Pseudohallucinations in People With Intellectual Disabilities: Two Case Reports

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This is the first case report of two people with mild intellectual disabilities presenting with chronic perceptual anomalies that can best be described as pseudohallucinations. Alongside the two case histories we present a discussion of the validity of the concept of pseudohallucinations, especially in people with intellectual disabilities, as well as a framework to assess auditory hallucinations in this population.
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Pseudohallucinations are particularly ambiguous symptoms, which are hard to clearly define. Despite the difficulty in a consensus view of the phenomenology of pseudohallucinations and method of eliciting such phenomena, most psychiatrists still find the term clinically and diagnostically useful. Traditionally, hallucinations are thought to indicate a psychotic or organic illness, whereas pseudohallucinations are associated with personality disorders or emotional disturbances such as bereavement.

Adityanjee and Benjamin[1] argue that it is vital to maintain the division between true hallucinations and pseudohallucinations in order to avoid a false diagnosis of schizophrenia and inappropriate long term treatment with antipsychotic medication. Indeed, caution must always be exercised: up to 10-35% of the general population may have a hallucinatory experience at some point in their lives,[4] suggesting that such phenomena are not always indicative of psychiatric disorder. Berrios and Dening,[2] in reviewing the history of the concept, conclude that the term pseudohallucination remains a nebulous and blurred one and is used by clinicians whenever a hallucinatory symptom does not fit with a pre-conceived psychiatric diagnosis.

Sims[5] defines pseudohallucinations as "a perceptual experience which is figurative, not concretely real, and occurs in inner subjective space, not in external objective space." In contrast to normal imaginative imagery, it cannot be deliberately evoked. In common with other phenomenologists such as Jaspers, Sims refers to pseudohallucinations as having an "as if" quality.

In people with intellectual disabilities, eliciting psychopathology is hindered by limited communication and conceptual skills. Thus, the distinction between true hallucinations and pseudohallucinations, which can already be a challenge, becomes doubly difficult. A particular problem when assessing these phenomena in people with intellectual disabilities is the presence of "imaginary friends." The use of imaginary friendships may be developmentally appropriate and can be observed as the individual "talking to themselves" and hence interpreted as responding to hallucinations.

This confusion may have important clinical implications. In people with intellectual disabilities the incidence of both schizophreniform illnesses and personality disorder is significantly increased.[3] Therefore, the distinction between true hallucinations and pseudohallucinations can be of high diagnostic value. The following case histories illustrate that people with intellectual disabilities can present with abnormal perceptual psychopathology that does not fit well into the description of true hallucinations.

Case Studies

Case 1.

Mr. A was a 35-year-old single male with mild intellectual disabilities and good verbal skills, who resided in an independent flat receiving daily outreach support from a specialist mental health team and a housing association. He had been seen numerous times both by general adult psychiatric and intellectual disabilities specialist mental health services for overdoses of Paracetamol and alcohol. He used alcohol and recreational drugs in times of stress but showed no evidence of physical dependence. He had a past history of childhood sexual abuse and consistently reported hearing intermittent, poorly

described, voices in his head, often derogatory in content, sometimes prompting him to take an overdose. The voices were not experienced in external space and their quality was not of the same nature as normal auditory experiences. Although occurring at times of stress of social difficulty, they were not related to his consumption of alcohol.

Limited prenatal and post-natal information was available regarding Mr. A. In his early development he showed evidence of delayed developmental milestones; he attended special needs education from the age of 7 years. His biological parents, who both were healthy, separated soon after Mr. A's birth and the father left the family home. Mr. A had four brothers, one of whom had a history of psychiatric hospitalizations (his diagnosis was not recorded).

Mr. A alleged that when he was 13-years-old, a male friend of his mother had sexually abused him on a number of occasions for a period of about two weeks. He was initially too frightened to disclose the abuse, but informed his mother a few days after the incident and she alerted the police. The man in question was not prosecuted. Almost immediately after the event Mr. A started complaining of hearing the voice of his abuser in his head. This complaint has consistently been the most prominent feature of his symptomatology in the following years.

In his early adolescent years Mr. A saw a clinical psychologist who thought he was experiencing symptoms indicative of a Post Traumatic Stress Disorder and started working with Mr. A along a cognitive behavioral (CBT) framework around the voices. Despite some initial success, after the end of the sessions the voices returned. He was then prescribed risperidone (Risperdal) tablets which yielded no clinical benefit and had to be stopped after several tablets were taken as an overdose. Olanzapine (Zyprexa) was also unsuccessful in alleviating the reported voices. Trials of antidepressants in his early twenties similarly showed minimal or no benefit. Mr. A continued taking minor overdoses and cutting his wrists superficially, usually after drinking large quantities of alcohol. He had been admitted to psychiatric hospitals on three occasions, once detained under the Mental Health Act.

