

# Folie a Famille Associated with Amphetamine Use

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## Abstract

*Shared Psychotic Disorder involving an entire family (folie a famille) is extremely rare. Only two cases of Shared Psychotic Disorder linked to stimulant abuse have been documented in the literature. We report a case of folie a famille that involved 5 members of a family, and was associated with amphetamine use in the primary individual. Our case shares many clinical and etiological factors with previously reported cases of shared psychotic disorders. A wide variety of psychotic manifestations are associated with amphetamine use and clinicians should be aware of this uncommon syndrome among stimulant-using population, particularly due to the recent increase in methamphetamine use and the link between delusional disorders and violence among these individuals.*

## INTRODUCTION

Shared Psychotic Disorder (DSM-IV) is a rare and unusual disorder characterized by sharing of the same delusions by different persons who typically have been intimately associated for a long time and live in relative social isolation. The condition was first described by Lasegue and Falret and termed folie a deux (1). Most often, two persons share the same delusion in a pathological relationship in which one individual's beliefs adversely affect another (2). Rare cases involving 4 or even 5 persons or an entire family (folie a famille) have been described (3-14). In almost all reports, the primary patient has been diagnosed to be suffering from schizophrenia or delusional disorder.

Although amphetamines and other stimulants have been recognized to induce schizophrenia-like psychosis, there have been just two published reports of folie a deux resulting from stimulant (methylphenidate) abuse (15,16). This is particularly

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surprising, given the wide spread abuse of illicit stimulants and increasing prescription of amphetamines in recent years. We report a case of folie a famille associated with amphetamine use in the primary individual.

#### CASE REPORT

Mr P, a 31-year old unemployed welder and his 26-year old wife were both referred to the addiction services in Nottingham, England for amphetamine abuse and psychotic symptoms.

Mr P first experimented with amphetamines in his late teens and then became dependent on it in his early 20s injecting up to a gram a day on a daily basis. He stopped his amphetamines after a successful inpatient detoxification at 25 years of age, which coincided with his finding a job. After 5 years of abstinence, he relapsed after he lost his job and rapidly progressed to intravenous use and was injecting approximately 2 grams of amphetamines every day at the time of referral.

Over the six months prior to the referral, Mr P believed that the anti-drug squad, police and customs officers were conspiring to file false charges against him as a major drug distributor in the city. Towards this end, he believed that they had mounted an elaborate surveillance operation enlisting the help of his neighbors and parents-in law to follow him in cars and in person. He was convinced that 'tiny microphones' were implanted into the walls of his house. He had obtained a letter from the previous tenants verifying that the house had not undergone any brick removal for repairs or restoration. He brought to the outpatient clinic a bag full of bricks, which, according to him, were newly inserted in the walls of his house, which he could tell from 'their different look'. He felt this proved his case that the walls were bugged. Mr P had frequently accused his neighbors of spying on him, leading to violent arguments.

Mr P had no previous psychiatric, medical or forensic history. His previous detoxification was not associated with psychosis. His parents were divorced and he had no contact with his father since age 7. He was close to his mother, Mrs M, who was 60 years of age and described as passive. He had two older sisters, Ms S and Ms V with whom he had a good relationship. All his family members lived on the same street as Mr P and he saw them on a regular basis. There was no history of a psychiatric illness in the family. Mr P was described as a loner who dropped out of school and worked as a welder for 10 years. He was married for 6 years and had 3 children. He had a domineering relationship with his wife, and at times he suspected that his wife was spying on him.

Mr P presented as a tall, confident, well-built person who had well-systematized persecutory delusions and was angry that nobody believed him. He did not exhibit any mood symptoms, auditory hallucinations or any disorganized thought processes. He had no insight and refused urine and blood investigations, medication and hospitalization. He was diagnosed to be suffering from Amphetamine-induced psychotic disorder.

His follow up was difficult as he often failed to keep appointments. Reluctantly,

he agreed to try haloperidol 5 mg per day, but then discontinued it due to side effects. He stopped injecting amphetamines for about 3-weeks and his psychosis appeared to have remitted partially. Contact was lost after 3 months and he was referred after 6 months when he failed to attend. Subsequently, he was remanded to prison for maliciously wounding his wife.

Mrs P was assessed at home and was 8 months pregnant. She was introduced to drugs by her husband and had been injecting amphetamines for a year. She had no previous history of any psychiatric disorder, illicit drug or alcohol use, or a family history of a psychiatric disorder. She presented as a slim attractive woman who insisted that she was being followed, their house was bugged and that there were tunnels underneath the house. She pointed out some 'loose bricks' in the house to the visiting team to justify that the walls were tampered with. When challenged, she became angry, insisting that the treatment team was part of the conspiracy and became uncooperative. There was no evidence of hallucinations, mood symptoms or any cognitive impairment. Her family lived locally and she had good relationship with her parents until recently, when she believed they were part of a conspiracy against herself and her husband. She also believed that her parents had misinformed the social services and the school that their children were not cared for.

