# Psychiatric Drugs, Violence, and Mass Shooting Homicides 1999 to present.

A white paper for Discussion by David Millar 2/2018

#### Abstract

## **Context**

Psychiatric drugs are rarely studied for adverse events linking them to violence, homicide and mass shootings.

# Objective

To show correlation between psychiatric drug adverse events, reporting, and the evidence supporting a need for further in-depth research.

# Methodology

Review past research and reporting.

## **Main Outcome Measures**

Homicide is disproportionally high to the number of acts of violence reported and adverse events are grossly under reported.

# **Results**

6.4% of psychiatric drugs were reported to disproportionally cause 791 cases of violence, 387 homicides and 404 assaults, during a 5.75-year study<sup>1</sup>.

# **Conclusions**

Further study, research and improvements in reporting of adverse effects are needed to reduce mass homicides.

Prescription Drugs Associated with Reports of Violence Towards Others
Thomas J. Moore, Joseph Glenmullen, Curt D. Furberg

#### Introduction

Despite limited studies, many psychiatric drugs contain warnings about the drugs causing thoughts of violence. Despite these warnings, and the extra vigilance that should be required when prescribing these drugs, the adverse effect reporting system is underutilized 94% of the time<sup>2</sup>.

## Methods

Reviewing studies, research, reports and scholarly articles on violence, and mass shooting homicides. The FBI defines mass shootings as any non-gang related shooting where 4 or more people are wounded or killed. This paper is solely focused on mass homicide shootings where 5 or more victims have been killed.

# **Results**

The homicides and assaults reported in the 5.75 year study<sup>1</sup> showed that the ratio was 1:1.1 homicides to assaults. The 2016 FBI Uniform Crime Report the ratio is 1:46.6 for the general population. The other issue is the results of the under-reporting. Extrapolating the 67.3 homicides per year in the study<sup>1</sup> to reflect median under-reporting<sup>2</sup>, the number is 1122 homicides per year table 1. This would be equal to 6.8% of yearly homicides, 2004 - 2009, in the U.S.

Yearly average reported homicides	Under- reporting High	Under- reporting Median	Under- reporting Low
67.3	3365	1122	374
Table 1			

In table 2 below, it shows 37 mass shooting events, 39 shooters, from 1999 to present with 5 or more homicides.

81.1%, 30/37, appear to be attributable to mental illness, 67%, 20/30, of these appear to be attributable to known or treated mental illness.

10.8%, 4/37, involved terrorism.

8.1% 3 are workplace violence or no known motive

<sup>&</sup>lt;sup>2</sup> Under-reporting of adverse drug reactions : a systematic review.

