Cognition and Psychosis in Older Adults with Schizophrenia. Schizophrenia as a Cognitive Disorder

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As noted in the first article in the newsletter by Dr. Cohen, it is becoming increasingly recognized that there are overlaps among various mental disorders, especially those that affect cognition (i.e., thinking, learning, memory). This article reviews some of the recent findings regarding the role that cognitive dysfunction plays in schizophrenia. Until a decade ago, schizophrenia was diagnosed and studied based on its more dramatic and prominent symptoms – positive symptoms, such as delusions and hallucinations, and negative symptoms. Although the diagnosis of schizophrenia is still made through its characteristic symptoms, it is increasingly being viewed as a cognitive disorder producing psychosis rather than a psychotic disorder affecting cognition (1, 2). Cognitive impairment is the leading cause of disability in mental illness, more so than psychiatric illness (3, 4). Moreover, functional recovery is much rarer than sustained, symptomatic remission, with cognitive deficits predicting functional disability (1).

Neuropsychological deficits in older adults with schizophrenia are similar to younger adults with schizophrenia, and occur in multiple domains, including attention, working memory, learning, memory processing speed, and executive functioning (5, 6). In the majority of patients, initial deterioration usually occurs shortly after the onset of the disorder and during the initial 5 to 10 years after the onset (7). While a majority of older adults with schizophrenia do not experience an overall decline in their cognitive functioning (about 80 to 85%), there may be a small minority (who are more likely to be institutionalized) who do show deterioration (8). Although this minority meet the clinical criteria for dementia, they can be usually be differentiated from patients with Alzheimer's disease (9). Patients with Alzheimer's disease show poorer overall recall and more rapid forgetting over time, whereas these patients with schizophrenia show greater deficit in visual confrontational naming and constructional praxis (9, 10). Although this subgroup of patients with schizophrenia show a greater annual rate of decline compared to the normal population, patients with Alzheimer's disease still show an even greater rate of decline (11).

Although most studies suggest little or no relation between symptoms and cognitive performance in both older and younger adults with schizophrenia (2, 12), some studies suggest otherwise (4, 12, 13). In our own sample of 198 community-dwelling persons with schizophrenia, we found an association between certain components of cognition as measured by the Mattis Dementia Rating Scale and positive symptoms such as hallucinations and delusions, even after controlling for negative symptoms (e.g., flat affect, paucity of thought).

The relationship between cognition and the more characteristic symptoms of schizophrenia is still unclear. Andreasen and coauthors(14) proposed a unitary model, arguing for a primary cognitive problem ("cognitive dysmetria"), with psychosis and the other manifestations of the disease as secondary symptoms. This resembled the original early 20th century conceptualization of schizophrenia proposed by Bleuler in which the primacy of a cognitive symptom, "looseness of associations," took precedent over other hallucinations and delusions. More recently, Kapur (15) proposed that psychosis is a state of "aberrant salience." Salience refers to any aspect of a stimulus that, for many reasons, stands out from the rest. Salience is an attentional (and therefore cognitive) derivative, and its misattribution is theorized to facilitate the development of psychosis.

In sum, cognitive impairment in schizophrenia, not only is being recognized as being important, but may be the primary deficit. Confirmation of this notion must await future research. Moreover, studies are now underway to develop strategies for enhancing cognitive functioning in persons with schizophrenia.

References for this article can be obtained from Dr. Reyes at: piareyesmd @yahoo.com

Downstate Receives Three New Grants

SUNY Downstate received a 3-year $1.8 million from the Health Services Resource Administration for training of fellows in geriatric medicine, psychiatry, and dentistry. Dr. Carl Cohen (Geriatric Psychiatry) is the Program Director, and the co-directors are Drs. Mohammed Nurhussein (Geriatrics), Susan Pugliese (Dentistry), and Georges Casimir (Geriatric Psychiatry). Dr. Carl Cohen is also the Principal Investigator on a new $800,000 award from the NYS Department of Health on teaching cultural competency in nursing homes that will be conducted in conjunction with Horizon Continuing Care Center. Finally, in 2007, Philoptocos made a generous $34,000 donation to the Brooklyn ADAC for outreach programs.