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The Evolution of Schizophrenia Research and Treatment

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About 100 years after Kraepelin laid the foundation of the current concept of schizophrenia (Falkai et al., 2015), sadly, much remains to be understood about this disease. As the research domain criteria (Buckley & Miller, 2015) are gradually being utilized, perhaps significantly altering our understanding of schizophrenia, work continues, increasingly using novel approaches – particularly the application of genetics and new technologies. Many markers have been linked with schizophrenia but findings do not support a full genetic "profile." (Chen et al., 2015) Neuroimaging technologies in particular have illuminated common areas of abnormalities including altered structural integrity of white matter in frontal and temporal brain regions and altered structural relationships among regional morphology in the thalamus, frontal, temporal and parietal cortices (Wheeler & Voineskos, 2014), while more research is needed to further define progressive changes and response to medication. Pharmacologically, we have progressed to a third generation of antipsychotics (Kelleher, 2004), although the challenges of balancing efficacy and side effects, particularly within the framework of cost efficient care is a significant issue. Clozapine remains the most efficacious antipsychotic although its most essential pharmacologic characteristic remains inadequately understood (Dold & Leucht, 2014). The best treatment of patients with schizophrenia involves not only psychopharmacology and psychotherapy but also attention to nonpsychiatric medical issues (Shulman, Miller, Misher & Tentler, 2014).

Increased sophistication has improved treatment outcomes for many patients. Common threads among these stories are usually medication adherence (Llorca, 2008) and strong supports (Taylor et al., 2005). Schizophrenia research has also informed the care of psychosis beyond schizophrenia including for the conditions of bipolar disorder (Buoli, Serati & Altamura, 2014), psychotic depression (Rothschild, 2013), and delusional disorder (Mews & Quante, 2013).

This special issue of the International Journal of Emergency Mental Health and Human Resilience describes some areas of advance in schizophrenia research. The contribution of genetics and the environment in the development of schizophrenia is the basis for the importance of endophenotypes in this illness. Tamas Tenyi et al. present a literature review of this topic. Excerpts from Terri Morgan's novel, The Genetic Lottery: A Novel Look at Schizophrenia provide a perspective on the illness from someone whose family members have been affected. Ashley Smith's review provides further support for Ms. Morgan's concerns.

Kerime Bademli reviews the important aspects of caregiver and peer support in schizophrenia. Fengyu Zhang and Jingping Zhao have written a fascinating commentary about China's progress in addressing mental health issues – of which schizophrenia is a central feature. Finally, Sidney Winford et al. present two cases of snake infestation delusion following sexual intercourse in patients with psychotic conditions.

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Progress continues in understanding schizophrenia. Contributions like these remind us both how far we have come and how far we have to go.

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