



Commentary

Impaired insight in psychotic disorder: an unmet need in treatment

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A pathognomonic feature of psychotic disorders is lack of insight. Impaired insight is seen in almost all patients with psychotic disorders at some point or other in time. Insight is a multi-dimensional concept, with at least four elements: lack of awareness about the illness (e.g. “I don’t hear voices, but the god actually speaks to me”), incorrect attribution of one’s experience (e.g. I hear voices that sound like god’s, but they come from a chip implanted in my teeth), and a failure to appreciate need for treatment (I don’t need medications, but only a spiritual solution) (Amador et al., 1991).

Impaired insight adversely impacts outcome in schizophrenia and other psychotic disorders. First, lack of insight causes treatment non-adherence, which in turn leads to relapses. Impaired insight is a predictor of poor functional outcome (Drake et al., 2007; Jacob, 2014). Insight deficits appear to be persistent. Phahladira et al. (2019) Investigated changes in insight in patients with early course schizophrenia during treatment with a depot antipsychotic. While clinician ratings of overall insight (using a single item in the PANSS scale) appreciation of need for treatment showed some improvement, there was no change in patient rated illness awareness or attribution. This suggests that despite clinical improvement, fundamental impairments in insight persist in the long term.

It is well known that cognitive impairments are a strong determinant of functional outcome (Strassnig et al., 2015). There is evidence that impaired cognition and metacognitive processes (such as theory of mind) are correlated with insight deficits (Keshavan et al., 2004; Lee et al., 2019; Bora, 2017). Koren et al. (2019) have suggested that altered metacognition may at least in part mediate the association between neurocognition and insight in attenuated psychosis syndrome. Given that cognitive deficits reflect underlying neurobiological alterations in these disorders, it is likely that insight loss is a neurological problem, akin the anosognosia seen in neurology (Shad et al., 2006). However, literature in this regard is variable. Sauvé et al. (2019), in a study of first- and multi-episode psychosis patients, found that deficits in cognitive capacity only accounted for a small (8%) and the stage of illness did not account for this association. It is possible that cognitive deficits are associated with some (such as mis-awareness), but not all components of insight impairments. Lee et al. (2019) went on to examine the relations between symptoms, insight, cognition and functioning by structural equation modelling in a prospective study of first episode psychosis patients. They found that symptoms (negative symptoms and general psychopathology) and insight were significant mediators between cognition and functioning. This raises the unique possibility that improving insight may favorably impact

functional outcome in addition to the benefits produced by treatment adherence.

Relatively few studies, however, have investigated insight deficits as a primary treatment target. Pijnenborg et al. (2019) developed and tested a novel psychosocial intervention 'REFLEX' targeting stigma-sensitivity, perspective taking and self-reflection to improve insight and functional outcome in people with schizophrenia. The control condition consisted of cognitive remediation training. Interestingly, no changes were seen in perspective taking, self-reflection, mental flexibility and stigma sensitivity, but a significant improvement of clinical insight in was seen in both conditions after treatment. It was not clear which of the components of insight might have benefited from these interventions. Given the association between impaired insight and cognitive deficits, these observations point to the potential value of cognitive remediation and metacognitive training in improving one or more elements of insight.

Clearly, impairments in insight are an unmet therapeutic need in psychotic disorders. More research is needed to understand the mechanisms underlying the diverse components of impaired insight, which will then shed light into novel approaches to treatment.

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