Folie à Trois: Case Report of a Patient Who Shared Delusions with Her Sister and another Patient in the In-Patient Psychiatric Unit

Margaret Carter¹, Tyler A. Barreto¹, Ruby Barghini¹ and Allison Zuckerberg¹,²,*

¹Department of Psychiatry, Temple University Hospital Episcopal Campus, Pennsylvania, USA
²Department of Medicine, Hackensack Meridian School of Medicine, New Jersey, USA

Abstract

Folie à deux is a rare condition in which a single person (often with a psychiatric disorder) develops a delusion that is shared by another person. Folie à trois is when a delusion is shared by three people. This case report documents the unusual case of an individual who shared delusions with two different people simultaneously. This report inspires questions about this person, her delusions, and what made them so believable to others. It is known that development of shared delusions most commonly occurs in relative isolation and disproportionately affects individuals with pre-existing psychiatric comorbidities. Because of these risk factors, delusions in a psychiatric unit may be even more “contagious” than in the general population. To our knowledge, this case report is the first to document a newly developed delusion shared between two unrelated patients in a single psychiatric unit. While physical separation of patients is the best practice in such cases, a risk-benefit analysis is needed prior to this intervention given the social barriers that may limit such an approach. Further research is needed to diagnose, manage, and optimize treatment for shared delusions in settings such as inpatient psychiatric facilities.

Keywords: Psychosis • Shared psychosis • Shared delusion • Induced delusion • Shared psychotic disorder • Folie à deux • Schizophrenia spectrum disorder • Specified schizoaffective spectrum • Psychotic disorders

Introduction

Folie à deux occurs when a “primary” presents with features of psychosis and a “secondary” demonstrates shared psychotic features. Although it is most often seen between two individuals, rarely a primary can influence more than one person [1]. This case report illustrates the clinical presentation of one individual sharing a delusion with two different individuals simultaneously, or folie à trois. In the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV), this condition is diagnosed when a delusion A) develops in an individual in the context of a close relationship with another person(s), who has an already-established delusion, B) is similar in content to that of the person who already has the established delusion, and C) the disturbance is not be better accounted for by another psychiatric disorder or a mood disorder with psychotic features and is not due to the direct physiological effects of a substance or a general medical condition [2]. In the DSM-V, this was removed and is now described as “delusional symptoms in the partner of an individual with delusional disorder” in the section “Other Specified Schizoaffective Spectrum and Other Psychotic Disorders” [3]. We use this case report to review common themes noted in previous literature and recommend future directions for studies of this rare phenomenon.

Case Presentation

A middle-aged female with a past psychiatric history of schizophrenia was brought to the emergency department by police for grandiose and persecutory delusions regarding a single individual. When contacting the patient’s sister who she had been living with, it was clear that she also believed such delusions and behaved as if they were reality. She repeatedly expressed concern that the patient’s persecutor was listening in on the phone calls. The patient was treated with risperidone which improved her affect and behaviour, but only minimally improved her delusions. During the hospitalization, she continued to endorse delusions regarding the persecutor. One such delusion was that some staff were employed by this individual and accessing her personal belongings from a locked closet. Interestingly, after some time the patient became friends with another patient on the unit who started endorsing this delusion too, although to a lesser degree. Physical separation of the two patients was considered; however, by this point the patient had stabilized and ready to be discharged. Although attempts were made to reconnect the patient’s sister throughout the hospitalization, she stopped answering calls so it could not be confirmed if the delusion continued to be maintained. She was ultimately discharged back to her sister’s home with recommendations to continue risperidone and follow up as an outpatient. Physical separation was also considered for the patient and her sister, but unfortunately the patient had nowhere else to live. Because of this, psychological separation from her sister was recommended. She was encouraged to reconnect with outside family members, friends, and social groups like church.

