The Truth in a Delusion: a case report on delusions of military service in a United States Air Force veteran with schizoaffective disorder.

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ABSTRACT

Delusions are a fixed set of false beliefs that can be bizarre or non-bizarre in nature and remain constant regardless of overwhelming contradictory evidence. Delusions are seen often in individuals with schizophrenia and related disorders. These beliefs often have detrimental effects on the insight of the individual into their own disease and can make treatment difficult for providers. There is limited evidence available concerning role prior life experiences have in shaping delusions, but it has been well established that environment plays a strong role in shaping the content of a delusion. The multifactorial model posits that persecutory delusions reflect the interface between psychological pathology, pre-existing beliefs, personality, and environmental cues.

Mr. X is a 49-year-old male with a long-standing history of refractory schizoaffective disorder. He has been admitted to a state psychiatric hospital in Ohio twelve times since 1998 for erratic and disruptive behaviors secondary to his non-bizarre delusions. His primary delusion is that of having had his identity stolen and hospitalization records falsified by another man. He has repeatedly claimed during his series of hospital admissions that he is an officer in the United States Air Force, particularly that he is a 5-star general with two Purple Heart Awards. During his most recent hospitalization, investigation into his veteran status was undertaken given the persistence of this delusion. It was determined that the patient had served in the United States Air Force. Because of this investigation, the patient's healthcare team was able to arrange for him to obtain benefits from Veteran Affairs upon discharge. This case is evidence of the basis that delusions can have in reality. It highlights the need for clinicians to think critically about how the personal history of a patient relates to the delusions that he or she is experiencing. There is a need for further research in this area. Understanding the foundation delusions can have in patient's previous life experiences creates the opportunity to individualize treatment and improve access to resources for patients.

Disclaimers: . The authors of this case report have no commercial, financial, or other conflicts of interests relating to this case report and the patient discussed.

PURPOSE

To present a unique case demonstrating the ability of prior life experience to shape the content of a non-bizarre delusion in a patient with severe refractory schizoaffective disorder.

BACKGROUND

Diagnostic criteria for Schizoaffective Disorder: [1]

- An uninterrupted period of illness during which there is major mood episode (major depressive or major manic) concurrent with Criterion A of schizophrenia.
  - Criterion A of schizophrenia: Two or more of the following, each present for a significant portion of time during a 1-month period (or less if successfully treated). At least one of these must be (1), (2), or (3):
    1. Delusions.
    2. Hallucinations.
    3. Disorganized speech.
    4. Grossly disorganized or catatonic behavior.
    5. Negative symptoms (i.e. diminished emotional expression or avolition).
  - NOTE: The major depressive episode must include Criterion 1A: Depressed mood.
- Delusions or hallucinations for 2 or more weeks in the absence of a major mood episode (depressive or manic) during the lifetime duration of the illness.
- Symptoms that meet criteria for a major mood episode are present for the majority of the total duration of the active and residual portions of the illness.
- The disturbance is not attributable to the effects of a substance (e.g., a drug of abuse, a medication) or another medical condition.

Specifier: Bipolar type: This subtype applies if a manic episode is part of the presentation. Major depressive episodes may also occur.

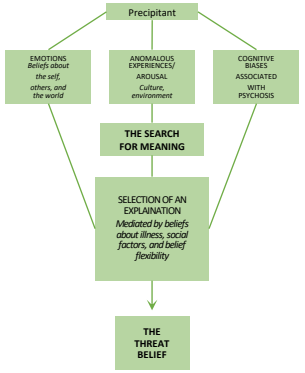
Delusions:[1]

A delusion is defined as fixed false belief that is maintained by an individual in the face of overwhelming contradictory evidence.

Table 1: Types of Delusions:[1]

Bizarre Delusion	Implausible, content not usually understandable
Non-Bizarre Delusion	Untrue, but understandable and retain the possibility of being true
CONTENT	
Reference	Belief that arbitrary events involve the individual in a special way
Grandiose	Belief that the individual has some special power or significance
Paranoid	Belief that the individual is being persecuted or followed
Nihilistic	Belief that the individual is dead or that his/her body is decaying or does not exist
Erotomanic	Belief that the individual has a special relationship with another individual

Figure 1: Multifactorial Model of Persecutory Delusions:[2]



Adapted from Figure 1 by Freeman et al. 2002.

CASE PRESENTATION

C.T. is a 51-year-old Caucasian female with a past psychiatric history of schizoaffective disorder-bipolar type and post-traumatic stress disorder (PTSD) who presented from local emergency department with symptoms of psychosis.

HPI:

- Admitted to Twin Valley Behavioral Health (TVBH) in Columbus, OH in December 2020 for rehabilitation from active psychosis and paranoid and persecutory delusions.
- Recently discharged in November 2020 for TVBH after three months of rehabilitation where he was treated with haloperidol 10mg BID, olanzapine 10mg BID, benztropine 1mg BID, and melatonin 2mg QHS.
- Lengthy history of medication non-compliance upon discharge and requiring forced medications in the inpatient setting.
- Twelve total admissions to TVBH, the first of which was in 1995, ten of which were since 2017.
- Primary delusion: He has had his identity stolen by a man and his hospital records falsified
- Secondary delusions: He is actually an officer in the U.S. Air Force, particularly a 5-star general and the "smartest person in the world."