Mass shooter	Psych meds	Type of drug or illness	Terrorism	Gender	Race	Age	Dead
Eric Harris	Yes	Fluvoxamine	No	М	С	18	13
Dylan Klebold	Yes	Paroxetine, Sertraline	No	М	С	17	13
Mark O. Barton	Yes*	Unknown	No	М	С	44	9
Byran Koji Uyesugi	Likely*	Delusional disorder and paranoia,	No	М	Α	40	7
Michael McDermott	No		No	М	С	42	7
Douglas Williams	No	Reported untreated depression	No	М	С	48	6
Jeffery Weise	Yes	Fluoxetine	No	М	NA	16	9
Jennifer San Marco	Likely*	Unknown	No	F	С	44	7
Charles Carl Roberts	No	Pedophilia	No	М	С	32	5
Sulejman Talovic	No	Unknown	Unknown	М	С	18	5
Seung-Hui Cho	Likely*	Unknown	No	М	Α	23	32
Robert Hawkins	Yes*	Unknown	No	М	С	19	8
Steven Kazmierczak	Reportedly**	Unknown	No	М	С	27	5
Jiverly Wong	No	Untreated Paranoia	No	М	Α	41	13
Nidal Malik Hasan	No		Yes	М	ME	39	13
Michael McLendon	No	Untreated Depression	No	М	С	28	10
Omar Thornton	No	Workplace violence, fired for theft	No	М	AA	34	8
Jared Lee Loughner	No	Untreated Paranoid schizophrenia*****	No	М	С	22	6
Scott Dekraai	Yes	Unknown for Bi-polar disorder	No	М	С	41	8
One L. Goh	No	Untreated Paranoid schizophrenia	No	М	Α	43	7
James Holmes	Yes	Sertraline, Clonazepam	No	М	С	24	12
Wade Michael Page	No	Untreated mental illness	No	М	С	40	6
Andrew Engeldinger	No	Mental illness, resisted treatment	No	М	С	36	5
Adam Lanza	Yes***	Citalopram, Escitalopram	No	М	С	20	27
John Zawahri	Likely*	Unknown	No	М	ME	23	12
Aaron Alexis	No	Untreated Paranoia	No	М	AA	34	12
Dlyann Roof	No	precursor symptoms of psychosis	Unknown	М	С	22	9
Elliot Rodger	Yes	Unknown antipsychotic medication	No	М	AC	22	6
Mohammod Youssuf Abdulazeez	No		Yes	М	ME	24	5
Christopher Harper- Mercer	Li kel y****	Unknown	No	М	С	26	9
Syed Farook	No		Yes	М	ME	28	14
Tashfeen Malik	No		Yes	F	ME	29	14
Omar Mateen	No		Yes	М	ME	29	49
John R Newman	No	No	No	М	С	45	5
Arcan Cetin	Yes	Unknown	No	М	ME	20	5
Esteban Santiago	Likely*	Unknown	No	М	PR	26	6
Stephen Paddock	Yes	Diazepam	No	М	С	64	58
Devin Kelley	Likely*	Unknown	No	М	С	26	26
Nikolas Cruz	Yes	Unknown	No	М	С	19	17
*Court Ordered Detention, Evaluation or Treatment				mean	30.6		
**Recently stopped taking them					STD	10.9	
***Stopped taking them					М	28	
****Attended a special school, reported mental health issues							
*****Refused mental	health evaluat	ion. Had used psilocybin, LSD and salvinc	orin A.				
Table 2							

### Results cont.

95% 37/39 of the shooters were male, 5% 2/39 were female.

59% 23/39, were Caucasian

18% 7/39, were Middle Eastern

10% 4/39, were Asian

5% 2/39, were African American

5% 2/39, were other

3% 1/39, was Native American

Mean age was 30.6 with STD 10.9

# Discussion

The 4 shootings, with 5 shooters, related to terror can likely be attributed to ideology and not mental illness.

Several of the shooters had, were supposed to be, or were using psychoactive drugs. Table 3 shows the psychoactive drugs, which had been used by the shooters, that were also found in the reported cases of violence, and the number of times violence had been reported, according to the study<sup>1</sup>.

Psychoactive	Reported			
drug	violence			
Paroxetine	177			
Fluoxetine	72			
Sertraline	64			
Citalopram	34			
Escitalopram	31			
Diazepam	11			
Clonazepam	10			
Fluvoxamine	5			
Table 3				

Several of the shooters had also been detained, evaluated, and/or on a doctor ordered treatment plans. Closer supervision or tracking, and better reporting is required. 6.4% of psychiatric drugs, commonly prescribed to less than 12% of the population, are linked to homicide and violence.

There are already classes of drugs that prohibit a person from owning a firearm, including medical marijuana. Adding the drugs from the study<sup>1</sup> to the classes of drugs on the list of persons prohibited from owning firearms may have prevented 54% of the mass shooting homicides from 1999 to present. If not, patients prescribed these medications should be on a watch list for firearms purchases and the authorities notified if they purchase a firearm.

## **Outliers**

Charles Carl Roberts IV claimed to be a pedophile in a note he left, which was found after he killed 5 Amish school girls without molesting them. His claims of prior molestation of young girls could never be proven. The girls mentioned in the note he left denied it ever happened.

In the study<sup>1</sup> violence reported was broken down by gender as 51% male patients and 49% female patients. This may require further study as why only 1 non-terrorist female committed mass homicide whereas it was 49% of females reporting violence in the study.

# **Conclusions**

Further research and study is needed on all mass homicide perpetrators. Their complete medical history, what psychiatric drugs they were prescribed, why they were prescribed and when they were prescribed. This could possibly lead to indicators/predictors of future mass shooters.