



## Briefing Paper

### Impaired Awareness of Illness (Anosognosia): A Major Problem for Individuals with Schizophrenia and Bipolar Disorder

**SUMMARY:** Impaired awareness of illness (anosognosia) is a major problem because it is the single largest reason why individuals with schizophrenia and bipolar disorder do not take their medications. It is caused by damage to specific parts of the brain, especially the right hemisphere. It affects approximately 50 percent of individuals with schizophrenia and 40 percent of individuals with bipolar disorder. When taking medications, awareness of illness improves in some patients.

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#### What is impaired awareness of illness?

Impaired awareness of illness means that the person does not recognize that he/she is sick. The person believes that their delusions are real (e.g. the woman across the street really is being paid by the CIA to spy on him/her) and that their hallucinations are real (e.g. the voices really are instructions being sent by the President). Impaired awareness of illness is the same thing as lack of insight. The term used by neurologists for impaired awareness of illness is anosognosia, which comes from the Greek word for disease (nosos) and knowledge (gnosis). It literally means "to not know a disease."

#### How big a problem is it?

Many studies of individuals with schizophrenia report that approximately half of them have moderate or severe impairment in their awareness of illness. Studies of bipolar disorder suggest that approximately 40 percent of individuals with this disease also have impaired awareness of illness. This is especially true if the person with bipolar disorder also has delusions and/or hallucinations.

Amador XF et. al. Awareness of illness in schizophrenia and schizoaffective and mood disorders. *Archives of General Psychiatry* 51:826-836, 1994.

Fennig S et. al. Insight in first-admission psychotic patients. *Schizophrenia Research* 22:257-263, 1996.

#### Is this a new problem? I've never heard of it before.

Impaired awareness of illness in individuals with psychiatric disorders has been known for hundreds of years. In 1604 in his play "The Honest Whore", playwright Thomas Dekker has a character say: "That proves you mad because you know it not." Among neurologists unawareness of illness is well known since it also occurs in some individuals with strokes, brain tumors, Alzheimer's disease, and Huntington's disease. The term anosognosia was first used by a French neurologist in 1914. However in psychiatry impaired awareness of illness has only become widely discussed since the late 1980s.

### **Is impaired awareness of illness the same thing as denial of illness?**

No. Denial is a psychological mechanism which we all use, more or less. Impaired awareness of illness, on the other hand, has a biological basis and is caused by damage to the brain, especially the right brain hemisphere. The specific brain areas which appear to be most involved are the frontal lobe and part of the parietal lobe.

Flashman LA. Specific frontal lobe subregions correlated with unawareness of illness in schizophrenia. *Journal of Neuropsychiatry and Clinical Neuroscience* 13:255-257, 2001.

Amador XF and David AS eds. *Insight and Psychosis*. New York: Oxford University Press, 1998. A revised edition of this book is scheduled for publication in 2004.

### **Can a person be partially aware of their illness?**

Yes. Impaired awareness of illness is a relative, not an absolute problem. Some individuals may also fluctuate over time in their awareness, being more aware when they are in remission but losing the awareness when they relapse.

### **Are there ways to improve a person's awareness of their illness?**

Studies suggest that approximately one-third of individuals with schizophrenia improve in awareness of their illness when they take antipsychotic medication. Studies also suggest that a larger percentage of individuals with bipolar disorder improve on medication.

Jorgensen P. Recovery and insight in schizophrenia. *Acta Psychiatrica Scandinavica* 92:436-440, 1995.

### **Why is impaired awareness of illness important in schizophrenia and bipolar disorder?**

Impaired awareness of illness is the single biggest reason why individuals with schizophrenia and bipolar disorder do not take medication. They do not believe they are sick, so why should they? Without medication, the person's symptoms become worse. This often makes them more vulnerable to being victimized and committing suicide. It also often leads to rehospitalization, homelessness, being incarcerated in jail or prison, and violent acts against others because of the untreated symptoms, as described in other Briefing Papers.

Lin IF. Insight and adherence to medication in chronic schizophrenia. *Journal of Clinical Psychiatry* 40:430-432, 1979.

Lacro J et al. Prevalence and risk factors for medication nonadherence in patients with schizophrenia: A comprehensive review of recent literature. *Journal of Clinical Psychiatry* 63:892-909, 2002.

McEvoy JP et. al. Insight and clinical outcome of schizophrenia patients. *Journal of Nervous and Mental Disorder* 177:48-51, 1989.

### **Impaired awareness of illness is a strange thing. It is difficult to understand how a person who is sick would not know it.**

Impaired awareness of illness is very difficult for other people to comprehend. To other people, a person's psychiatric symptoms seem so obvious that its hard to believe the person is not aware he/she is ill. Oliver Sacks, in his book *The Man Who Mistook His Wife for a Hat*, noted this problem:

*It is not only difficult, it is impossible for patients with certain right-hemisphere syndromes to know their own problems...And it is singularly difficult, for even the most sensitive observer, to picture the inner state, the 'situation' of such patients, for this is almost unimaginably remote from anything he himself has ever known.*