The authors report no conflicts of interest.

This systematic review aims to synthesise previous research examining psychotic symptoms associated with methamphetamine (MAP) use. While the presence of hallucinations and delusions in MAP is well documented, the relationship between other psychotic symptoms and MAP is less clear. Methamphetamine can produce psychotic reactions in up to 60% of those using the drug. Clinical presentations of methamphetamine associated psychosis (MAP) can be virtually identical to schizophrenia with co-morbid substance use, leading to misdiagnosis, inadequate treatment and poor prognosis. The presence of hallucinations and delusions in MAP is well documented, whereas negative psychotic symptoms are predominately absent from MAP. The absence of negative symptoms may help clinicians differentiate between MAP and schizophrenia and provide appropriate treatment. The dominance of delusions and hallucinations supports the applicability of the DSM-V criteria for substance-induced psychosis. The presence of affective symptoms and MAP may be due to high rates of co-morbid anxiety and major depression among individuals. Symptoms of disorganisation and inappropriate affect were reported infrequently (6% of the studies) with the exception of flattened affect (19%).

32 studies were identified, with a majority being from Japan (n=12), East Asian and Pacific countries (n=8), and the USA (n=7). The mean sample size was 75 (range of 6 – 289). Most studies recruited from in-patient clinical settings (n=27). Participants were primarily men who were dependent on methamphetamine. The most commonly reported symptoms (Fig 1) were auditory hallucinations (62% of studies), visual hallucinations (60%), and delusions of persecution (60%).

A total of 89 articles were eligible. Findings from cross-sectional (n=14) and case control (n=18) studies are reported here. Aims were included if they examined the symptom profile of psychotic symptoms in individuals who were either i) diagnosed with MAP, ii) identified as having MAP, or iii) diagnosed with substance-induced psychosis with concurrent methamphetamine use. Articles were included if they examined the symptom profile of psychotic symptoms in individuals who were either i) diagnosed with MAP, ii) identified as having MAP, or iii) diagnosed with substance-induced psychosis with concurrent methamphetamine use.


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