



Treatment Advocacy Center Backgrounder

Are People with Serious Mental Illness Who Are Not Being Treated Dangerous?

(updated March 2014)

SUMMARY:

1. Most individuals with serious mental illnesses are not dangerous.
2. Most acts of violence are committed by individuals who are not mentally ill.
3. Being a young male or being a substance abuser (alcohol or drugs) is a greater risk factor for violent behavior than being mentally ill.
4. Individuals with serious mental illnesses are victimized by violent acts more often than they commit violent acts.
5. If people with serious mental illnesses are being appropriately treated, there is no evidence that they are any more dangerous than individuals in the general population.
6. All of the above statements are true, but it is *also* true that a *small number of individuals with serious mental illnesses commit acts of violence*. Almost all these acts of violence are committed by individuals *who are not being treated, and many such individuals are also abusing alcohol or drugs*.

I. The association between serious mental illness and acts of violence

- A meta-analysis of 204 studies of psychosis as a risk factor for violence reported that “compared with individuals with no mental disorders, people with psychosis seem to be at a substantially elevated risk for violence.” Psychosis “was significantly associated with a 49%–68% increase in the odds of violence.”

Douglas KS, Guy LS, Hart SD. Psychosis as a risk factor for violence to others: a meta-analysis. *Psychological Bulletin* 2009;135:679–706.

- A review of 22 studies published between 1990 and 2004 “concluded that major mental disorders, per se, especially schizophrenia, even without alcohol or drug abuse, are indeed associated with higher risks for interpersonal violence.” Major mental disorders were said to account for between 5 and 15 percent of community violence.

Joyal CC, Dubreucq J-L, Gendron C, et al. Major mental disorders and violence: a critical update. *Current Psychiatry Reviews* 2007;3:33–50.

- Among 3,743 individuals with bipolar disorder, 8.4 percent committed violent crimes compared to 3.5 percent of the general population in Sweden.

Fazel S, Lichtenstein P, Grann M, et al. Bipolar disorder and violent crime. *Archives of General Psychiatry* 2010;67:931–938.

- Of 8,003 individuals with schizophrenia, 13.2 percent committed at least one violent crime compared with 5.3 percent of the general population in a study in Sweden. Concurrent abuse of alcohol or drugs accounted for much of the increased rate.

Fazel S, Langstrom N, Hjern A, et al. Schizophrenia, substance abuse, and violent crime. *Journal of the American Medical Association* 2009;301:2016–2023.

- Data on mental disorders and violence was collected on 34,653 individuals as part of the US National Epidemiologic Survey on Alcohol and Related Conditions. According to one analysis (Elbogen and Johnson), “the incidence of violence was higher for people with severe mental illness, but only significantly so for those with co-occurring substance abuse and/or dependence.” According to another analysis (Van Dorn et al.), which criticized the first analysis, “those with SMI [serious mental illness], irrespective of substance abuse status, were significantly more likely to be violent than those with no mental or substance use disorders.”

Elbogen EB, Johnson SC. The intricate link between violence and mental disorder. *Archives of General Psychiatry* 2008;66:152–161.

Van Dorn R, Volavka J, Johnson N. Mental disorder and violence: is there a relationship beyond substance use? *Social Psychiatry and Psychiatric Epidemiology* 2011 Feb 26.

- After reviewing the psychiatric literature from 1970 to 2007, the author of the study concluded that “sound epidemiologic research has left no doubt about a significant relation between psychosis and violence, although one accounting for little of society’s violence.” She also noted that “when violence is a problem, individuals in the immediate social circle of an individual suffering from psychosis are most at risk.”

Taylor PJ. Psychosis and violence: stories, fears, and reality. *Canadian Journal of Psychiatry* 2008;53:647–659.

- A study in Ohio compared 122 patients with schizophrenia who had committed violent acts with 111 patients with schizophrenia who had not committed such acts. The violent

patients had significantly more prominent symptoms and significantly less awareness of their illness.

Friedman L, Hrouda D, Noffsinger S, et al. Psychometric relationships of insight in patients with schizophrenia who commit violent acts. *Schizophrenia Research* 2003;60:81.

- A study of 961 young adults in New Zealand reported that individuals with schizophrenia and associated disorders were two-and-one-half times more likely than controls to have been violent in the past year. If the person was also a substance abuser, the incidence of violent behavior was even higher.

