoughts, and below I summarize our conversation.

Recently I posted a video on <u>TikTok of my biggest pet peeve</u> (or one of them) as a psychiatrist—that the mentally ill in the media are often blamed for violence. This is something that increases stigma towards this already marginalized population.

Here are a couple of the critical remarks I got about this post:

- I'm Not gonna vitis cuz I'm pretty sure a mass shooter has Metal Health issues that have gone undiagnosed!! But they got em!!
- I like to believe everyone suffers from mental health issues. The difference is how we cope and if it's diagnosed. I know many not diagnosed
- I think those numbers might be reversed, bud.
- Not buyin it 🤨
- And how does that make you feel? Do you think it reflects the relationship with your father? Which is why you mask your pet peeve w/ statistics? .
- horseshit
- So what do you claim the 95 percent do it for then? Just because they were bored? 🙄
- so that means violence is SANE.. 😨 😨 😨

I wanted to have a short episode to present data that demonstrates that the mentally ill are actually rather non-violent. In fact, if all the mental illness diseases were to disappear, (major depression, bipolar, schizophrenia) the rate of violence would not drop much, likely only 5%.

That means that 95% of violent crimes are committed by people who have other motivations for hurting someone.

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First of all, there is a common belief among the public that mental illness causes violence.

- One study of 1,444 people showed: "Respondents rated the following groups as very or somewhat likely of doing something violent to others: drug dependence (87.3%), alcohol dependence (70.9%), schizophrenia (60.9%), major depression (33.3%), and troubled (16.8%)." (<u>Stuart, 2003</u>)
- Another study showed 46% of people surveyed said that those with mental illness were far more dangerous than the general population. (<u>Swanson, 2015</u>)

Secondly, we know that people with mental illness are more likely to be victims of violence:

- "In a study of current victimization among inpatients, for example, 63% of those with a dating partner reported physical victimization in the previous year." (<u>Stuart, 2003</u>)
- "A recent study of criminal victimization of persons with severe mental illness showed that 8.2% were criminally victimized over a four month period, much higher than the annual rate of violent victimization of 3.1 for the general population." (<u>Stuart, 2003</u>)

Thirdly, various studies show that only 5% of violent acts can be attributable from a mental illness.

- The MacArthur Violence Risk Assessment Study followed 1,136 people with good controls (comparing those with mental illness with their neighbors), of those who had mental illness, but did not abuse substances, and the rate of violence was indistinguishable from their non-substance abusing neighbors. Substance abuse doubled the risk. (Stuart, 2003)
- Another study showed that in a general population, the attributable risk (the overall effect a factor has on a level of violence in a population) was 4.3% for major mental illness, 34% for substance abuse, and 5% for comorbid mental illness and substance abuse.
 (Stuart, 2003)
- In a Canadian study of 1,151 newly detained criminals, only 3% of the crimes were attributable to mental disorders such as schizophrenia or depression. (<u>Stuart, 2003</u>)

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Now looking specifically at different diagnoses in particular, it is helpful to note that without substance abuse, the odds rate is significantly lower.

Schizophrenia

• A meta analysis on schizophrenia showed a much lower rate of violence in those without substance abuse (OR 2.1), compared to those with substance abuse (OR 8.9) (see the graphs below). (Fazel 2009)

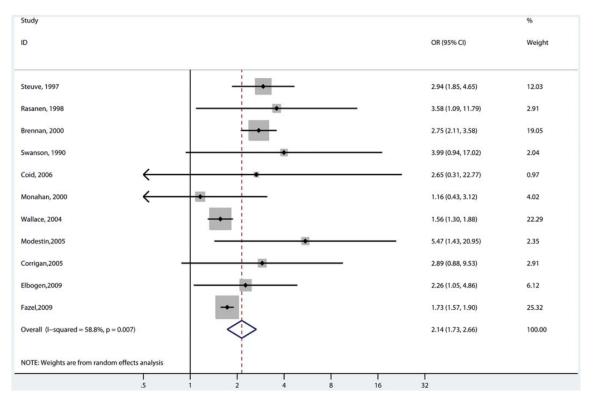


Figure 2. Risk estimates for violence in schizophrenia and other psychoses with no substance abuse comorbidity. doi:10.1371/journal.pmed.1000120.g002

Episode 072: How Much Violence Is Due To

Mental Illness?

