Imagine the prototypical violent criminal, like the one who appears on the news after committing a horrible act. It’s a common belief that individuals like this often suffer from a long history of mental illness that compels them to act destructively. But research published in Clinical Psychological Science by APS Fellow Jennifer Skeem (University of California, Berkeley) and colleagues suggests that the relationship between mental illness and violence isn’t as strong we might think.

To investigate the link between psychosis – defined as a severe mental disorder accompanied by delusions and hallucinations – and acts of violence, Skeem and colleagues examined data from the MacArthur Violence Risk Assessment Study.

In the MacArthur study, over 1,000 violent offenders were interviewed every 10 weeks for a year after they were released from prison or jail. These structured interviews examined if participants committed any violence (e.g., physical injury, sexual assault, use of a weapon) and whether psychosis preceded that violence. The study also included data on participants’ other personality traits and disorders, cognitive abilities, and problem behaviors.

Experts know that most violent acts are committed by a small group of repeat offenders and the
MacArthur data showed this: About 10% of individuals were responsible for 50% of the violent incidents that occurred in the year after the offenders were discharged. Of the repeat offenders, about half reported symptoms of psychosis (e.g., delusions or hallucinations) at some point during the year. Critically, however, only 12% of violent incidents were preceded by symptoms of psychosis, indicating that the link between psychosis and violence was weak.

Even though instances of psychosis-preceded violence were infrequent, Skeem and colleagues wanted to know whether some individuals routinely experienced psychosis before each violent act. Using multilevel modeling, the researchers determined that there were mainly two types of repeat violent offenders: Those who at no point experienced psychosis before violence (80% of the sample), and those who occasionally experienced psychosis before violence (15%). Thus, the popular conception of a violent criminal who experiences psychotic episodes prior to committing violent acts is actually rather rare, characterizing only 1 in 20 of repeat offenders.

“There is little evidence for a subgroup with exclusively psychosis-preceded violence,” the authors conclude.

The findings indicated that there were slight differences between the individuals who sometimes experienced psychosis prior to violence and those who never did. Individuals who occasionally experienced psychosis prior to violence were more likely to also have bipolar disorder, schizophrenia, and other mental disorders. On the other hand, those who never displayed psychosis prior to violence tended to score lower on verbal intelligence and showed greater antisocial tendencies. These patterns were subtle, however, and the authors suggest that they provide interesting avenues for further research.

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“Effective treatment of psychosis will have negligible direct effects on violence for most patients and important but partial effects for the remainder,” the researchers write.

Instead, the authors recommend that “programming for individuals with repeated violence may need to encompass factors associated with social deviance, whether patients occasionally engage in acts of violence related to psychosis or not.”

In other words, providing anger management treatment to all repeat violent offenders may be more effective at reducing violent crime than offering specialized treatment to those who experience psychosis.

To read more of the researchers’ work exploring links between mental illness, personality, and crime, see Peterson et al. (2014), Skeem et al. (2011), and Skeem and Monahan (2011).

Reference