

New Swedish Study Confirms Association between  
Schizophrenia and Violent Behavior,  
Especially for Those Who Also Have Substance Abuse Problems

A recently published study from Sweden (Fazel et al , Schizophrenia, substance abuse, and violent crime, *JAMA* 2008;301:2016–2023) confirms what more than twenty other studies have reported: individuals with schizophrenia, especially those who also abuse street drugs or alcohol, have a disturbingly high incidence of violent behavior. The Swedish study did not include data on treatment, but other studies have shown that the individuals who become violent are almost all not being treated. Individuals with schizophrenia who are being treated do not have a higher incidence of violent behavior than the general population.

The Swedish study was the largest such study done to date and included 8,003 individuals with schizophrenia diagnosed between 1973 and 2006. During that period, 13.2 percent of them were convicted of a violent crime compared with 5.3 percent of the general population. Thus, the diagnosis of schizophrenia increased the chances of committing a violent crime by two-and-one-half times. However, if the person with schizophrenia was also abusing street drugs or alcohol, the rate of violent crime for this group was 27.6 percent. By contrast, if the person with schizophrenia was not abusing street drugs or alcohol, their rate of violent crime was only 8.5 percent, one-and-one-half times higher than the general population.

The difference in incidence of violent behavior between patients with (27.6 percent) and those without substance abuse (8.5 percent) in this study contrasts with the previous MacArthur Foundation study done in the U.S. (Steadman et al., Violence by people discharged from acute psychiatric inpatient facilities and by others in the same neighborhoods, *Arch Gen Psychiatry* 1998;55:393–401). In the MacArthur study, the incidence of violent behavior among seriously mentally ill individuals with substance abuse was 31 percent, and without substance abuse, 18 percent, less than a two-fold difference, whereas in the present Swedish study the difference is more than three-fold. The most likely explanation for this is that psychiatric outpatient services and follow-up of patients is much better in Sweden than in the U.S., and it is known in both countries that patients with substance abuse are much less likely to take their medication than those without substance abuse. Thus, in Sweden the patients who do not have substance abuse are more likely to be taking their medication than those in the U.S., and we know that taking medication is an important means of decreasing violence. See, for example, N.Y. State Office of Mental Health, *Kendra's Law: Final report on the Status of Assisted Outpatient Treatment* (New York: Office of Mental Health, 2005), and Swanson et al., Involuntary outpatient commitment and behaviour in persons with severe mental illness, *Br J Psychiatry* 2000;176:324–331.

The take-home messages from these studies include the following:

1. Substance abuse, with or without serious mental illness, is a strong predictor of violent behavior.

2. Having a serious mental illness such as schizophrenia or bipolar disorder also increases the incidence of violent behavior.

3. Having a serious mental illness *and* substance abuse puts the person in the highest risk category for violent behavior.

4. Treatment of serious mental illnesses markedly decreases the incidence of violent behavior.

5. Individuals with schizophrenia who are being treated are not more violent than the general population.