Psychosocial History:

- Family history or mental health disorders including a grandmother who committed suicide.
- History of using cocaine, marijuana, alcohol, and crack at unspecified times in the past.

Past Medical History:

- Asthma
- Hyperlipidemia
- GERD
- Restless Leg Syndrome
- History of unspecified neuropathy
- History of subdural hematoma secondary to MVC in 1984

Allergies:

- Lithium
- Valproic Acid
- Carbamazepine
- Bupropion
- Hydrocodone
- Oxcarbazepine

MENTAL STATUS EXAM:

Appearance – Older than stated age, hair in face, without teeth. Good eye contact.

Speech – Pressured. Fluctuating tone. Spoke rapidly in unbroken English. Paraphasia. Rhythmic speech with pauses for dramatic effect.

Mood – "Get out of here, I don't want to see you."

Affect – Expansive with rapidly fluctuating emotional states. Initial infuriation with seeing Dr. Iversen transformed into anger at the injustice of being impersonated. He ultimately became expansive using body language and head motions to emphasize his speech.

Thought Process – Tangential thoughts focused on a central delusion that he has had his identity stolen. Does not think that that others can understand his situation. Evidence of splitting with his opinion of Dr. Iversen being all bad and his opinion of Dr. Bhatt being all good.

Thought Content – Denies SI. HI directed at the man he believes is his imposter. Aggressive wishes towards him current staff and physicians, stating that every time "[they] come around [they] falsify his paperwork." Paranoid and persecutory delusions, adamantly stating that Dr. Bhatt is the only person with his interest in mind. He has delusions of grandeur including that of being a 5-star general and Air Force officer as well as "the smartest person in the world."

Perceptions – Denies AVH.

Cognition – Oriented to person, place, time, and situation.

Insight – Extremely poor. Unable to provide insight into his mental health conditions and is certain that he is admitted on "false pretense." He stated multiple times that he is "completely normal" and everyone else is just crazy. He attributes hospital records of psychotic behavior and delusional statements to his imposter.

Judgement – Very poor. He is fixated on being impersonated and is incapable of considering any other theoretical or hypothetical thoughts. He immediately returns conversation to the topic of this impersonation and relates all his other delusions back to it.

INTERVENTION

- Mr. X was admitted for stabilization and placed on quetiapine 400mg BID, olanzapine 10mg BID, and benztropine 1mg BID.
- His delusions continued despite medication and he experienced extrapyramidal side effects
- Medications were ultimately discontinued as they did not appear to be changing the patient's psychotic symptoms and historically had not improved his condition.
- **The Ohio Department of Veteran Services was contacted by attending physician, Dr. Nita Bhatt, and it was determined that the patient was a U.S. Air Force veteran, though not a 5-star general, and would be eligible for Veteran Affairs benefits upon discharge.**
- **Mr. X will be placed in contact with Veteran Affairs prior to discharge and will be arranged to have mental health follow-up through the VA in addition to Ohio Health Partners who he had been following with in the past.**

DISCUSSION

- The multifactorial model for understanding persecutory delusions suggests that culture and environment interact with the emotions of the individual and cognitive biases associated with mental psychosis to create an explanation for some precipitating event.[2]
  - Beliefs about illness, social factors, and belief flexibility are thought to lead to the abnormal selection of an explanation of these factors and result in the threat belief.[2]
  - There is evidence supporting childhood trauma being associated with increased severity of delusions in psychotic disorders.[3]
- The role of culture and environment in the content of non-bizarre delusions is evidenced by historical accounts of delusions. *du Plessis, 2019* describes this in his study of 400 records from the Grahamstown Lunatic Asylum in South Africa from 1890-1907.[4]
  - The South African War, the rinderpest epidemic, diamond mining, and the discovery of gold were common themes for delusional content in these patients.
  - One patient stated that he was *"certain that the Dutch wish[ed] to destroy the railways and want[ed] to prevent them."*[4] He also believed he was being watched by spies due to his interest in protecting the railways.[4]
  - Similar themes but relating to current affairs are readily seen within the psychiatric patient population, including this patient.
- Neurocognitive models have been postulated to understand the neuroscientific foundation for persecutory delusions.[5]
  - fMRI studies in first episode psychosis patients demonstrate increased phasic dopamine release which is thought to result in the aberrant attribution of high salience to seemingly irrelevant events.[5]
- This patient's delusion of grandeur as a 5-star military general appears to be deeply rooted in the identity he had as an airman in the United States Air Force. We hypothesize that he associated value with military success in his early, pre-psychotic, life and that value has been made manifest in his delusion.
- This underscores the importance of mental health services to think critically about the nature of a patient's delusion and what this may emphasize about the patient's past.

LIMITATIONS:

- There is limited literature available concerning the relationship between known life events and the content of delusions seen in patients with psychosis.
- Connecting this patient with Veteran Affairs took years to undertake because the severity of his disease and his numerous delusions resulted in providers placing little merit in the factual history that underlies the delusion.
- Delusions, by definition, are unfounded beliefs. Therefore, reading too far into a patient's delusion could quickly lead to both frustration and the squandering of resources.
- Determining when it is appropriate to investigate the origins of a delusion is a balancing act that is best left to the judgement of the patient's primary practitioner and care team.

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