

Recovery from schizophrenia: Fact or fiction?

Long-term remission is unusual, but comprehensive therapy may improve the odds

Willem H.J. Martens, MD, PhD

Director, W. Kahn Institute of Theoretical Psychiatry and Neuroscience Advisor of psychiatry appointed by the European Commission (Leonardo da Vinci) Elst (Utrecht), The Netherlands

s it realistic for patients with schizophrenia to believe they can recover? Recent observational studies show that some do,¹ even though all DSM editions have defined schizophrenia as a chronic disease with a poor outcome.²

Our understanding of schizophrenia is changing as we gain new insights into:

- mechanism of recovery
- efficacy of combined psychotherapeutic, psychosocial, and drug therapies for sustaining remission and recovery
- the value of long-term aftercare.

This article examines evidence on:

- achieving recovery from schizophrenia
- factors associated with remission
- treatments that may help prevent relapse and lead to stable, lasting recovery.

WHAT IS 'RECOVERY'?

Diagnostic criteria. Recovery from schizophrenia has social, occupational, symptomatic, and psychostructural dimensions. For clinical practice, Liberman et al³ developed a useful set of 10 criteria



© Dave Cutler / Images

Table 1

Recovery from schizophrenia: 10 clinical criteria

| Characteristics of recovered patients* | | |
|--|--|--|
| 70% reported good or very good family relationships | | |
| None reported illicit drug use in the past year, and two reported occasional alcohol consumption | | |
| Only 13% reported >1 year delay between symptom onset and treatment | | |
| 87% reported effective symptom control with their first antipsychotic medication | | |
| All reported adherence to psychiatric care and medication regimens | | |
| 91% reported ongoing psychotherapy, and 78% reported that accessible and supportive psychiatrists and therapists aided their recovery | | |
| Normal or near-normal functioning on tests of flexibility in solving problems, verbal working memory, and perceptual skills | | |
| None showed more than very mild negative symptoms | | |
| 70% graduated from college, 13% completed 2 years of college, and 3 of remaining 4 worked full time before becoming ill | | |
| 91% received antipsychotics and psychotherapy, 48% social skills training, 57% family participation, 26% vocational rehabilitation, and 61% self-help groups | | |
| | | |

^{*} Based on a study of 23 schizophrenia patients who returned to work or school with their symptoms under control. Source: Reference 3

for recovery (*Table 1*) by analyzing the literature and cases of 23 schizophrenia patients who returned to work or school with their symptoms under control.

Recovery is not a smooth, linear progression. Even when patients attain remission, they often find it hard to make up for "lost life" during years of disability.⁴ Recovery also can be defined as social, emotional, and biological maturation. This definition considers recovery not as an end-state or cure but as a process of personal growth.⁵

Several groups proposed recently that recovery from schizophrenia includes four processes:

- finding hope
- re-establishing identity
- taking responsibility for recovery
- finding meaning⁶ and "getting on with life"⁷ (Box).

LONG-TERM VS SHORT-TERM

Recovery has been studied in many populations, but the evidence is difficult to compare. Data quality is compromised by poorly-defined cohorts, weak study designs, and lack of clear definitions of recovery and its diagnostic criteria. Moreover, empirical evidence is lacking on recovery's multidimensional nature, including psychosocial, biochemical, genetic, environmental, cultural, and ethnic correlates.

Long-term recovery. Recently, three studies of American populations diagnosed with schizophrenia detected trends toward long-term (≥5 years) recovery.

U.S. populations. Modestin et al⁸ in 2003 re-evaluated diagnoses of 208 patients in Swiss psychiatrist Manfred Bleuler's influential 1972 study on schizophrenia's long-term course. Using DSM-III-R, DSM-IV, and International



Statistical Classification of Diseases and Related Health Problems (ICD-10) criteria, the authors excluded about 30% of the original patients (most rediagnosed with schizoaffective disorder). Among those remaining, 12% to 15% showed long-term recovery and one-half had an undulating course with remissions.

