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What is so different about psychotic patients who have extremely long institutional stays?

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Hives et al.[1] describe the cognitive, clinical, and behavioral characteristics of a group of people with severe mental illness who are substantial in their numbers, but off the radar screen. These are patients who have been adjudicated as "not guilty by reason of insanity" and confined in a state psychiatric hospital for 30 or more years. This population is highly interesting, because they have schizophrenia and a history of major behavioral problems, but they also have been institutionalized in a psychiatric hospital for 3 or more decades. Thus, they constitute an excellent sample to ask the question as to whether the experience of institutionalization leads to toxic effects on cognition, symptoms, and functioning, as well as to address the causes of these institutional stays.

The authors use a well-validated neurocognitive (NC) assessment, the rBANS[2] and compare institutionalized patients (mean age 61) to younger hospitalized patients, finding that the older patients perform 2.2 SD below normative standards and 0.5 SD worse than younger schizophrenia patients. Thus, the younger schizophrenia patients are impaired compared to normative standards (1.7 SD) and differences associated with age and institutionalization are minimal compared to those associated with schizophrenia.

When the performance of the older, institutionalized patients is compared to performance standards for older ambulatory patients, ambulatory patients look similar to the younger patients in the Hives study. For example, we[3] reported that 111 older ambulatory patients (mean age 56) performed 1.5 SD below normative standards on NC assessment. When the patients in this sample were compared to healthy controls, their deficits reflected substantial age-related burden. We[4] found that they performed more poorly than healthy controls (HC) who were over 30 years older.

It is possible that there is more cognitive change to come in the Hives et al sample. In longitudinal studies of long-stay institutionalized patients with lengths of stay comparable to the current study, cognitive and functional declines were greatest in patients over the age of 65. For instance, Friedman et al[5] performed a 6-year followup on HC, long-stay schizophrenia inpatients, and patients with Alzheimer's Disease (AD), all of whom ranged in age from 50-80 at the outset of the study. AD patients declined regardless of their baseline age; HC did not decline regardless of their baseline age; and schizophrenia patients 70 and above had a substantial risk of 6-year cognitive and functional decline while patients in their 50s (who had experienced institutional stays of 20 or more years) had no risk at all. Cross-sectional data from the Loewenstein et al. study was very similar. The greatest discrepancy from normative performance was in schizophrenia patients older than 70.

So, it seems as if there are several strong signals to be detected in studies of older patients with schizophrenia, both in and out of psychiatric hospitals. A strong signal for within subject cognitive decline is age, even though cortical dementia is not like a cause in most patients. Age does not exert a linear influence on cognitive change. A second influence is institutionalization and, more likely, the reason for institutionalization. In the Hives et al. paper the cause is clearly forensic, but in our previous studies of institutionalized patients we also found that patients who remained hospitalized during periods of rapid downsizing had substantial behavioral problems. For instance, the best predictor of discharge during a two-year period of deinstitutionalization pressure in a sample of 551 older