Are Mass Killings Associated with Untreated Mental Illness Increasing?  

(updated November 2014)

The high profile mass killings in Newtown, Aurora, Tucson and elsewhere have raised two questions: 1) Are such killings increasing; 2) what proportion of them are attributable to persons with severe mental illnesses? There have been four attempts to answer these questions.

- In 1999, Hempel et al. (1) at the University of North Texas identified 30 mass killings for which extensive information was available. The killings occurred between 1949 and 1998 in the U.S. and Canada. Mass killings were defined as having at least three people killed, excluding the killer; only firearms-related killings were included. Even though the 30 killings took place over a 50-year period, 21 of them (70 percent) took place in the most recent years, from 1986-1998. This suggests that there has been an increase in the incidence of such killings. Twelve perpetrators had psychotic symptoms at the time of the killings and another 8 individuals “exhibited behavior suggestive of psychosis;” thus 20 of the 30 perpetrators (67%) had definite or probable psychosis. The most common diagnoses were schizophrenia, delusional disorder, and major depression. Fifteen of them had a previously documented psychiatric history of psychiatric hospitalization or visits to a mental health professional. Alcohol was said to play a role in only 3 of the 30 killings.

- In 2000, the New York Times published a detailed survey of 100 “rampage killers” who committed mass killings between 1949 and 1999 (2). The survey included all “multiple-victim killings that were not primarily domestic or connected to a robbery or gang.” The survey included crimes with “multiple victims, at least one of whom died, and to have occurred substantially at one time.” A total of 425 people were killed and 510 were injured. The number of such incidents was as follows:
  - 1949-59: 1
  - 1960-69: 3
  - 1970-79: 6
  - 1980-89: 17
  - 1990-99: 73

Figure 1 shows the number of such killings by year.

The survey concluded that “the incidences of these rampage killings appears to have increased.”

The survey noted that of the 100 cases “63 involved people who made threats of violence before the event…In case after case, family members, teachers and mental health professionals missed or dismissed signs of deterioration.” For example James Brady “told
The survey also reported “much evidence of mental illness in its subjects. More than half had histories of serious mental health problems…48 killers had some kind of formal diagnosis, often schizophrenia.” Among these, 24 had been prescribed psychiatric drugs but “14 had stopped taking them.”

- In 2007, Grant Duwe, a PhD criminologist in the Minnesota Dept. of Corrections, published *Mass Murders in the United States* (3). He included all killings of 4 or more people within a 24 hour period, including felony-related mass killings such as occur in drug-related or other criminal activities. His source of data was primarily the FBI’s Supplemental Homicide Reports. He identified 909 such events between 1900 and 1999, with a definite increase from 1980 on, e.g., 52 percent of the 116 “mass public shootings” took place between 1980 and 1999. Duwe found it very difficult to estimate how many of the perpetrators of the mass murders were mentally ill because such data was missing on 40 percent of the cases and another 22 percent were killed, by police or by themselves, at the crime scene. Among the others, at least 13 percent “were diagnosed with some form of mental illness” and another 15 percent “exhibited symptoms of mental illness” (p.105).

- In 2012, *Mother Jones* published a survey of 62 identified mass shootings between 1982 and 2012 (4). The survey included only those incidents in which four or more people were killed (not including the shooter) and which were not “related to gang activity or armed robbery.” It also included only those in which guns were used as the weapon; thus it excluded individuals such as David Attias, diagnosed with bipolar disorder, who in 2001 drove his car onto a Santa Barbara sidewalk, killing four and injuring nine. He then got out of his car and announced that he was the “angel of death.” Five years previously he had been hospitalized after trying to kill his sister.

The survey suggested that the mass shootings are increasing in incidence, as follows:

- 1982-92: 14
- 1993-02: 19
- 2003-12: 29 (including 7 in 2012)

Figure 2 shows the number of killings by year.

Although no attempt was made to obtain extensive psychiatric data, the authors reported that “a majority were mentally ill - and many displayed signs of it before setting out to kill.” Among the 62 shooters, 36 also killed themselves and 7 others died in shootouts with the police, suspected of being “suicide by cop.” The authors concluded: “Mental illness among the killers is no surprise, ranging from paranoid schizophrenia to suicidal depression.”

- A 2014 report by the FBI reported a sharp rise in mass shootings between 2000 and 2013. The average number of such shootings between 2000 and 2006 was 6.4 per year. However, between 2007 and 2013 this increased to 16.4 per year. The FBI did not include
information on mental illness in this report but said that it would be reported later.


Conclusion

Four surveys published between 1999 and 2012 suggest that: 1) mass killings are increasing in incidence; and 2) individuals with severe mental illness are probably responsible for approximately half of such killings.

References

Figure 1. Rampage killings with multiple victims, at least one of whom died (1949-1999) (Fessenden et al., New York Times, 2000)
Figure 2. Mass shootings with >4 deaths, (1982-2012) not including the person doing the shooting (Follman et al., *Mother Jones*, 2012)