In 1997, Stephens et al⁹ examined hospital records from 1913 to 1940 of 484 patients, mean age 27, hospitalized with schizophrenia. Using >5 years of follow-up data and DSM-IV criteria, the authors rated 13% as recovered and 58% unimproved.

Also in 1997, Harrow et al¹⁰ evaluated 74 patients diagnosed with schizophrenia by DSM-IV criteria at 2, 4.5, and 7.5 years. In this longitudinal study, one-third (32%) showed complete remission at one follow-up session, compared with 5% at all three evaluations.

This study suggested that schizophrenia patients show relatively poor functioning, compared with other psychotic patients. Over time, however, the likelihood of long-term remission appeared to increase. A similar pattern was seen in a sample of 658 Americans age \geq 65 with schizophrenia diagnosed by DSM-III criteria. As these patients aged, 15% developed long-lasting remission.¹¹

Elsewhere, empirical findings across 15 years from three Norwegian studies indicate that lasting recovery from schizophrenia—with symptom improvement and psychosocial adjustment—is rare (3% to 5% of patients).³ Similarly, only 4% of a Scandinavian sample of 301 patients attained complete, long-term remission during 3 to 39 years of follow-up.¹²

Across cultures, an international study¹³ evaluated 15- and 25-year outcomes in 1,633

Box

Remission: A new start after 20 years

s J, 48, is in recovery from schizophrenia. She has a stable job as a Web designer, is married, and has learned to build and maintain social relationships. Much of her life, however, has been very different.

At age 15 she was diagnosed with schizophrenia, paranoid psychotic type, with occasional comorbid bipolar symptoms. Over the next 20 years, she was admitted to psychiatric hospitals six times for treatment. At age 36, she was hospitalized with psychosis, depressive symptoms, and insomnia. At that point, she was taking carbamazepine, 500 mg/d, for mood stabilization, and haloperidol, 50 mg/d.

Changing medications. Her psychiatrist started olanzapine, 5 mg/d, and tapered off haloperidol, which appeared to be gradually becoming less effective while causing mood-related side effects. Ms. J's psychosis persisted, however, with no response to olanzapine.

Her psychiatrist then tapered carbamazepine to 175 mg/d while starting lamotrigine, 150 to 300 mg/d. The rationale for switching mood stabilizers was that lamotrigine may be more effective than carbamazepine in controlling mixed bipolar states, provide a greater antidepressant effect, and cause fewer side effects.

Intensive treatment. Within 10 days, Ms J's thought form and composition improved, and her psychiatrist immediately started psychotherapy and psychosocial guidance. Carbamazepine was withdrawn 3 months later, but Ms. J remained on olanzapine, 5 mg/d, and lamotrigine, 300 mg/d. With these medications, the paranoid psychosis went into remission.

After 5 months of intensive treatment, Ms. J was discharged. Outpatient treatment included weekly psychotherapy plus psychosocial guidance and social and coping training 6 times per month. These therapies—along with olanzapine, 5 mg/d, and carbamazepine, 300 mg/d—continue today.

Ms. J's mental and emotional condition stabilized, and her cognitive abilities improved. Education and therapy helped reduce stress within her family. She has not been rehospitalized or suffered a serious relapse in 12 years.

Table 2

Psychosocial interventions for patients in recovery from schizophrenia*

- Family intervention (support, management, training, education)
- Coping skills training
- Supported employment
- Intensive community treatment
- Psychoeducation
- Improvement of interpersonal functioning, stress management, emotional regulation, and cognitive skills training
- Social and independent-living skills training
- * Psychosocial interventions are most effective when combined with antipsychotic therapy and individualized psychotherapy

patients diagnosed with schizophrenia. Approximately 50% had favorable outcomes—stable work, independent from support, no imprisonment, no substance abuse, no rehospitalization, improved social life—but heterogeneity was marked.

