

# Perception of psychosis in patients

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## INTRODUCTION

It is through an integration of sensory information and stored knowledge that we perceive the objects, events and emotions that make up our world. Thus, we may perceive a state of happiness in the self, or another, when inner cues such as a feeling of elation, or external signs like a smiling face, are detected and associated with previously held conceptions about what a state of happiness is. In patients with psychosis however, this transaction between external and internal environmental cues and knowledge of the self and the world is disrupted. Psychosis is a mental state where there is some loss of contact with reality and where there are disturbances to the normal processes of thought and perception. With the normal mechanisms of mental appraisal impaired, it is not only the perception of everyday thoughts and events that is at risk of misinterpretation. The perception of the psychotic state both in the self, and in others is likely to be distorted. In this editorial, consideration is given to how patients with disorders such as schizophrenia, subjectively and objectively perceive the state of psychosis along with a brief discussion of the factors most likely to influence the identification and appraisal of delusional beliefs and hallucinatory experiences.

### Patients' perception of psychosis in the self

With the exception of the individual holding the belief, the implausibility of a delusion is usually conspicuous to

all those aware of its subject matter. Indeed, it is a characteristic feature of psychosis that while family, friends and health professionals clearly identify delusions and other psychotic symptoms as pathological, those same symptoms are often denied as a sign of illness by the person experiencing them. In respect of auditory hallucinations for example, patient explanations of the phenomena may range from claims of possessing a special power to hear such voices, to a belief that the voices are normal and that others can hear them too. The appraisal by patients that individual symptoms are non-pathological often extends to a denial or an apparent lack of awareness that they are experiencing any form of psychological or emotional disturbance. In psychiatric terminology, the word 'insight' describes the level of awareness that patients have with respect to their symptoms and illness status.

Poor insight is a common feature of the functional psychoses. Researchers in the World Health Organization's *International Pilot Study of Schizophrenia* (Sartorius, 1972) interviewed nearly one thousand people, in nine different countries who were experiencing a recent onset of acute schizophrenia. Amongst the items used in the assessments was a measure of patient insight. This measure consisted of an assessment of whether the participants had some awareness of an emotional illness or whether they vigorously denied that they were disturbed. The IPSS found that a lack of insight occurred in 97 percent of the sample. Poor insight was more frequent in the IPSS sample than any single type of psychotic symptom including auditory hallucinations, ideas of reference, delusions of persecution and flatness of affect. Subsequent large sample studies have reported comparable findings. The results of an investigation of insight in 786 patients with chronic schizophrenia by Wilson *et al.* (1986), replicated the same high rates of poor illness awareness reported in the IPSS study. In the field trials for the DSM-IV, Amador *et al.* (1994) reported that 60

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percent of patients with schizophrenia have a moderate to severe unawareness of their illness. Numerous smaller scale studies have also reported low levels of insight across the spectrum of functional psychotic disorders (McEvoy *et al.*, 1993a; David *et al.*, 1995; Ghaemi *et al.*, 1995; Almeida *et al.*, 1996; Fennig *et al.*, 1996; Dickerson *et al.*, 1997; Collins *et al.*, 1997; Peralta & Cuesta, 1998; Schwartz, 1998; Husted, 1999; Smith *et al.*, 2000; Buckley *et al.*, 2001; Chen *et al.*, 2001).

Schedules designed to assess levels of insight in patients with psychosis may be analogous to the action of looking in a mirror, which requires the patient to perceive (and reflect) on their own mental state. The tools of perception in psychosis appear to malfunction and the patient's mirrored image becomes blurred and distorted. The analogy of a mirror is somewhat problematic however, as the patients are not looking at a visual image of themselves, but rather one drawn from their own thoughts, emotions and memories. It would be of particular value to know how patients would perceive their psychotic state, if presented as a 'real' mirror image of themselves. Surprisingly perhaps, few researchers have studied this type of scenario. Davidoff *et al.* (1998) did conduct such an investigation when they interviewed on videotape, a group of acutely psychotic patients within two days of admission to hospital. Showing the patients the video recording of their interview between one and six weeks later appeared to raise the degree to which they perceived themselves to be psychotic. A control group of patients, with similar levels of overall psychopathology, who were not exposed to the recording of themselves in a state of psychosis, displayed significantly lower levels of awareness into their illness and their delusions.

Altering the object of perception from the present to the past, and perhaps even more importantly, presenting the object in a visually graphic form might then, by-pass some of the disrupted mechanisms of self-appraisal. It would also be of interest to know if changing the stance of the perceiver from the self to that of another would also allow access to the normal channels of appraisal and identification. A recent study conducted by Gambini *et al.* (2004) on a sample of patients with schizophrenia who lacked any insight into their delusions, examined this very question. Gambini *et al.* asked the patients to consider the reality of their delusional beliefs e.g. "My neighbours influence my life with X-rays passing through the floor" (Gambini *et al.*, 2004, p43), by taking the perspective of the interviewer asking the questions. When the patients moved their perspective from the first to the third person, a significant number of them said that they no longer considered their delusions to be reasonable.

