Schizophrenia is a disorder whose hallmark is diversity. The patterns of symptoms seen in the illness are variable from patient to patient, and individual patients often have different symptom patterns on successive episodes of illness. There is one aspect of schizophrenia that has proven remarkable in its consistency, however, and that is the debilitating state of the typical individual affected by this illness.

Most patients with schizophrenia are unable to work, to have normal social interactions, and to live independently. Also consistent are the findings that cognitive impairment is present in schizophrenia and that the level of cognitive impairment seen is roughly correlated with the level of adaptive dysfunction in the individual.

It is an unfortunate fact that, despite their success in reducing the positive symptoms in many affected individuals, typical neuroleptic medications have not shown any particular promise in improving the majority of cognitive impairments in schizophrenia. This is probably why the overall outcome has not changed appreciably from its early definitions to the present. Thus, the outcome of schizophrenia has remained grim, and expectations regarding full recovery have been, realistically, very low.

There is a ray of hope that has been emerging recently. New neuroleptic drugs such as clozapine, risperidone, and olanzapine have been known to have reduced profiles of extrapyramidal side effects and a greatly reduced risk for tardive dyskinesia. All have also proven to be at least as effective in reducing the positive and negative symptoms of schizophrenia as the older typical drugs. However, these new compounds have another potentially beneficial effect that may be their most important feature.

Spurred by initial reports of improved cognitive functioning with some of these drugs, many studies are currently in progress to examine the direct enhancing effects of these drugs on cognitive functioning in schizophrenia.

It is to this research and its findings that this issue of *CNS Spectrums* is dedicated. If atypical neuroleptic medications have a direct cognitive enhancing effect, their importance will be magnified enormously and their impact on this illness will be much greater than anticipated.

The articles in this issue are diverse in content, outlining a background and framework for cognitive enhancement studies, providing a theoretical model for:

1. Thought disorder
2. How drug treatment may reduce thought disorder
3. The presentation of the results of several different clinical trials of new neuroleptic medications and their effects on cognition in schizophrenia

The results of these clinical trials, in addition to the previous positive results regarding cognitive enhancement with atypical neuroleptic medication, increase my optimism, that this may be a real phenomenon. If it is, we may have in our hands a way to change the course and reshape the outcome of this devastating and costly illness.