

Prevalence and Economic Impact of Schizophrenia and Bipolar Disorder

The United States Surgeon General's data for 1999 indicated that about 2.6% of all adults in the US were affected by serious mental illnesses which include schizophrenia and bipolar disorder. In 2003, the adult population of the United States was 214 million and at that time there would have been around 5.6 million adults in the US with the most severe mental illnesses. For the world's population as a whole, the statistics are consistent and equate to there currently being approximately 114 million people living with schizophrenia or bipolar disorder.

Schizophrenia and bipolar disease are two of the most common and severe mental illnesses producing a chronic morbidity with devastating consequences for those affected. Each year, schizophrenia alone affects around 2.3 million American adults with symptoms often first appearing late in the second decade of life. In addition, as many as 5.7 million American adults, or 2.6 percent of the U.S. adult population are affected each year by bipolar disorder with the median age of onset being 25 years. One quarter of those affected experience symptoms before the age of 20.

A significant proportion of public hospital beds in the USA are occupied by patients with schizophrenia on a long-term basis and a large proportion of the approximately 250,000 people living on the streets and in jails within the US, likely have schizophrenia. Specific statistics on prison inmates where studied in three states have revealed that between 4-6% have been diagnosed with bipolar or schizophrenic disorder. The personal cost of the schizophrenia is catastrophic; it is associated with a decrease in life expectancy of between 12 to 15 years and because more than 50% of people with chronic schizophrenia do not receive treatment, upwards of 40% of schizophrenia sufferers attempt suicide more than once. Bipolar disorder has a similar incidence rate and may manifest in one to two

episodes of mania or depression throughout a lifetime, or in a severe and debilitating illness with several episodes of mania or depression occurring within a single year. Thirty percent of people with untreated bipolar disorder are known to commit suicide.

In addition to the devastating personal consequences of these illnesses, the economic impact is staggering. In the United States, mental illness is the leading cause of disability among one third of young to middle aged people. The annual economic cost of mental illnesses is estimated at more than \$190 billion and for the most part reflects losses in productivity. Federal spending on the treatment and support of people with serious mental illnesses was \$42 billion in 1997 and bipolar disorder alone currently accounts for approximately \$76 billion in direct healthcare costs in the US. Since the clinical onset of schizophrenia and bipolar disorders are typically in early adulthood, with a full recovery occurring only rarely, the catastrophic loss of productive lives is clearly evident.

A solution to this predictable scenario resides in the elucidation of the etiology and neurological pathogenesis of these disorders and the subsequent development of improved treatment and preventative strategies. Although the mechanisms of development of schizophrenia and bipolar disease appear to be both genetic and environmental, little has been clarified with respect to the pathophysiology and neurochemistry of these disorders. In the past few decades several hypotheses have been proposed, and reports of an array of neurochemical alterations that appear in patients with these disorders have been accumulated, but current medical treatment options for individuals suffering with these disorders, which consist of anti-psychotic medication and psychosocial therapy, have essentially been unchanged for decades.