### Patients' perception of psychosis in other patients

In the last two studies, the object of perception i.e. the psychotic state, is viewed from two different perspectives. The patients in those studies are not engaging in a purely one-dimensional process of self-reflection. In Davidoff *et al.*'s study, there is a visual image and time-delay to comprehend: the person is seeing how they were, rather than how they are now. Gambini and colleagues on the other hand, asked their patients to view a mental mirror image of himself or herself, not from the standpoint of the self, but rather from that of another person. Another perspective can be taken. How do patients who show no insight into their own psychotic state perceive psychosis in other people? Would their view of other patients with disorders such as schizophrenia coincide with the insightless perception they hold of themselves, or conversely, would they identify psychotic symptoms in others?

There is some evidence, that patients with psychosis and poor insight into their own illness, have the capacity to identify and perceive psychotic symptoms and behaviour in other psychiatric patients. Startup (1997) studied a group of 28 patients with schizophrenia. The patients were presented with psychiatric case study vignettes and asked to indicate how likely it was that the individuals in the depicted scenarios had mental illnesses. Patients with low insight could distinguish between descriptions of psychotic symptoms and normal thoughts, and abnormal feelings and behaviours as well as healthy non-psychotic controls and health professionals. This suggests that when the focus of appraisal is not the self, the perception of psychosis may be more aligned with people who are not psychotic. Other vignette based studies have however, reported different findings. McEvoy *et al.* (1993b) presented 26 patients with schizophrenia or schizoaffective disorder with a series of brief vignettes depicting examples of people displaying both positive and negative symptoms of schizophrenia. The patients' appraisals of these brief case studies were compared with those of a physician. Hallucinations and suspiciousness were viewed as signs of mental illness by the physician but not by the patients. In a later study, using the same vignettes but with a different group of patients with schizophrenia, Swanson *et al.* (1995) reported similar findings to those of McEvoy *et al.* That is, (and in contrast to the study by Startup, 1997), the patients did not tend to view the scenarios depicted in the vignettes as signs of mental illness.

It is perhaps of note, that while the study conducted by Startup (1997) comprised patients, mental health professionals and healthy controls, the views of the patients in the other two vignette studies were compared only with

those of physicians. A comparison between the perception of psychosis in patients with schizophrenia and those of their relatives and the general public may be of equal or even greater interest. Chung *et al.* (1997) conducted such an investigation using a single case study vignette depicting a person with typical schizophrenic symptoms. Whilst the recognition of psychotic symptoms across all three groups was relatively low, one of the key findings in this study was that the patients (and their relatives) were more likely to identify psychotic symptoms as signs of a mental illness than subjects drawn from the general population. It also emerged from the Chung *et al.* (1997) investigation that the patients most likely to identify symptoms as psychotic in the vignette scenario were those most aware of their own psychotic state. The relatively small number of vignette based studies such as these, do not allow any firm conclusions to be drawn about patient perceptions of psychosis in others. There are some indications however, most notably in the study by Startup (1997), that the capacity to identify symptoms such as hallucinations and delusions in other people may be greater than the ability to see them in oneself.

### Factors affecting the perception of psychosis

The ability to self-reflect is an activity that requires an appraisal of the past and the present (Sedikides & Skowronski, 1995) and will thus depend (at least to some extent), on episodic and autobiographical memory resources. The process of perceiving symptoms such as hallucinations and delusional beliefs is likely to be concerned with a consciousness awareness of events occurring in the outside world and activities taking place within the mind and body. The mechanisms of perception and attention give coherence and unity to sensory input and allow a person to develop a limited concept of what is happening in both the internal and external environment (Young & Pigott, 1999). An inability to identify self-generated mental events may lead to a conviction that a hallucinatory voice originates outside the body (Keefe, 1998). In such circumstances, it is unlikely that a person experiencing hallucinatory voices will be able to correctly identify and relabel such phenomena as pathological.

Cognitive models of poor insight into mental illness and psychotic symptoms hold that deficits in the perception of the true mental state arise from a disruption to the mechanisms of information processing (Cuesta *et al.*, 1996; Collins *et al.*, 1997; Kinsbourne, 1998; Lysaker *et al.*, 1998). In the last 10 years, the relationship between cognitive function, illness awareness and the perception of symptoms in the psychoses has become the focus of

over 40 investigations. Nonetheless, a clear understanding of the relationship between illness awareness, the perception of symptoms as psychotic, and cognition remains elusive. In a review of those studies, Morgan & David (2004) concluded that while there is a weak association between insight and general intellectual functioning, the association between insight and cognition is perhaps strongest with non-linguistic aspects of neuropsychological function. For example, the most consistent findings of insight-cognition studies involve tasks of mental flexibility suggesting that good insight is at least partially dependent on intact frontal-executive functioning.

