Poor Insight in Schizophrenia: Implications for Diagnosis and Treatment

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According to the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision (DSM-IV-TR):

"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 psychological functioning, and a poorer course of illness." P.304 (American Psychiatric Association Press, 2000).

This quote from the diagnostic manual used by all mental health professionals in the United States and many other countries including Hungary, reflects scientific consensus in the field as of 1999. It summarizes well replicated research indicating that poor insight into being ill is common in schizophrenia, is predictive of negative outcomes and is linked to executive, or frontal lobe, dysfunction (*Amador et al.,* 1991; *Amador and David,* 2004; *Shad et al.,* 2006). In the years since this was written many new studies have replicated these findings and extended them to include structural and functional brain imaging studies that find frontal lobe abnormalities in patients with poor insight, or anosognosia, for schizophrenia (e.g., *Flashman, LA and Roth,* RM, 2004). In addition, unawareness of being ill is typically found to be the best predictor of nonadherence and partial adherence to antipsychotic medicine and points to the need to focus on strengthening the therapeutic alliance in order to optimize compliance (*Olfson et al.,* 2000; *Amador,* 2010).

There have been many debates in academic circles and in the public forum regarding the diagnosis of schizophrenia including whether or not we should abandon the label "schizophrenia" itself. To my surprise, there have been far fewer debates about the issue of subtypes: Paranoid, Disorganized, Catatonic, Undifferentiated and Residual. With the exception of the paranoid subtype, these categories have proven to offer very little with respect to predictive, or criterion, validity (*Amador, X and Gorman,* JM 1998). Because problems with illness awareness are predictive of neuropsychological deficits, adherence to treatment and poorer outcomes, some have proposed that this dimension should be included in future diagnostic systems, such as the DSM V (*Ratakonda et al.,* 1998; *Amador, X and Gorman, M,* 1998).

What makes a diagnosis valid?

Psychiatric diagnoses in both the DSM and International Classification of Disease (ICD) systems are not yet based on laboratory tests. There is no blood test or brain scan that we can use to make a diagnosis. Someday this may change. But to achieve this we have to rely on our current system. Today, the diagnosis of Schizophrenia, like all psychiatric diagnoses, is based on its descriptive and predictive validity. What that means is simply this: Can people in various locations from different backgrounds generally agree the disorder exists as described and does the description (i.e., the diagnostic

category) predict anything about what will happen and what can be done (i.e., predict prognosis and inform treatment plans)? In the case of Schizophrenia and related psychotic disorders (e.g., Schizoaffective disorder, Psychotic Disorder, N.O.S., Delusional Disorder) most people would agree the answer is yes.

However, as my colleagues and I have argued elsewhere, the Schizophrenia subtype diagnoses do not seem to offer nearly as much in the way of predictive validity (*Ratakonda et al.,* 1994). I am not suggesting we abandon them all together because they do offer some descriptive and predictive validity. But I am suggesting that we can do a lot better.

Schizophrenia with, or without, anosognosia

We know from clinical experience and the research that insight into having schizophrenia is among the best predictors of who will accept treatment and stay on medication over the course of years. What had not been clear until recently, however, is the very positive effect that early and consistent treatment has on the course of the illness and the hope of recovery. Research shows that helping persons with schizophrenia accept treatment early, and keeping them in treatment consistently over the years, is very important. According to the new research, whenever someone with schizophrenia has another episode, the long-term prognosis worsens. Some scientists have gone so far as to argue that psychotic episodes are toxic to the brain. The idea is that brain cells are altered or die during and immediately following an episode of psychosis. As yet there is no definitive evidence that this is true, but there is a good deal of indirect support coming from long-term studies.

In one landmark study conducted at the Hillside Hospital in Queens, New York, researchers found that those individuals with schizophrenia who received treatment early and consistently had much better outcomes. The results of the study indicate that when antipsychotic drugs are given shortly after the illness first emerges, and subsequent psychotic episodes are treated quickly to shorten their duration, future response to treatment and prognosis is greatly improved.

Similar results were found in a follow-up study involving 276 young, seriously mentally ill persons. The researchers studied these patients during an episode of psychosis and then stayed in contact with them for up to seven-and-one-half years. The subjects who had more psychotic episodes during the early stages of the study did much worse years later. Once again, the results strongly suggest that by limiting the number of full-blown episodes of psychosis and intervening early whenever the illness does flare up, patients remain higher functioning and less ill later in life.

Finally, in a fifteen-year follow-up study of 82 patients with schizophrenia, researchers found that delays in mental-health treatment and longer periods of psychosis led to a worse prognosis over the long run. This study is especially informative because patients were entered into the study during their very first episodes of illness.

The three studies just described are but a few examples of the growing body of evidence supporting the efficacy of early intervention for patients with schizophrenia. In addition to this research we also know that about 1.5 million Americans have untreated schizophrenia, 150 000 of them are homeless and 159 000 are incarcerated for crimes committed while unmedicated.

The number of untreated patients with schizophrenia in Hungary and worldwide is strikingly similar. For example, studies have found that at any given time between 50% to 75% of patients with schizophrenia exhibit full or partial non-adherence (*Rummel-Kluge,* 2008). Within 7–10 days of medication initiation 25% are noncompliant (*Keith & Kane,* 2003). Meanwhile, 50% of schizophrenia patients are noncompliant after one year and 75% after two years. Only about 33% reliably take medication as prescribed (*Oehl,* 2000).

What the research described above make clear is that when we ignore the problem of

poor insight and its impact on treatment adherence it not only doesn't go away, it gets worse. We must address the twin problems of poor insight and medication refusal if we want individuals with schizophrenia to have the best possible chance of recovery.

I believe, as do many others, that homelessness, incarceration, episodes of violence, and premature death are not necessary because we know what to do but fail to do it. The first step to attacking all of these problems is to identify whether the person believes he or she has an illness and/or symptoms of the illness. For this and all the reasons given above, I believe that once the diagnosis of schizophrenia (or related psychotic disorder) has been made, the next question should be: Is this with or without anosognosia for mental illness? If it is with anosognosia for mental illness, then our treatments should center on the use of long-acting therapies and on building the therapeutic alliance using communication techniques based on motivational interviewing rather than oral medication and psychoeducation (*Olfson et al.,* 2000; *Amador,* 2010).

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