

## Lessons Learned About Poor Insight

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Twenty years ago, there were about 10 empirical studies in the research literature on the common problem of poor insight into illness in schizophrenia (see Amador et al<sup>1</sup>). There were, however, numerous case studies and theoretical papers that never questioned the causes or broader impact of this clinical feature on the course of illness, functioning, and interpersonal relationships. Although authors such as Moreau de Tours in the 19th century and Mayer-Gross in the beginning of the 20th century recognized the importance of the subjective experience of recognizing one's illness for diagnosis and treatment, it was after Kraepelin that the field first recognized the tremendous barrier to accepting and staying in treatment that poor insight causes. In the 70s, poor insight was reported to be one of the 3 most discriminating symptoms for schizophrenia diagnosis among psychotic disorders.<sup>2</sup> Despite any empirical studies of causes, there was a rush to judgment regarding etiology: poor insight was psychotic denial, a copying strategy. Some years later, there were more than 200 studies of insight in the peer reviewed scientific literature! When one of us (X.A.) was asked to cochair the text revision of the *Schizophrenia and Related Disorders Section of the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR, APA Press, 2000)*, so that it reflected scientific consensus, we assembled a group of schizophrenia experts to serve as peer reviewers. Ten years ago that group opined that the scientific literature supported the following statement:

A majority of individuals with schizophrenia have poor insight regarding the fact that they have a psychotic illness. Evidence suggests that poor insight is a manifestation of the illness rather than a coping strategy. It may be comparable to the lack of awareness of neurological deficits seen in stroke, termed *anosognosia*. This symptom predisposes the individual to noncompliance with treatment and has been found to be predictive of higher relapse rates, increased number of involuntary hospital admissions, poorer psychosocial functioning, and a poorer course of illness page 304, DSM-IV (American Psychiatric Association Press, 2000).

Since then, the explosion of new research on this problem has continued. Terminology and measurement has been refined so that we now have a range of psychometric tools available to study insight that have demonstrated reliability and validity.

Among the major findings are that about 50% of persons with schizophrenia (about 1.5 million in the United States) do not know they have an illness, and this unawareness typically does not improve with education, time, or treatment. And as mentioned in the quote above, the research indicates that what we are seeing is usually not denial.<sup>3</sup> If after months and years of evidence, the person still does not believe she or he is ill, what we are often dealing with a cognitive deficit: anosognosia (AH-no-sog-NO-sia). The term anosognosia was coined by the Hungarian-born neurologist Babinski who, when working in Paris at the turn of the last century, described patients with neurological deficits such as hemiparesis, who were completely unaware of the deficits. And perhaps more importantly, most studies of nonadherence and partial adherence to treatment find that the best predictor is unawareness of illness or poor insight. Because problems with illness awareness are associated with neuropsychological deficits and predictive of poor adherence to treatment and poorer outcomes, some have proposed that this dimension should be included in future diagnostic systems, such as the DSM-V, as a specifier for schizophrenia.<sup>4,5</sup>

Although it is far beyond the scope of this issue of the *Schizophrenia Bulletin* to cover the many advances in our knowledge that have been made over the past 20 years, we selected papers that are representative of new areas of inquiry and elaborations on the major advances the field has made in our understanding of the causes and clinical impact of poor insight.

Among the papers in this edition is one that found that the relationship of insight with clinical symptoms may

differ depending on the stage of the disease. Quee et al report that neurocognition, social cognition, and symptom dimensions were all associated with insight. More importantly, the phase of illness (first-episode patients vs multiple episode or chronic patients) was found to moderate the relation between insight and the studied predictors. Previous studies have assessed the relationship between insight and neurocognition although its relationship with social cognition is more rarely studied. The relationship between deficient mentalizing and reduced insight in one's illness seems as an interesting line of research.

Following the importance of performing research in first-episode psychoses, Parellada et al<sup>6</sup> extend a previous following 1-year study in early onset patients with recent onset psychosis. In the study published in the present issue, they report on the 2-year follow-up results adding variables not included before as depressive symptoms and neuroimaging markers. There are no many follow-up studies assessing insight in the same cohort of patients, much less if the sample is composed of first-episode patients, but probably the more remarkable achievement is that all patients studied were children and adolescents at the time of their first-psychotic symptoms. Interestingly, older age correlated with better insight. In addition, baseline insight into having a mental disorder, duration of untreated psychosis, and baseline intelligence quotient (IQ) became the most consistent variables explaining different aspects of insight at 2 years in patients that ended up with a diagnosis of schizophrenia. Furthermore, left frontal and parietal gray matter volumes increased the variance that explained insight into having specific psychotic symptoms, in line with the anosognosia theory.

In another study with first-episode patients, in this case with mostly adult population Campos et al assess the longitudinal relationships between personality traits and insight dimensions in a large sample of first-episode psychosis. Schizoid and sociopathic personality showed a significant association with "not feeling ill" insight dimension after a 6 month follow-up, although not at baseline, and predicted lack of insight change over 6 months. This again highlights the differential relationships between insight and the different variables studies depending on the stage of the disease. An important outcome of this study is that assessment of personality traits and comorbidity with personality disorders in first-episode schizophrenia patients may facilitate the

therapeutic plan addressing issues such as treatment compliance.

Gileen et al report that meanwhile patients with schizophrenia show a good awareness for memory and behavioral deficits, the awareness into their mental illness was poor in the majority of patients. Awareness in each domain was predicted by different factors. Cognitive insight, comprising self-certainty and self-reflexivity was a better predictor of awareness into mental illness than the neuropsychological measurements assessed in the study. Therefore, awareness seems to be multidimensional and multiply determined. This interesting study suggests that different therapeutic interventions may be needed to produce improving awareness in specific domains.

In 2 of the papers, greater depression (self-rated in one of the studies and researcher-rated in the other) was associated with lower awareness as opposed to previous reports. This is an interesting issue as therapeutic implications were derived from previous studies pointing out that gaining insight may be related to more depressive symptoms and higher risk of suicidality, which does not hold true in the present studies. Finally, the 3 studies that assess the relationship of insight with psychopathology and neurocognition report that insight is in part explained by them. This just points toward the complexity of this phenomenological conundrum that is at the core of schizophrenia and other psychotic disorders.

We hope that you find the reports as clinically and theoretically valuable as we do.

## References

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