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Serious Mental Illness and Homicide

SUMMARY

US and international to date research suggests that individuals with schizophrenia and bipolar disorder are responsible for approximately 10% of all homicides in the United States. For mass killings, the percentage is approximately 33% (see "Serious Mental Illness and Mass Homicide"). One study reported that homicide rates are higher in states with stricter commitment laws, thus making it more difficult to treat mentally ill individuals who are in need of treatment.

RELATED US STUDIES

• A study on all 48 homicides committed between 1970 and 1975 in Albany County, New York, found that 8 (17%) were committed by individuals with schizophrenia. Most of the offenders were not being treated for their illness at the time of the crime, leading the authors to conclude that "closer follow-ups of psychotic patients, especially schizophrenics, could do a lot to improve the welfare of the patient and community."

Grunberg, F., Klinger, B.I., Grumet, B. (1977). Homicide and deinstitutionalization of the mentally ill. *American Journal of Psychiatry*, *134*, 685–687.

Grunberg, F., Klinger, B.I., Grumet, B.R. (1978). Homicide and community-based psychiatry. *Journal of Nervous and Mental Disease*, 166, 868–874.

 A 1985 study reported that 10% (7 out of 71) of all homicides between 1978 and 1980 in Contra Costa County, California, were carried out by individuals diagnosed with schizophrenia. All the offenders had been evaluated psychiatrically prior to the crime and had refused medication.

Wilcox, D.E. (1985). The relationship of mental illness to homicide. *American Journal of Forensic Psychiatry*, 6, 3–15.

• In a study in Indiana, researchers examined the records of 518 individuals in prison who had been convicted of homicide between 1990 and 2002. Of the 518, 53 (10.2%) had been diagnosed with schizophrenia (*n* = 27), bipolar disorder (*n* = 12), or other psychotic disorder not associated with drug abuse (*n* = 14). An additional 42 individuals had been diagnosed with mania or major depressive disorder. Note that the study included only those who had been sentenced to prison and did not include those individuals who had committed homicides and were subsequently found to be incompetent to stand trial or not guilty by reason of insanity, and therefore sent to a psychiatric facility instead of prison. Thus, the 10.2% is probably an undercount. The authors themselves did not conclude that individuals with serious mental illnesses were responsible for 10% of the homicides, but given the

data this seems a reasonable conclusion. The authors also noted that 80% of the mentally ill individuals who had committed homicides had received psychiatric treatment in the past, but that "many of the offenders were not receiving treatment" at the time of the homicide.

Matejkowski, J.C., Cullen, S.W., Solomon, P.L. (2008). Characteristics of persons with severe mental illness who have been incarcerated for murder. *Journal of the American Academy of Psychiatry and the Law, 36,* 74–86.

In 2011, Steven P. Segal of the University of California at Berkeley published an interesting analysis of
homicide rates by states compared with the strictness of state laws in committing mentally ill
individuals for involuntary hospitalization and treatment. He reported a significant association
between these two factors (p < .01), indicating that state homicide rates were higher in states with
stricter involuntary treatment criteria, thus making it more difficult to treat individuals in need of
treatment.

Segal, S.P. (2012). Civil commitment law, mental health services, and US homicide rates. *Social Psychiatry and Psychiatric Epidemiology*, *47*, 1449–1458.

• A 2013 study of all homicides between 2001 and 2005 in Allegheny County, Pennsylvania (Pittsburgh), reported that only 4% of the defendants had a diagnosis of psychosis. However, the county had a very high rate of drug- and gang-related homicides (e.g., African Americans constituted 79% of the defendants but only 13% of the county's population). Thus, the sample is not representative of the US population as a whole.

Martone, C.A., Mulvey, E.P., Yang, S., Nemoianu, A., Shugarman, R., Soliman, L. (2013). Psychiatric characteristics of homicide defendants. *American Journal of Psychiatry*, *170*, 994–1002.

RELATED INTERNATIONAL STUDIES

• Large and colleagues identified 18 studies of homicide and schizophrenia and conducted a metaanalysis. They reported that 6.5% of the homicide offenders had a diagnosis of schizophrenia.