Short-term course predicted long-term outcome, and local environment played a significant role in determining symptoms and social disability. The authors concluded that adequate early treatment and an optimum environment might lead to favorable long-term outcome.

In the United Kingdom, 14% of a sample of patients diagnosed by ICD-10 criteria achieved remission across a mean 8.5 years. ¹⁴ In a study of Czechoslovakian patients (70 men, 50 women) with early-onset schizophrenia diagnosed by DSM-III-R criteria, 10% recovered during 13 to 42 years of follow-up. ¹⁵

Short-term recovery. The McLean-Harvard first-episode project examined outcomes 6 months after schizophrenia diagnosis in 102 patients (55 men, 47 women). Sixty-five percent attained syndromal recovery (significant reduction of diagnostic features), whereas only 33% achieved functional recovery (increased social-emotional, vocational, and coping abilities).¹⁶

In Japan, 62 patients (33 men, 29 women; mean age 25) were followed for 13 years after a first hospitalization for schizophrenia. The authors reported an undulating course with recovery or a mild end-state in 53%, and a simple course of recovery and a moderate or severe end-state in 28%.¹⁷

Conclusions. The evidence suggests that early and lasting treatment of schizophrenic symptoms—even in recovered patients—might prevent frequent rehospitalizations. Thus, patients with schizophrenia must be followed carefully during and after recovery. Health care professionals, colleagues, friends, and relatives can help patients sustain recovery by watching for the earliest signs of deterioration and intervening before relapse occurs.

STRATEGIES FOR RECOVERY

Therapeutic factors. Many studies suggest psychosocial interventions (*Table 2*), psychotherapy, and medication are most effective in combination for stabilizing patients with schizophrenia and continuing their recovery. Other patient factors that may contribute to recovery include:

- quality of relationships with family, friends, and professional caregivers
- ability and motivation to use resources and take responsibility for one's life
- spiritual and religious activities
- awareness that recovery is possible.

Sells et al¹⁸ noted that attempting to make new contacts outside of their former spheres ("positive withdrawal") may allow schizophrenia patients to reconsider and ultimately recover a durable sense of self.

We at the W. Kahn Institute¹⁹ find that all these treatment strategies may be useful and even necessary to continue and stabilize recovery from schizophrenia. We feel they merit the attention of all professionals involved in recovered patients' aftercare and guidance.

continued on page 27



continued from page 22

Table 3

Suggested antipsychotic dosages during schizophrenia recovery*

| Drug | Dosage (mg/d) | Potential side effects | Positive effects |
|--------------|------------------|--|--|
| Aripiprazole | 10 to 30 | Headache, anxiety, insomnia, lightheadedness | Reduced positive, negative symptoms |
| Clozapine | 300 to 900 | Withdrawal, blunted emotions, seizures, lack of motivation | Reduced positive symptoms |
| Haloperidol | 30 to 100 | Tardive dyskinesia, parkinsonian symptoms, insomnia, depressive reactions, confusion, drowsiness, hypertension | Reduced mania, hyperactivity, agitation |
| Olanzapine | 5 to 10 | Drowsiness, agitation, weight gain, involuntary movements, restlessness | Reduced positive, negative symptoms |
| Quetiapine | 25 to 100 | Dizziness, hypotension, increased cholesterol, weight gain | Reduced positive symptoms |
| Risperidone | 2.5 to 5 | Anxiety, nervousness, back pain, bleeding, dizziness, irregular blood pressure | Reduced positive, negative symptoms |
| Ziprasidone | 10 to 200 | Heart-rhythm irregularity, loss of consciousness, restlessness, weakness, drowsiness | Reduced positive symptoms |

^{*} Dosages are individualized and may vary among patients and situations, but most will be gradually reduced to minimum levels during remission.

Social/vocational network. Family, friends, neighbors, and social workers play an important role in the patient's development during recovery. They provide positive stimulation (such as physical activities and social or vocational engagements) and support.