Arseneault L, Moffitt TE, Caspi A, et al. Mental disorders and violence in a total birth cohort. *Archives of General Psychiatry* 2000;57:979–986.

- A study of 63 inpatients with schizophrenia in Spain reported that the best predictors of violent behavior were being sicker (i.e., higher scores on symptom measures) and less insight into their illness. "The single variable that best predicted violence was insight into psychotic symptoms."

Arango C, Barba AC, Gonzalez-Salvador T, et al. Violence in schizophrenic inpatients: a prospective study. *Schizophrenia Bulletin* 1999;25:493–503.

- A 10-year follow-up of 1,056 severely mentally ill patients discharged from mental hospitals in Sweden in 1986 reported that "of those who were 40 years old or younger at the time of discharge, nearly 40 percent had a criminal record as compared to less than 10 percent of the general public." Furthermore, "the most frequently occurring crimes are violent crimes."

Belfrage H. A ten-year follow-up of criminality in Stockholm mental patients. *British Journal of Criminology* 1998;38:145–155.

- A study of 331 individuals with severe mental illness in the United States reported that 17.8 percent "had engaged in serious violent acts that involved weapons or caused injury." It also found that "substance abuse problems, medication noncompliance, and low insight into illness operate together to increase violence risk."

Swartz MS, Swanson JW, Hiday VA, et al. Violence and severe mental illness: the effects of substance abuse and nonadherence to medication. *American Journal of Psychiatry* 1998;155:226–231.

- In a study in Finland, an unselected birth cohort of 11,017 individuals was followed for 26 years. Men with schizophrenia without alcoholism were 3.6 times more likely to commit a violent crime than men without a psychiatric diagnosis. Men with both schizophrenia and alcoholism were 25.2 times more likely to commit a violent crime.

Rasanen P, Tiihonen J, Isohanni M, et al. Schizophrenia, alcohol abuse, and violent behavior: a 26-year follow-up study of an unselected birth cohort. *Schizophrenia Bulletin* 1998;24:437–441.

- There is very little data that can be used to estimate the percentage of severely mentally ill individuals who become violent. The best study used the Danish psychiatric case register, covering the whole country, and convictions for criminal offenses. Between 1978 and 1990, 6.7 percent of males and 0.9 percent of females with "major mental disorders" (psychoses) were convicted of a violent crime ("all offenses involving interpersonal aggression or a threat thereof") compared with 1.5 percent males and 0.1 percent females among individuals with no psychiatric diagnosis. Since these are only convictions, it can be assumed that another unknown percentage committed a violent act for which they were not charged or convicted.

Hodgins S, Mednick SA, Brennan PA, et.al. Mental disorder and crime. *Archives of General Psychiatry* 1996;53:489–496.

- A study in Switzerland compared 282 men with schizophrenia with a matched control group in the general population. The patients were five times more likely to have been convicted of violent crimes, mostly "assaults resulting in bodily harm." The more acutely ill the patient was, the more likely he was to have been violent.

Modestin J, Ammann R. Mental disorder and criminality: male schizophrenia. *Schizophrenia Bulletin* 1996;22: 69–82.

- A study of 538 individuals with schizophrenia living in London reported that the men had a 3.9 times and women a 5.3 times greater risk for conviction for assault and serious violence compared to a control group with other psychiatric diagnoses.

Wesseley SC, Castle D, Douglas AJ, et al. The criminal careers of incident cases of schizophrenia. *Psychological Medicine* 1994;24:483-502.

- A Swedish study examined the criminal records of all individuals born in Stockholm in 1953 and still living there 30 years later. Men and women with a severe mental illness were 4.2 times (men) and 27.5 times (women) more likely to have been convicted of a violent crime compared to individuals with no psychiatric diagnosis.

Hodgins, S. Mental disorder, intellectual deficiency, and crime. *Archives of General Psychiatry* 1992;49:476–483.

- In a follow-up of patients released from a psychiatric hospital, Dr. Henry Steadman et al. reported that "27 percent of released male and female patients report at least one violent act within a means of four months after discharge."

Monahan J. Mental disorder and violent behavior. *American Psychologist* 1992;47:511–521.

- In a carefully controlled study comparing individuals with severe mental illness living in the community in New York with other community residents, the former group was found to be three times more likely to commit violent acts such as weapons use or "hurting someone badly." The sicker the individual, the more likely they were to have been violent.

Link BG, Andrews H, Cullen FT. The violent and illegal behavior of mental patients reconsidered. *American Sociological Review* 1992;57:275–292.