Mrs P did not wish any treatment or follow up. With great difficulty, she agreed to be seen at home by the community nurse. Her parents were very concerned about her condition. She stopped injecting amphetamines after a few weeks of follow up and did not receive any medications. Shortly afterwards she stopped believing in her husband's persecutory ideas but went along with him since she was frightened of him. She delivered a healthy baby and restarted injecting amphetamines in a couple of weeks. A few days later, she became abusive towards the community nurse and terminated follow up.

Mrs M and Ms V (Mr P's mother and sister respectively) were seen at the clinic together with Mr P at the initial assessment. They corroborated Mr P's history, being convinced by his explanations and not believing that Mr P was psychiatrically ill. They were angry at the local social services and police for not stopping Mr P's surveillance.

Ms S (Mr P's sister) called the social worker on the treatment team expressing the same set of beliefs as Mr P and insisting that 'something should be done'. To the best of our knowledge, None of Mr P's family had used amphetamines or other drugs and had no previous psychiatric history. It was not possible to follow up any of the family members.

## DISCUSSION

This case shares many clinical and etiological factors with previously reported cases of shared psychotic disorders. According to DSM-IV (17), for a case to merit the diagnosis of shared psychotic disorder, it must meet three criteria. First, an individual develops a delusion in the context of a close relationship with another individual, who has an already-established delusion. In our case, Mrs P presented with perse-

cutory delusions which seem to be cultivated by her relationship with her husband. Secondly, the individual must share delusions similar in content to that of the inducer, which was the case in Mrs P's psychopathology. Similar contextual conditions and delusional beliefs also occurred among other family members (Mr P's mother and sisters), although their delusions were not as prominent as Mrs P's. Finally, another psychotic disorder, a mood disorder with psychotic features, or the direct physiological effects of a substance must not cause the illness. Due to the fact that some of the family used amphetamines, namely Mr and Mrs P, the association of amphetamine abuse with shared psychotic disorder is stressed in the present report.

Glassman (18) described six typical features of families who develop folie a famille: 1) the families exist in social isolation, 2) relationships between family members tend to be mutually dependent and ambivalent, 3) the families are repeatedly in a state of crisis, 4) there is often an underlying threat or the frank presence of violent behaviors, 5) the family membership is stable over a long period of time, and 6) there is a dominant family member, the inducer, around whom the delusional beliefs evolve. The inducer holds the delusional beliefs with the strongest conviction (19), fulfilling the dominant role in the family (20). The other family members, the induced, have been shown to often be less intelligent, female, and passive, dependent, suggestible, or histrionic (7,11,12). The case report described above fits these criteria well.

One particularly interesting feature of this case seems to be the role of amphetamines in development of psychopathology. Mr P, the primary patient suffered from an amphetamine-induced psychotic disorder. The close association between psychosis and amphetamine use, partial remission on discontinuation of amphetamines, relapse on resumption of the drugs and absence of past history of psychosis makes a diagnosis of schizophrenia less likely in his case. It also seems that amphetamines contributed to Mrs P's psychotic symptoms although it remains unclear to what extent Mrs P and other family members were truly delusional rather than being highly impressionable and passively accepting Mr P's delusional beliefs. Another unusual feature was the large number of individuals (five) sharing the same delusional system. A disturbing and unfortunate outcome was the violent assault by Mr P on his wife, which seems to have been linked to his delusions.

Folie a deux is believed to be a variant of delusional disorder, and genetic as well as psychological factors have been considered to be relevant in its development (21). It is therefore surprising that there are hardly any reports of amphetamine or cocaine-related folie syndromes, especially since delusional disorders are frequently associated with stimulant use (22). One possible reason could be simply the chaotic life styles of substance abusers, which often make it difficult to interview relatives and partners of such patients, which is essential to diagnose the disorder. Another possibility is that paranoid psychoses are less frequent with cocaine than amphetamine use due to difficulty in sustaining high chronic blood levels of cocaine (23) and the fact that cocaine (crack cocaine) has largely replaced amphetamine as the preferred stimulant in the past 20 years in the United States (24). Nevertheless,

clinicians should be aware of this uncommon condition among stimulant-using population as well as dually diagnosed patients, particularly due to its potential for violence, if unrecognized and untreated. Moreover, recent epidemiologic trends indicate that amphetamines, particularly methamphetamines and methylenedioxymethamphetamine (MDMA, ecstasy) are becoming increasingly popular among adolescents (25), and, in the future, clinicians may be more likely to see more and more use of such drugs and the problems that accompany their use.

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