

## **10 Keys to Recovery From Schizophrenia**

*From the University of California at Los Angeles*

UCLA Neuropsychiatric Institute researchers have identified 10 key factors to recovery from schizophrenia. The findings open opportunities to develop new treatment and rehabilitation programs and to reshape the negative expectations of many doctors, patients and their families.

Based on analyses of the professional literature and the cases of 23 schizophrenia patients who successfully returned to work or school with their symptoms under control, the findings appear in the November 2002 edition of the *International Review of Psychiatry*.

Factors detailed in the study that influenced recovery included 1) family relationships, 2) substance abuse, 3) duration of untreated psychosis, 4) initial response to medication, 5) adherence to treatment, 6) supportive therapeutic relationships, 7) cognitive abilities, 8) social skills, 9) personal history and 10) access to care.

"Our findings join a growing body of research that flies in the face of the long-held notion that individuals diagnosed with schizophrenia are doomed to a life of disability with little expectation for productive involvement in society, a fatalistic view that in itself is damaging to prospects for recovery," said lead author Dr. Robert P. Liberman, a research scientist at the UCLA Neuropsychiatric Institute and professor of psychiatry at the David Geffen School of Medicine at UCLA.

"By understanding the dynamics of recovery, we can design more effective courses of treatment and combat the pessimism held by many doctors, patients and families struggling to cope with this debilitating disease," said Liberman, director of the UCLA Psychiatric Rehabilitation Program and Center for Research on Treatment and Rehabilitation of Psychosis. "Increasing the rate of recovery from schizophrenia will help destigmatize this disease, reduce the emotional burden on families, and lighten the financial weight on communities, states and the nation."

Liberman and his collaborator, Dr. Alex Kopelowicz, medical director of the San Fernando Mental Health Center and associate professor of psychiatry at UCLA, edited the November 2002 edition of the *International Review of Psychiatry*. Their articles are joined by those from an international array of investigators on the process of recovery, prospects for improving schizophrenia treatment and suggestions for future research.

Factors identified as keys to recovery from schizophrenia included:

1. Family relationships: Family stress is a powerful predictor of relapse, while family education and emotional support decrease the rate of relapse. Among study participants, 70 percent reported good or very good family relationships.
2. Substance abuse: National Institute of Mental Health research estimates the prevalence of lifetime substance abuse among schizophrenia patients at 47 percent, well above the overall rate. Though three-quarters of the study participants reported substance abuse prior to treatment, just 17.4 percent reported abuse after the onset of schizophrenia. None reported illicit drug use in the past year, and just two reported occasional alcohol consumption.
3. Duration of untreated psychosis: Longer duration of symptoms prior to treatment correlates directly with greater time to remission and a lesser degree of remission. Among study participants, only 13 percent reported a delay of more than a year between the onset of symptoms and treatment.
4. Initial response to medication: Improvement of symptoms within days of receiving antipsychotic drugs significantly predicts long-term results of treatment. Among the study group, 87 percent reported effective control of symptoms with their first antipsychotic medication.
5. Adherence to treatment: Failure to take antipsychotic medication as prescribed hampers both short-term and long-term recovery. All study participants reported adherence to psychiatric care and medication regimens.
6. Supportive therapy: Positive relationships with psychiatrists, therapists and/or treatment teams engender hope and are essential to improvement. Among study participants, 91 percent reported ongoing psychotherapy, and 78 percent reported that accessible and supportive psychiatrists and therapists contributed to their recovery.
7. Cognitive abilities: Neurocognitive factors such as working memory, sustained attention and efficient visual perception are strong predictors of recovery. Among study participants, all showed normal or near normal functioning on tests of flexibility in solving problems, verbal working memory and perceptual skills.
8. Social skills Negative symptoms, or poor interpersonal skills relative to social expectations, correlate with the degree of disability caused by schizophrenia. No study participants showed more than very mild negative symptoms.
9. Personal history: Premorbid factors, or those in place prior to the onset of the disease, that affect treatment outcome include education and IQ, age of onset, rapidity of onset, work history, and social skills. Among study participants, level of education was used as a measure of premorbid history. A total of 70 percent graduated from college before becoming ill, and an additional 13 percent completed two years of college. Three of the remaining four subjects worked full time before their illness began.

10. Access to care: Continuous, comprehensive, consumer-oriented and coordinated treatment is crucial to recovery. Among study participants, 91 percent reported receiving antipsychotic medication and psychotherapy, 47.8 percent social skills training, 56.5 percent family participation, 26 percent vocational rehabilitation, and 61 percent benefits from self-help groups.

The study:

Schizophrenia encompasses a group of psychotic disorders characterized by disturbances in thought, perception, emotion, behavior and communication that last longer than six months. In addition, the disorders are associated with disability in work, school, social relations and independent living skills. The cause or causes of schizophrenia is unknown. Genetic factors may play a role, as identical twins and other close relatives of a person with schizophrenia are more likely to develop the disorder. Psychological and social factors, such as drug abuse, stressful life challenges and interpersonal relationships, may also play a role in development.

In identifying factors to recovery, Liberman and his team reviewed a growing body of literature that show recovery from schizophrenia can occur under two conditions: 1) when the disorder is treated early with assertive case management and use of antipsychotic medication; and 2) when more chronic or relapsing forms are treated for lengthy periods of time with comprehensive, continuous care.

In addition, the researchers examined the cases of 23 schizophrenia patients who met specific recovery criteria, including remission of symptoms as well as successful functioning at work and school, independent living and social relationships.

The National Institute of Mental Health and the National Alliance for Research on Depression and Schizophrenia funded the study. UCLA Neuropsychiatric Institute researchers involved in the study with Liberman included Kopelowicz, Dr. Joseph Ventura and Dr. Daniel Gutkind.

The UCLA Neuropsychiatric Institute is an interdisciplinary research and education institute devoted to the understanding of complex human behavior, including the genetic, biological, behavioral and sociocultural underpinnings of normal behavior, and the causes and consequences of neuropsychiatric disorders. In addition to conducting fundamental research, the institute faculty seeks to develop effective treatments for neurological and psychiatric disorders, improve access to mental health services, and shape national health policy regarding neuropsychiatric disorders.