Large, M., Smith, G., Nielssen, O. (2009). The relationship between the rate of homicide by those with schizophrenia and the overall homicide rate: A systematic review and meta-analysis. *Schizophrenia Research*, *112*, 123–129.

 A study of all 2,005 individuals convicted of homicide or attempted homicide in Sweden from 1988 to 2001 found that 229 (11%) had schizophrenia or bipolar disorder. Substance abuse and medication noncompliance were significant risk factors.

Fazel, S., Grann, M. (2004). Psychiatric morbidity among homicide offenders: A Swedish population study. *American Journal of Psychiatry*, *161*, 2129–2131.

Fazel, S., Buxrud, P., Ruchkin, V., Grann, M. (2010). Homicide in discharged patients with schizophrenia and other psychoses: A national case-control study. *Schizophrenia Research*, 123, 263–269.



 In Singapore, 110 individuals were charged with murder between 1997 and 2001. Of those charged, seven had schizophrenia, one had bipolar disorder, and two had delusional disorders. Thus, 10 out of 110 (9%) had psychotic disorders.

Koh, K.G.W.W., Gwee, K.P., Chan, Y.H. (2006). Psychiatric aspects of homicide in Singapore: A five-year review (1997–2001). Singapore Medical Journal, 47, 297–304.

• In England and Wales, a clinical survey of 1,594 people convicted of homicide from 1996 to 1999 reported that 85 (5%) had schizophrenia. However, another English study reported that 11% of the homicides in greater London between 1979 and 1980 were committed by people with schizophrenia.

Shaw, J., Hunt, I.M., Flynn, S., Meehan, J., Robinson, J., Bickley, H., Parsons, R., McCann, K., Burns, J., Amos, T., Kapur, N., Appleby, L. (2006). Rates of mental disorder in people convicted of homicide: National clinical survey. *British Journal of Psychiatry*, *188*, 143–147.

Taylor, P.J., Gunn, J. (1999). Homicides by people with mental illness: Myth and reality. *British Journal of Psychiatry*, 174, 9–14.

• In Germany, a study of 290 individuals who committed or attempted to commit homicides between 1992 and 1996 reported that 29 (10%) had schizophrenia.

Erb, M., Hodgins, S., Freese, R., Müller-Isberner, R., Jöckel, D. (2011). Homicide and schizophrenia: Maybe treatment does have a preventive effect. *Criminal Behavior and Mental Health*, 11, 6–26.

 A study of homicides in Finland reported that "the risk of committing a homicide was about 10 times greater for schizophrenia patients of both genders than it was for the general population." For men "schizophrenia without alcoholism increased the odds ratio more than 7 times; schizophrenia with coexisting alcoholism more than 17 times."

Eronen, M., Tiihonen, J., Hakola, P. (1996). Schizophrenia and homicidal behavior. *Schizophrenia Bulletin*, 22(1), 83—89.

• In Denmark, 251 individuals accused of homicide were evaluated psychiatrically. Thirty-seven (15%) were diagnosed with psychosis related to schizophrenia or affective disorder.

Gottlieb, P., Gabrielson, G., Kramp, P. (1987). Psychotic homicides in Copenhagen from 1959 to 1983. *Acta Psychiatrica Scandinavica*, *76*, 285–292.

• In Iceland, between 1900 and 1979 there were 47 convicted homicide offenders. Seven (15%) had schizophrenia.

Petursson, H., Gudjonsson, G.H. (1981). Psychiatric aspects of homicide. *Acta Psychiatrica Scandinavica*, *64*, 363–372.

 A study of 87 men convicted of homicides in Quebec reported that 11 (12.6%) had schizophrenia and another 5 (5.8%) had bipolar disorder. However, the prisoners in this study had to agree to be interviewed, so the sample may not be representative. Also, like the Indiana study described above, these men had been convicted of homicides and sent to prison; thus the study does not include mentally ill men who committed homicides and were found to be incapable of standing trial or not guilty by reason of insanity.

Cote, G., Hodgins, S. (1992). The prevalence of major mental disorders among homicide offenders. *International Journal of Law and Psychiatry*, *15*, 89–99.