

THE SILENT RISE OF METHAMPHETAMINE-INDUCED PSYCHOSIS

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Unlike many other parts of the world where methamphetamine (meth) makes headlines, the meth crisis in the U.S. has gone unnoticed. In 2023, 2.6 million people reported using meth, doubling the number since 2009. Overpowered by the opioid and fentanyl crisis, meth use has grown without much attention. As a stimulant, it accounts for over 25% of fatal drug overdoses. The co-occurrence of stimulants with opioids is called a “silent epidemic,” emphasizing the increasing impact of meth in the illegal drug scene.

UMass Mind has published several papers on meth use in the past 1,2. Invited by the National Association of Mental Health Program Directors (NAMHPD) and the SAMHSA Serious Mental Illness Technical Assistance Center (SMI-TTAC), Xiaoduo Fan, MD, MPH, recently delivered a webinar titled “Intersections of methamphetamine-induced psychosis and schizophrenia spectrum disorders”. The event was attended by hundreds of frontline service providers, administrators, policymakers, and researchers.

Like schizophrenia, symptoms of meth-induced psychosis (MIP) include delusions—beliefs not based in reality, such as being watched, poisoned food, or having magic powers—and auditory or visual hallucinations, which involve hearing or seeing things that are not there. However, negative symptoms—like loss of emotion, lack of pleasure, and decreased sociability—are less prominent in MIP than in a primary psychotic disorder such as schizophrenia. Studies show that 40% of meth users will experience MIP after stopping meth, and 16-25% will experience MIP beyond one month after stopping.

Existing research indicates that meth use might not cause schizophrenia, but it can “trigger” schizophrenia in individuals with a family history of psychosis. When psychotic symptoms persist without further links to drug use, a MIP diagnosis is reassessed as schizophrenia.

A common clinical situation is that substance use disorder (SUD) often co-occurs with schizophrenia. Research indicates a shared “neural overlap” between schizophrenia and SUD, helping to explain why these disorders frequently occur together. The brain chemicals involved in reward and motivation, triggered by meth, are also ones that people with schizophrenia may have imbalances or sensitivities to. This makes individuals with schizophrenia especially vulnerable to developing meth addiction, even if they understand the risks.

MIP can be frightening and have a significant impact on an individual. Currently, there are no FDA-approved medications for treating MIP. Non-drug approaches, such as contingency management, are the most effective treatment options available. Contingency management helps shift people’s decision-making away from drug use and toward other rewards like social connection, consumer goods, and incentives (such as gift cards and vouchers for maintaining drug-free blood test results).

Meth destroys and harms the lives of millions in the United States, where it has been overshadowed by the opioid and fentanyl crisis. Through better education, public health efforts, and community support, we can help those struggling with meth abuse live safer, more stable lives.

Next time you hear about substance abuse, consider what could be hidden underneath.

References:

1. Harrington A, Fan X. Methamphetamine-associated psychosis: what should clinicians know? *Psychiatric Times*, 2022.
2. Chiang M, Du J, Lombardi D, Harrington A, Shukair N, Zhao M, Fan X. Methamphetamine-associated psychosis: clinical presentation, biological basis and treatment options. *Human Psychopharmacology: Clinical and Experimental*, 2019.