Whilst the majority of theories that seek to explain poor insight in the psychoses originate from domains such as those of psychopathology or neuropsychology, consideration has also been given to other factors that may also contribute to a patient's poor perception of the psychotic state. The potential for other factors to interfere with the perception of illness in the self (and others) may be evident in physical conditions such as heart disease, cancer, renal failure, tuberculosis and diabetes, where patients frequently fail to acknowledge their illness status (Goldbeck, 1997). A negative public attitude towards some of those conditions illustrates just one way in which social factors could contribute to an individual's reluctance to admit their illness and engage with health services. The stigma associated with tuberculosis, for example, may lead to individuals either refusing treatment or socially isolating themselves in an effort to conceal the true nature of their illness (Kelly, 1999). The effect of stigma may be similar in psychotic illnesses. A recent survey of the opinions of over 1000 British adults showed that people with schizophrenia were commonly perceived to be unpredictable, dangerous and hard to talk to (Crisp *et al.*, 2000). Such negative connotations may well influence how people perceive their illness status.

A person's cultural background such as their ethnicity or religion may also influence the core beliefs they have about their mental health. Consequently, it is possible that people from different cultures and social groups will have quite diverse perceptions as to what it is to be psychotic. Wahass & Kent (1997a, b) illustrate this in their study of community attitudes towards auditory hallucinations in Saudi Arabia and the United Kingdom. People living in Saudi Arabia were more likely to believe that Satan or magic caused their hallucinations while the members of the UK sample were more likely to cite schizophrenia or brain damage. Within a given community, those with an involvement or interest in a particular religion will have access to an alternative system of beliefs that may determine their interpretation of, and

response to, phenomena such as visual or auditory hallucinations. Psychotic symptoms could for example, be attributed to possession by evil spirits, the soul being stolen, or the patient being cursed or charmed (Tan, 1993). Some clinicians may consider that patient perceptions of psychopathology that do not correspond to conventional psychiatric views reflect a lack insight. Psychiatrists are less religiously oriented than their patients and the general population (Neeleman & King, 1993; Kirov *et al.*, 1998) and this may increase the chances of a disagreement about the nature of a patient's illness status.

Traditional explanations of awareness deficits in the psychoses have advocated that poor insight results from psychological defenses or coping strategies employed to deflect the feeling of a loss of personal control, and to maintain a sense of well being (Mayer-Gross, 1920; Searles, 1965; Semrad, 1966; Levy *et al.*, 1975; McGlashan & Carpenter, 1976; Van Putten *et al.*, 1976). A person might respond to the onset of psychosis by rejecting the reality of their situation in an attempt to preserve their 'pre-morbid' self-image. Rogers (1961) has proposed that when people encounter experiences which are inconsistent with their self concept, those experiences are temporarily rendered harmless by being distorted or denied in awareness. This may be a plausible response to the trauma of a psychotic episode when one considers that in everyday life mentally healthy people distort reality to enhance their self-esteem and maintain beliefs about their self-agency (Taylor & Brown, 1988; 1994). In an extensive review of the clinical and psychological literature, Taylor & Brown (1988) concluded that when faced with negative, ambiguous or unsupportive feedback, healthy individuals often respond with exaggerated perceptions of control and unrealistic optimism. This type of response to anomalous and stressful mental events may also occur in psychiatric patients.

## CONCLUSION

In disorders such as schizophrenia, the perception of psychosis in the self is often at odds with the views of relatives, friends and health professionals. A lack of illness awareness and an apparent inability to identify symptoms as pathological is characteristic of many patients with psychotic disorders. Explanations for what is often described as a lack of 'insight', have emerged from diverse fields of enquiry. These include neurocognitive models, theories of psychological defense and explanations based on cultural variation. To date, no single theo-

ry can adequately explain the perceptual block frequently aligned to the state of psychosis. Seeing the self (and psychosis) from a different perspective may offer some clues. Viewing recordings made of the self when acutely psychotic, and being asked to evaluate one's symptoms from the perspective of another, might be effective methods for enhancing a patient's system of self-appraisal. The beginning of this editorial observed that one of the defining features of psychosis is a distortion to the perception of reality. It will only be through an understanding of the nature and aetiology of psychosis itself that one will truly be able to understand the perception that patients have of psychosis.

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