To equip the patient's network for this responsible task, provide them with training (such as in acceptance, empathy, feedback, and communication), education, and guidance.

Support groups can enhance the social networks of patients whose own networks are too small to prevent social isolation or overburdening of members.

Vocational training and mediation also may be stabilizing. Religious activities are central to self-understanding and recovery for many psychiatric patients and may improve outcomes.²⁰ **Patient skills.** To achieve stabilization and continue their recovery, patients must develop social

continued

interaction skills and coping strategies. Conversation training, for example, seems to help improve social interaction. Patients in remission must learn to:

- find or create low-stress, positively stimulating environments in which their recovery can flourish
- tolerate discomfort and stress
- overcome internalized stigma about recovery.

Patients also need to learn when and how to withdraw from hectic, stressful environments and from people who are overly emotional, patronizing, or hold unrealistic expectations about them.

Pharmacotherapy. Sound pharmacotherapy underlies rehabilitation and psychosocial treatment of patients in remission from schizophrenia.²¹ Healthy neurobiological functioning and equilibrium may help normalize social-emotional behavior and create opportunities to improve all life dimensions via psychotherapy, psychosocial guidance, education, and training.

Dosages often can be reduced during recovery, titrating gradually downward to reduce the risk of relapse. Suggested antipsychotic dosages during recovery are listed in *Table 3*. Be patient and consistent when adjusting dosages, guided by information in package inserts, from clinical trials, and

New understandings of psychosocial and drug therapies may help more patients achieve long-lasting, stable recovery from schizophrenia. Continued antipsychotic therapy, supportive psychotherapy, and collaboration with the patient's support network appears to be most effective in sustaining remission and recovery.

Bottom

in recent articles on specific medications. When introducing a medication, start with the lowest dosage and increase in small steps until symptoms are reduced and side effects are minimal.

Discontinuing antipsychotics. Is it therapeutically reasonable to discontinue antipsychotics after recovery? Probably not.

Relapse rates in unmedicated patients with schizophrenia appear extremely high—perhaps 8 or 9 out of 10 cases—even during remission. By comparison, relapse rates appear very low—perhaps 3 or 4 out of 10 cases—for remitted patients who remain on antipsychotics. Atypical antipsychotics or low doses of conventional agents are generally well-tolerated and safe in the long term.²² **Patient monitoring.** Patients in remission from schizophrenia benefit from:

- 24-hour phone lines to call for guidance, treatment, and quick interventions
- central, alert treatment coordination among psychiatrists, psychologists, social workers, therapists, vocational experts, and activity counselors.

Psychiatrists in solo or small-group settings may need to seek out these resources in their communities. The goal of this team approach—in cooperation with the patient's social network—is to help the patient develop employment and social activities appropriate to his or her needs and capabilities.

References

- Davidson L. Living outside mental illness: qualitative studies of recovery in schizophrenia. New York: New York University Press, 2003.
- Kruger A. Schizophrenia: Recovery and hope. Psychiatr Rehabil J 2000;24(1): 29-37.
- Liberman RP, Kopelowicz A, Ventura J, Gutkind D. Operational criteria and factors related to recovery from schizophrenia. *Int Rev Psychiatry* 2002;14(4):256-72.
- Torgalsboen AK, Rund BR. Lessons learned from three studies of recovery from schizophrenia. Int Rev Psychiatry 2002;14(4):312-17.
- Boone EC. A qualitative investigation of the process of recovery in people experiencing schizophrenia. *Dissert Abstr Int* 1996;57 (5-B):3402.

continued from page 28

Related resources

- Ascher-Svanuw H, Kraus A. Psychoeducational groups for patients with schizophrenia: a guide for practitioners. Gaithersburg, MD: Aspen Publishers. 1991.
- Suzuki T, Uchida H, Tanaka KF, et al. Revising polypharmacy to a single antipsychotic regimen for patients with chronic schizophrenia. Int J Neuropsychopharmacol 2004;7(2):133-42.
- American Psychiatric Association. Schizophrenia (patient/family information). www.psych.org/public_info/schizo.cfm
- ► Schizophrenia.com. Nonprofit Web community providing information, support, and education. www.schizophrenia.com