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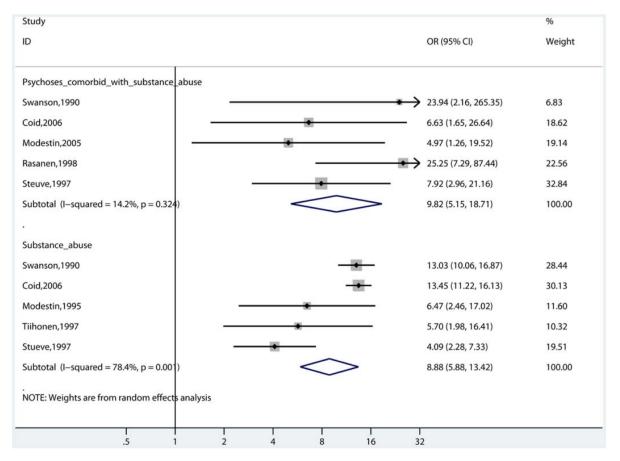


Figure 7. Risk estimates for violence in men with schizophrenia comorbid with substance abuse compared with risk in men with substance abuse (without psychosis) reported in the same study. doi:10.1371/journal.pmed.1000120.g007

• Dr. Cummings mentioned that studies have shown that those with persecutory beliefs (when they think others are trying to harm them) they have about 10 times the violence rate of people without mental illness. While the public opinion magnifies this, we are actually talking about a tiny group of people.

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Intellectually handicapped

 "Intellectually handicapped men were three times more likely to offend than men with no disorder or handicap and five times more likely to commit a violent offense. Intellectually handicapped women were almost four times more likely to offend than women with no disorder or handicap, and 25 times more likely to commit a violent offense."(Hodgins. 1992).

Bipolar Disorder

• In a study of patients with bipolar disorder, those who used substances had an odds ratio of 6.4 for committing violent crimes, whereas for those without substance use, the odds ratio was only 1.3. The odds ratio was less if you compared those with bipolar to their siblings (1.1). (Fazel. 2010)

Traumatic Brain Injury and Violence

"In a Swedish study involving 22,914 patients, among the traumatic brain injury cases, 2,011 individuals (8.8%) committed violent crime after diagnosis, which, compared with population controls (n = 229,118), corresponded to a substantially increased risk (adjusted odds ratio [aOR] = 3.3, 95% CI: 3.1–3.5); this risk was attenuated when cases were compared with unaffected siblings (aOR=2.0, 1.8–2.3)." (Fazel, 2011)

Substance Use Disorders

• The table below comes from a study that looked at a large amount of people and the different substances they used, and how much of a population attributable risk they had for violent crime. (<u>Grann 2004</u>)



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Population attributable risk (PAR) and population attributable risk fraction (PAF) of patients with substance misuse to violent crime in Sweden 1988-2000

| | No people admitted to hospital | No crimes committed by non-patients | No crimes committed by patients | r* | <i>r</i> ₀ * | <i>r</i> 1* | PAR | PAF (%) |
|-------------------------|--------------------------------------|---|---------------------------------------|------|-------------------------|-------------|------|---------|
| | | | | | | | | |
| Principal diagnosis: | | | | | | | | |
| Misuse of any substance | 127 789 | 244 168 | 80 215 | 48.2 | 37.0 | 627.7 | 11.2 | 23.3 |
| Alcohol misuse | 105 918 | 267 558 | 56 825 | 48.2 | 40.4 | 536.5 | 7.8 | 16.2 |
| Drug misuse | 38 228 | 265 565 | 58 818 | 48.2 | 42.6 | 1318.0 | 5.6 | 11.6 |
| Drug misuse: | | | | | | | | |
| Opiates | 6 167 | 316 091 | 8 292 | 48.2 | 47.0 | 1344.6 | 1.2 | 2.5 |
| Cannabis | 3 118 | 318 679 | 5 704 | 48.2 | 47.4 | 1829.4 | 0.8 | 1.7 |
| Sedatives | 5 004 | 321 676 | 2 707 | 48.2 | 47.9 | 541.0 | 0.4 | 0.8 |
| Cocaine | 196 | 323 992 | 391 | 48.2 | 48.2 | 1994.9 | 0.1 | 0.1 |
| Amphetamines | 5 523 | 313 049 | 11 334 | 48.2 | 46.6 | 2052.1 | 1.6 | 3.4 |
| Hallucinogens | 293 | 323 921 | 462 | 48.2 | 48.2 | 1576.8 | 0.1 | 0.1 |
| Solvents | 368 | 323 791 | 592 | 48.2 | 48.2 | 1608.7 | 0.1 | 0.2 |
| Poly-drug misuse | 13 413 | 303 446 | 20 937 | 48.2 | 45.2 | 1560.9 | 3.0 | 6.3 |
| Drug induced psychosis | 4 146 | 315 984 | 8 399 | 48.2 | 47.0 | 2025.8 | 1.2 | 2.5 |