- In reviewing many of these studies in 1992, Prof. John Monahan concluded: "The data that have recently become available, fairly read, suggest the one conclusion I did not want to reach: Whether the measure is the prevalence of violence among the disordered or the prevalence of disorder among the violent, whether the sample is people who are selected for treatment as inmates or patients in institutions or people randomly chosen from the open community, and no matter how many social and demographic factors are statistically taken into account, there appears to be a relationship between mental disorder and violent behavior."

Monahan J. Mental disorder and violent behavior. *American Psychologist* 1992;47:511–521.

- A 1990 study investigated violent behavior among severely mentally ill individuals in 1,401 randomly selected families who were members of the National Alliance for the Mentally Ill (NAMI). In the preceding year, 11 percent of these individuals were reported to have physically harmed another person.

Steinwachs DM, Kasper JD, Skinner EA. *Family Perspectives on Meeting the Needs for Care of Severely Mentally Ill Relatives: A national survey*. Arlington, Va.: National Alliance for the Mentally Ill, 1992.

- The Epidemiological Catchment Area (ECA) surveys carried out 1980–1983 reported much higher rates of violent behavior among individuals with severe mental illness living in the community compared to other community residents. For example, individuals with schizophrenia were 21 times more likely to have used a weapon in a fight.

Swanson JW, Hozer CD, Ganju VK, et al. Violence and psychiatric disorder in the community: evidence from the Epidemiologic Catchment Area surveys. *Hospital and Community Psychiatry* 1990;41:761–770.

- A Swedish study of 644 individuals with schizophrenia followed for 15 years reported that they committed violent offenses at a rate four times greater than the general population.

Lindqvist P, Allebeck P. Schizophrenia and crime: a longitudinal follow-up of 644 schizophrenics in Stockholm. *British Journal of Psychiatry* 1990;157:345–350.

- In reviewing early studies on discharged psychiatric patients, Dr. Judith Rabkin concluded: "Arrest and conviction rates for the subcategory of violent crimes were found to exceed general population rates in every study in which they were measured."

Rabkin J. Criminal behavior of discharged mental patients: a critical appraisal of the research. *Psychological Bulletin* 1979;86:1–27.

II. Most acts of violence committed by individuals with serious mental illness are carried out when they are not being treated

- A 2013 meta-analysis of 110 studies, which included 45,533 individuals with schizophrenia and other psychoses, identified several risk factors for violent behavior: non-adherence with medication; non-adherence with psychological therapies; drug abuse; and alcohol abuse.

Witt K, van Dorn R, Fazel S. Risk factors for violence in psychosis: Systematic review and meta-regression analysis of 110 studies. *PLoS ONE* 2013;8:e55942.

- Researchers in Turkey examined 49 individuals with schizophrenia who had committed homicide. They reported that 42 of the 49 “were not using their medication regularly and that treatment compliance was considerably low.”

Belli H, Ozcetin A, Erteum U, et al. Perpetrators of homicide with schizophrenia: sociodemographic characteristics and clinical factors in the eastern region of Turkey. *Comprehensive Psychiatry* 2010;51:135-41.

- Meta-analyses of studies of individuals with serious mental illness who commit acts of violence, including homicides, report that a disproportionate number of these acts occur during the person’s first psychotic episode before they have been treated.

Large MM, Nielssen O. Violence in first-episode psychosis: a systematic review and meta-analysis. *Schizophrenia Research* 2010;125:208–220.

Nielsson O, Large M. Rates of homicide during the first episode of psychosis and after treatment: a systematic review and meta-analysis, *Schizophrenia Bulletin* 2010;36:702–712.

- A study in New York assessed 60 severely mentally ill men who had been charged with violent crimes. The author reported that medication noncompliance and lack of awareness of illness both played significant roles in causing the men’s violent behavior.

Alia-Klein N, O’Rourke TM, Goldstein RZ, et al. Insight into illness and adherence to psychotropic medications are separately associated with violence severity in a forensic sample. *Aggressive Behavior* 2007;33:86–96.

- A study of 907 individuals with severe mental illness reported that those who were violent were “more likely to deny needing psychiatric treatment.” The authors concluded that “clinical interventions that address a patient’s perceived need for psychiatric treatment, such as compliance therapy and motivational interviewing, appear to hold promise as risk management strategies.”