He was finally diagnosed with an emotionally unstable personality disorder and has benefitted from an integrated intervention consisting of individual psychological treatment, outpatient psychiatric attendance, supported employment and community activities provided by a dedicated team for people with mental health problems and intellectual disabilities. This consistent approach has reduced his level of stress, alcohol and drug use, and degree of symptoms.

CASE 2.

Mr. B was a divorced, unemployed man of 51 years of age with mild intellectual disabilities. He had a long standing diagnosis of borderline personality disorder, a previous history of alcohol misuse and a history of sexual offences dating back in his early twenties. In addition to problems around identity, interpersonal relationships, impulsivity, intermittent persecutory thoughts and affective instability, he had chronic auditory pseudohallucinations, often commanding him to take an overdose. He described these as being located within his head and qualitatively like a man's voice.

Mr. B was the second in birth order of eight siblings. His prenatal history was unremarkable and he was born by forceps delivery. Early developmental milestones were reported as normal, although he was described as being clumsy and having temper tantrums. At the age of eight he was transferred to a residential school for children with emotional and behavioral disorders. When Mr. B was 14-years-old his mother left the family. She was reported as having an alcohol dependency problem and being violent towards Mr. B. His father took on the primary care giving role from that point. Mr. B left school with no formal qualifications and held two manual, unskilled jobs, for two months each, until he was 17-years-old; he has remained unemployed ever since. Throughout his adult life Mr. B lived in several mental health hostels and group homes and kept very little contact with his family. His father died of a stroke in 1993. No family history of psychiatric illnesses was documented in Mr. B's medical notes.

In 1966 Mr. B was convicted of an indecent assault against a child and was placed on probation. He re-offended two years later and was placed in a secure hospital for three years. In 1990 he was arrested and placed on remand in prison for three months for setting fire to his blankets in his hostel but was not charged with the offense. There is no evidence that Mr. B has offended against children for the last 35 years.

With regards to his past psychiatric history Mr. B has been admitted to numerous psychiatric

hospitals, on both a voluntary and compulsory basis. Most admissions were precipitated by threats to harm himself or others, as a result of auditory hallucinations in the context of high anxiety and emotional distress. He has taken many minor overdoses and two more severe ones and has inflicted small wounds to his wrists several times. Mr. B received a diagnosis of schizophrenia and affective disorder in the late seventies. Over the years he has been on various medications including conventional (oral and depot) and atypical antipsychotics, antidepressants (TCAs, SSRIs) and benzodiazepines. No pharmacological treatment alone managed to reduce his symptoms significantly. In the early nineties his diagnosis was reviewed. In the absence of first rank symptoms of schizophrenia and after establishing that the "voices" did not seem to represent true hallucinatory experiences but pseudohallucinations, a diagnosis of personality disorder of the borderline type was considered.

At present Mr. B receives care from a multi-professional community-based specialist team for people with intellectual disabilities. Alongside administration of a depot injection of Zuclopenthixol (which has not affected the presence of "voices" but has reduced his overall level of agitation) he receives specialist psychiatric reviews, individual sessions with a clinical psychologist and regular support from housing officers to participate in community-based activities. His care is coordinated by a nominated person and Mr. B is subject to regular and ongoing risk assessment.

Discussion

In the cases presented, to label the abnormal perceptions as pseudohallucinations or true hallucinations, based solely on the patients' reports, seems a rather difficult task. This is not uncommon, as in the Psychiatry of Intellectual Disabilities we are more dependent on behavioral observations due to the patient's cognitive or communication impairments. Indeed the observed response to abnormal hallucinatory experiences could be an important discriminative factor. Behaviors such as distraction, looking at unoccupied areas without due cause, and speech or communication suggesting response to hallucinatory stimuli may all suggest that true hallucinatory phenomena are indeed occurring. Similarly, reported abnormal perceptual experiences without a behavioral response could suggest pseudohallucinations.

Such division is by no means accurate; true hallucinations can occur without obvious behavioral responses, and pseudohallucinations can occur with quite marked reactions. However, we would argue for the value of using such distinction since it is practical, unambiguous and not contrary to any other system of descriptive psychopathology. We would also suggest that the division between behaviorally linked hallucinations and behaviorally neutral hallucinations has more value as the level of intellectual disabilities becomes more severe. In people with less severe impairments it should be used more in conjunction with eliciting the symptomatology from the patient.

It seems that there is an inherent inaccuracy in systems set out to describe such complex phenomena in people with intellectual disabilities. Ultimately, the utility of pseudohallucinations/ non-psychotic hallucinations and of any system of distinction will endure or fall on its diagnostic and prognostic power, and to date this has not been adequately researched.

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