DRUG BRAND NAMES

Aripiprazole • Abilify Carbamazepine • Tegretol Clozapine • Clozaril Haloperidol • Haldol Lamotrigine • Lamictal Olanzapine • Zyprexa Quetiapine • Seroquel Risperidone • Risperdal Ziprasidone • Geodon

DISCLOSURE

The author reports no financial relationship with any company whose products are mentioned in this article or with manufacturers of competing products.

- Andresen R, Oades L, Caputi P. The experience of recovery from schizophrenia: towards an empirically validated stage model. *Aust NZ J Psychiatry* 2003;37(5):586-94.
- Noordsy D, Torrey W, Mueser K, et al. Recovery from severe mental illness: an interpersonal and functional outcome definition. *Int Rev Psychiatry* 2002;14(4):318-26.
- Modestin J, Huber A, Satirli E, et al. Long-term course of schizophrenic illness: Bleuler's study reconsidered. Am J Psychiatry 2003;160(12):2202-8.
- 9. Stephens JH, Richard P, McHugh PR. Long-term follow-up of patients hospitalized for schizophrenia, 1913 to1940. *J Nerv Ment Dis* 1997;185(12):715-21.

- Harrow M, Sands JR, Silverstein ML, Goldberg JF. Course and outcome for schizophrenia versus other psychotic patients: a longitudinal study. *Schizophr Bull* 1997;23:287-303.
- Craig TJ, Bregman Z. Late-onset schizophrenia-like illness. J Am Geriatr Soc 1988;36(2):104-7.
- Opjordsmoen S. Long-term course and outcome in unipolar affective and schizoaffective psychoses. Acta Psychiatr Scand 1989;79(4):317-26.
- Harris G, Hopper K, Craig T, et al. Recovery from psychotic illness: a 15- and 25-year international follow up study. Br J Psychiatry 2001;178:506-17.
- Kiriakakis V, Bhatia KP, Quinn NP, Marsden CD. The natural history of tardive dystonia. A long-term follow-up study of 107 cases. *Brain* 1998;121(Pt 11):2053-66.
- Mala E. Early onset schizophrenia. Cesk Slov Psychiatry 1993; 89(5):259-71.
- Tohen M, Strakowski SM, Zarate C, et al. The McLean-Harvard first episode project: 6-month symptomatic and functional outcome in affective and non-affective psychosis. *Biol Psychiatry* 2000; 48(6):467-76.
- Kobayashi T. Course types of first admission schizophrenia: A mean 13-year follow back study. Seishin Igaku Clin Psychiatry 2002; 44(2):161-8.
- Sells DJ, Stayner DA, Davidson L. Recovering the self in schizophrenia: An integrative review of qualitative studies. *Psychiatr Q* 2004; 75(1):87-97.
- Martens WHJ, Kahn W, Oppenheimer C. Predictors and prevalence of recovery in schizophrenia. W. Kahn Institute of Theoretical Psychiatry and Neuroscience (WKITPN) Publication 36, 2001(5):113-26.
- Fallot RD. The place of spirituality and religion in mental health services. In: Lamb HR (ed). Best of new directions for mental health services, 1979-2001. San Francisco: Jossey Bass, 2001:79-88.
- Kane JM. Long-term treatment of schizophrenia: Moving from a relapse-prevention model to a recovery model. *J Clin Psychiatry* 2003;64(11):1384-5.
- Tauscher-Wisniewski S, Zipursky RB. The role of maintenance pharmacotherapy in achieving recovery from a first episode of schizophrenia. *Int Rev Psychiatry* 2002;14(4):284-92.