Discussion

Since folie à deux (French for “madness of two”), was first characterized in the late 1800s, many have questioned what causes this phenomenon [4]. Although the mechanism is not understood, researchers have attempted to stratify risk factors that contribute to its development. Social isolation has consistently been identified as the most significant risk factor among those affected [5]. Similarly, our patient was noted to be isolated from society. In one encounter, the patient admitted to clinicians that she was too paranoid...
to use a cell phone. She could not identify any form of social support besides her sister. In the DSM-IV, schizophrenia was considered the most likely diagnosis in the primary which also happened to be our patient’s diagnosis [3]. Generally, those with some form of psychiatric illness have been found to be more susceptible to shared psychosis [6]. Literature spanning from 1942 to 1993 found that the majority (90.2%) of cases were within dyads of the nuclear family, and evenly distributed amongst married couples, sibling dyads, and parent-child dyads [7] and a more recent review from 2006 estimated as many as 98% of reported cases occurred within the nuclear family [8]. Gender concordant pairings were also more common [8]. Earlier hypotheses suggest that women are more susceptible than men [3]; however, other studies have not replicated this [7]. Across PubMed, there was only a single case report about a patient on a medical floor who shared delusions with another person, but it was the patient’s mother staying with them in the hospital rather than another patient [9]. Lastly, our case report details a primary and two separate secondaries who had multiple shared demographics outside of family relationship including age, gender, and race. To our knowledge, no current literature has considered the representation of race or ethnicity in those who share delusions.

Typically, treatment for shared delusions is separation and treatment of all affected individuals. Unfortunately, this is challenging to address when someone affected is not a patient. We do not know if the patient’s sister experienced improvement in her delusion with separation. However, we suspect not because she was paranoid during phone calls that it may have caused her to stop answering entirely. While physical separation between the patient and her sister could be encouraged, the reality is that the patient was homeless otherwise and already had interacted at least once with law enforcement. The risks vs. benefits of separation were weighed to which it was agreed that enforcing physical separation was not feasible and would likely worsen the patient’s overall prognosis. Since psychological separation could improve the patient’s delusions, it was recommended that patient reconnect with people who may not share her delusion. Additional treatment modalities are needed for patients with shared delusions, as separation and treatment of all parties is not always realistic (Table 1).

### Table 1. Key points/Clincial pearls.

<table>
<thead>
<tr>
<th>Key points</th>
<th>Clinical pearls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isolation is a key risk factor for shared psychosis</td>
<td>Investigate other risk factors (e.g., race, ethnicity)</td>
</tr>
<tr>
<td>Risks vs. benefits must be analyzed for physical separation</td>
<td>Consider psychological separation if physical separation is not feasible or may worsen prognosis</td>
</tr>
<tr>
<td>Psychological separation is a reasonable alternative for shared psychosis</td>
<td>Educate clinicians about psychological separation</td>
</tr>
<tr>
<td>Sharing a psychiatric unit may contribute to development of shared psychosis</td>
<td>Clinicians should be aware of this potential risk factor</td>
</tr>
</tbody>
</table>

### Conclusion

Ultimately, one can conclude that first-degree, gender concordant family members with a close as far as isolated relationship is a highly prevalent configuration for shared delusions (i.e., the patient and her sister). Further, individuals with a psychiatric comorbidity are more likely to share psychosis (i.e., the second patient on the psychiatric unit). How any kind of folie happens is unknown, but its propensity to occur in families may be a combination of isolation and other factors yet to be as systematically characterized, such as genetics or characteristics of a shared environment. Our case raises an interesting question on the validity of information collected via collateral from family members, since they may share delusions. What is unusual about this case report is that beyond this, an unrelated patient on the psychiatric unit also began endorsing delusions similar in content to the patient and her sister, consistent with folie à trois. In theory, shared experiences within a psychiatric unit, such as confiscation of personal belongings and a high level of supervision may increase patients’ perception of isolation. It is possible that this phenomenon occurs commonly in psychiatric units where patients have opportunities to formally and informally interact but is underreported or underrecognized. This case inspires questions about what may contribute to affinity and/or relative social isolation of groups. Further research is needed to diagnose, manage, and optimize treatment for shared delusions in contexts such as the inpatient psychiatric setting.