Elbogen EB, Mustillo S, Van Dorn R, et al. The impact of perceived need for treatment on risk of arrest and violence among people with severe mental illness. *Criminal Justice and Behavior* 2007;34:197–210.

- A study of 1,011 outpatients with severe psychiatric disorders in five states reported that “community violence was inversely related to treatment adherence,” i.e., the less medication individuals took, the more likely they were to become violent.”

Elbogen EB, Van Dorn RA, Swanson JW, et al. Treatment engagement and violence risk in mental disorders. *British Journal of Psychiatry* 2006;189:354–360.

- A four-state (New Hampshire, Connecticut, Maryland, and North Carolina) study of 802 adults with severe mental illness (64 percent schizophrenia or schizoaffective disorder, 17 percent bipolar disorder) reported that 13.6 percent had been violent within the previous year. “Violent” was defined as “any physical fighting or assaultive actions causing bodily injury to another person, any use of lethal weapon to harm or threaten someone, or any sexual assault during that period.” Those who had been violent were more likely to have been homeless, to be substance abusers, and to be living in a violent environment. Those who had been violent were also 1.7 times more likely to have been noncompliant with medications.

Swanson JW, Swartz MS, Essock SM, et al. The social-environmental context of violent behavior in persons treated for severe mental illness. *American Journal of Public Health* 2002;92:1523–1531.

- In the three-site MacArthur Foundation Study of violence and mental illness, 17.4 percent of the patients were violent in the 10-week period prior to hospitalization, during which time they were not being treated, compared to an average of 8.9 percent for the five 10-week periods after hospitalization during which most of them were being treated.

Steadman HJ, Mulvey EP, Monahan J, et al. Violence by people discharged from acute psychiatric inpatient facilities and by others in the same neighborhoods. *Archives of General Psychiatry* 1998;55:393–401.

- An English study of 1,015 forensic patients with severe mental illness (“functional psychosis”) reported that the diagnosis of “schizophrenia was most strongly associated with personal violence” and that “more than 75 percent of those with a psychosis were recorded as being driven to offend by their delusions.” The authors concluded that “treatment appears as important for public safety as for personal health.”

Taylor PJ, Leese M, Williams D, et al. Mental disorder and violence. *British Journal of Psychiatry* 172:218–226, 1998.

- A study of 348 inpatients in a Virginia state psychiatric hospital found that patients who refused to take medication “were more likely to be assaultive, were more likely to require seclusion and restraint, and had longer hospitalizations.”

Kasper JA, Hoge SK, Feucht-Haviar T, et al. Prospective study of patients’ refusal of antipsychotic medication under a physician discretion review procedure. *American Journal of Psychiatry* 1997;154:483–489.

- In an analysis of data from the ECA study, the authors noted that "mentally ill individuals with no treatment contact in the past six months had significantly higher odds of violence in the long term" and that "moderate levels of agitation and psychoticism increase the risk of violence." They then conclude: "This would seem to provide a strong argument for providing more interventions targeted specifically to persons with combined mental illness and addictive disorders who are likely not to comply voluntarily with conventional outpatient therapies."

Swanson J, Estroff S, Swartz M, et al. Violence and severe mental disorder in clinical and community populations: the effects of psychotic symptoms, comorbidity, and lack of treatment. *Psychiatry* 1997;60:1–22.

- A study of 133 outpatients with schizophrenia showed that "13 percent of the study group were characteristically violent." Having inadequately treated symptoms of delusions and hallucinations was one of the predictors of violent behavior. Specifically, "71 percent of the violent patients . . . had problems with medication compliance, compared with only 17 percent of those without hostile behaviors," a difference that was statistically highly significant ($p < 0.001$).

Bartels J, Drake RE, Wallach MA, et al. Characteristic hostility in schizophrenic outpatients. *Schizophrenia Bulletin* 1991;17:163–171.

- A study of severely mentally ill patients in a state forensic hospital found a highly significant correlation ($p < 0.001$) between failure to take medication and a history of violent acts in the community.

Smith LD. Medication refusal and the rehospitalized mentally ill inmate. *Hospital and Community Psychiatry* 1989 40:491–496.

- A study of inpatients diagnosed with schizophrenia reported an inverse correlation between their propensity to violence and their blood level of antipsychotic medication.

Yesavage JA. Inpatient violence and the schizophrenic patient: an inverse correlation between danger-related events and neuroleptic levels. *Biological Psychiatry* 1982;17:1331–1337.