



## Anosognosia, Non-Treatment, and Violent Behavior

### SUMMARY

Most individuals with serious mental illness are not dangerous, most acts of violence are committed by individuals who are not mentally ill, and people with mental illness are more likely to be victims than perpetrators of violent acts. Nonetheless, individuals with the most severe psychiatric diseases are at heightened risk for violent behavior when untreated for their symptoms, especially psychosis with paranoia or “command hallucinations.” As the most common reason that roughly half of people with schizophrenia and severe bipolar disorder do not adhere to prescribed medications, anosognosia – also known as “lack of insight” is associated with this heightened risk for violent behavior. (See also [Serious Mental Illness and Anosognosia](#)).

### RELATED US STUDIES

Following is related US studies listed in reverse chronology.

- In New York, 60 male patients with psychosis who had been charged with a violent crime were assessed. Severity of community violence was strongly associated with poor insight, medication non-adherence and substance abuse.

Alia-Klein, N., O'Rourke, T.M., Goldstein, R.Z. Malaspina, D. (2007). Insight into illness and adherence to psychotropic medications are separately associated with violence severity in a forensic sample. *Aggressive Behavior*, 33, 86–96.

- In five US sites, 1,011 outpatients with severe psychiatric disorders were assessed for medication adherence and physically assaultive behavior over six months. Those who became physically assaultive were significantly more likely to be non-adherent to treatment ( $p < 0.001$ ), more severely ill, abusing substances and to have a personality disorder.

Elbogen, E.B., Van Dorn, R.A., Swanson, J.W. Swartz, M.S., Monahan, J. (2006). Treatment engagement and violence risk in mental disorders. *British Journal of Psychiatry*, 189, 354–360.

- In a multi-site study, 1,906 individuals with schizophrenia and related disorders were prospectively followed and assessed for three years. Medication non-adherence was significantly associated with being violent, arrested and victimized (all significant at a level of  $p < 0.001$ ).

Ascher-Svanum, H., Faries, D.E., Zhu, B. Ernst, F.R., Swartz, M.S., Swanson, J.W. (2006). Medication adherence and long-term functional outcomes in the treatment of schizophrenia in usual care. *Journal of Clinical Psychiatry*, 67, 453–460.

- In Ohio, 115 individuals with schizophrenia who had committed and charged criminally with violent acts were compared to 111 individuals with schizophrenia with no history of violent acts. The



## Anosognosia, Non-Treatment, and Violent Behavior

individuals with a history of violence were found to have “marked deficits in insight” and be much more symptomatic. Those who had been violent scored significantly lower ( $p < 0.001$ ) on awareness of mental disorder, awareness of achieved effect of medications and awareness of social consequences of mental disorders when compared to the nonviolent individuals.

Buckley, P.F., Hrouda, D.R., Friedman, L., Noffsinger, S.G., Resnick, P.J., Camlin-Shingler, K. (2004). Insight and its relationship to violent behavior in patients with schizophrenia. *American Journal of Psychiatry*, 161, 1712–1714.

- In North Carolina, 331 “severely mentally ill” individuals who had been involuntarily admitted to a psychiatric facility were assessed for history of assaultive and violent behavior. Substance abuse, medication non-adherence and low insight into illness “operate together to increase violence risk,” the study concluded.

Swartz, M.S., Swanson, J.W., Hiday, V.A., Borum, R., Wagner, H.W., Burns, B.J. (1998). Violence and severe mental illness: the effects of substance abuse and nonadherence to medication. *American Journal of Psychiatry*, 155, 226–231.

- In Massachusetts, 133 outpatients with schizophrenia were assessed for violent behavior over six months. During that period, “13 percent of the study group were characteristically violent.” Violent acts were significantly associated with medication non-adherence. “Seventy-one percent of the violent patients had problems with medication compliance, compared with only 17 percent of those without hostile behaviors.”

Bartels, S.J., Drake, R.E., Wallach, M.A., Freeman, D.H. (1991). Characteristic hostility in schizophrenic patients. *Schizophrenia Bulletin*, 17, 163–171.

## RELATED INTERNATIONAL STUDIES

- In a four-country study in Canada, Germany, Finland and Sweden, 216 forensic hospital patients with schizophrenia were followed for two years following discharge. Those patients with little or no insight had significantly more aggressive behavior compared to those with good insight. However, as predictors of aggressive behavior, the patients’ positive symptom score (e.g., delusions and hallucinations) and their level of psychopathy (sociopathy) were better predictors than was their level of insight.

Lincoln, T.M., Hodgins, S. (2008). Is lack of insight associated with physically aggressive behavior among people with schizophrenia living in the community? *Journal of Nervous and Mental Disease*, 196, 62–66.

- In Germany, the criminal records of 1,662 individuals with schizophrenia who had been discharged from psychiatric hospitals were assessed. According to the authors: “Significantly higher rates of criminal conviction and recidivism were found for patients with lack of insight at discharge.”

Soyka, M., Graz, C., Bottlender, R., Dirschedl, P., Schoech, H. (2007). Clinical correlates of later violence and criminal offences in schizophrenia. *Schizophrenia Research*, 94, 89–98.



## Anosognosia, Non-Treatment, and Violent Behavior

- In Ireland, 157 individuals with first-episode psychosis were assessed for violent behavior. The strongest predictors of violent behavior in the week following admission were poor insight (odds ratio 2.97) and a past history of violence (odds ratio 3.82).

Foley, S.R., Kelly, B.D., Clarke, M. McTigue, O., Kamali, M., Larkin, C., O'Callaghan, E., Browne, S. (2005). Incidence and clinical correlates of aggression and violence at presentation in patients with first episode psychosis. *Schizophrenia Research*, 72, 161–168.

- In England, 44 male inpatients in a forensic psychiatric hospital were assessed for violent behavior. It was found that “a previous diagnosis of mental illness, lack of insight, and active signs of mental illness were the most predictive of inpatient violence.”

Grevatt, M., Thomas-Peter, B., Hughes, G. (2004). Violence, mental disorder and risk assessment: can structured clinical assessments predict the short-term risk of inpatient violence? *Journal of Forensic Psychiatry and Psychology*, 15, 278–292.

- In Sweden, 40 “mentally disordered” individuals with a history of “violent criminality” were discharged from two forensic hospitals and followed for between 3 and 12 years. Twenty-two of former patients committed additional violent crimes, and 18 did not. Among the strongest predictors for violence were lack of insight and “noncompliance with remediation attempts” (i.e., treatment).

Strand, S., Belfrage, H., Fransson, G., Levander, S. (1999). Clinical and risk management factors in risk prediction of mentally disordered offenders—more important than historical data? *Legal and Criminological Psychology*, 4, 67–76.

- In Spain, 63 individuals with a diagnosis of schizophrenia or schizoaffective disorder were assessed for violent behavior during brief hospitalizations. The strongest predictors of violent behavior were lack of insight into symptoms (especially delusions), being sicker and past history of violence.

Arango, C., Calcedo Barba, A., González-Salvador, T., Calcedo Ordonez, A. (1999). Violence in inpatients with schizophrenia: A prospective study. *Schizophrenia Bulletin*, 25, 493–503.