**r* is the number of violent crimes per 1000 individuals in the whole population over the study period, r_0 is the number of violent crimes per 1000 among individuals not hospitalised for substance misuse, and r_1 is the number of violent crimes per 1000 hospitalised patients with substance misuse. Calculations accounted for all admissions. Individuals admitted on several occasions receiving different diagnoses were counted in relevant diagnostic categories. The population attributable risk PAR=*r*- r_0 and population attributable risk fraction PAF=PAR/*r*.

• Substance use disorder is a leavening agent for mental illness and violence. If someone has a serious mental illness, and is prone to substance use, it increases their risk of violence. What's also worth noting, however, is that people without mental illness also have increased risk of violent acts when abusing, or even using, substances.

Personality Disorders

• A study looking at the increased rate of personality disorder found that having a personality disorder increased the odds of violence 3 times, whereas those with Antisocial Personality Disorder had an increased odds of 12.8 (Yu, 2012)

Antisocial personality disorder

A fair number of people who commit violent crimes would fit the description for the DSM description of antisocial personality disorder. This definition is approached purely on behavioral terms, without the intrapsychic understanding of the characteristics of psychopathy. In prison,

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 $\frac{2}{3}-\frac{3}{4}$ would meet the criteria for APD, whereas those that meet the definition of true psychopathy, as determined by the psychopathy checklist (PCLR) revised score of >30, only $\frac{1}{3}$ of the antisocial people that meet that level. Psychopaths are a much smaller group than those that would be considered as having APD.

As a general critique of APD, it does not consider the environment in which the person exists—in some neighborhoods and social situations, if you had no capacity for antisocial behavior, your long term survival would not be good.

Mass Shootings and Mental Illness

Many ascribe mass shootings to mental illness. People such as those who commit crimes like school shootings appear to be isolated, marginalized individuals, who may then take on a program of self radicalization and are enamored by violent themes.

Looking at the data on serotonin, we've noticed that an acute deficit is associated with violent and impulsive behavior. The medication prescriptions of mass shooters have not been looked at. Although SSRIs are commonly prescribed, people then turn around and blame the medication for violent behavior. According to Dr. Cummings, this is like blaming tombstones for the death of people. There is correlation without causation.

We don't know much about mass shooters other than the broad strokes, but looking at their reasons can point to why they'd commit such violent crimes. The mass shooter in Vegas left no records of why he committed the crime. The Virginia shootings were committed by a disgruntled city employee. In San Bernardino where I live, we had a mass shooting, committed by a pair radicalized to Islam. The motivations behind mass violence vary greatly from case to case, but might be worthy of a deep dive in a future episode!

Why are these happening? Are people having more mental illnesses? One psychological effect is emotional contagion and the power of copycat behavior. As far as mass shootings go (defined as 4 or more victims) the more it occurs, the more it has a normalizing effect, so it becomes an option to express distress (especially if it launches you from being unheard to being watched by millions of people).

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What does contribute to violent behavior?

When people feel hopeless about their behavior and outlook on

life, turning to violence may be an outcome. Gangs are another major contributor to violence. Domestic disputes are ripe for violent behavior. Over time there has been an increased polarization, marginalization, so there are large scale social issues, driving more unhappiness and frustration.

In conclusion

I would encourage people to not get caught up reading just any article on the internet about violence and violent crime. Often, the sources are incorrect and they are merely written to frighten people and sell news. If you want to learn about what causes violence, maybe start by digging in deeper to some of the citations in this article.