Deinstitutionalization and Schizophrenia in Finland II: Discharged Patients and Their Psychosocial Functioning

by Teija Honkonen, Soile Saarinen, and Raimo K.R. Salokangas

Abstract

Three representative cohorts of schizophrenia patients deinstitutionalized from psychiatric hospitals in 1982, 1986, and 1990 were followed up for 3 years in Finland. Patients of the last cohort were older, more disturbed, and had been ill for a longer time than those discharged at the beginning of the 1980s. Despite this, the mortality of patients deinstitutionalized in 1990 did not increase, and their psychosocial functioning seemed to become even better during the 3-year follow-up period compared with those deinstitutionalized during the previous decade. Patients who had been discharged in 1990 were more often living alone than those discharged in the 1980s. Homelessness was rare throughout the study period. In general, patients were more satisfied with their life situation at follow-up compared with that on discharge. Furthermore, most patients were satisfied with their treatment situation. Altogether, the psychiatric care system seemed to be able to meet schizophrenia patients' need for care fairly well during the rapid deinstitutionalization process in Finland. More attention, however, should be paid to the loneliness and social withdrawal of discharged patients as well as to other disabilities in their social functioning.

Key words: Schizophrenia, follow-up study, deinstitutionalization, psychosocial functioning, Finland.


Material and Methods

The DSP samples consisted of 3,307 schizophrenia patients, ages 15 to 64 years, who had been discharged during the era of deinstitutionalization—the effects of this policy have been widely studied and discussed, particularly in Britain and the United States (Bachrach 1978; Borus 1981; Thornicroft and Bebbington 1989; Clifford et al. 1991; Lamb 1992; O’Driscoll 1993). In Finland, the deinstitutionalization process started later than in many other countries, but since the beginning of the 1980s the decrease in the number of psychiatric beds has been particularly sharp and rapid (Salokangas 1994). A national development program—the National Schizophrenia Project—has acted to accelerate this process. In the beginning of the 1980s there were still almost four hospital beds per 1,000 inhabitants. The corresponding figure at the end of the decade was about two, and in the mid-1990s slightly over one per 1,000 (Salokangas et al. 1996).

Since the beginning of the deinstitutionalization process in Finland, there has been growing concern about the treatment and life situation of long-term mentally ill persons living in the community. In response, a national Discharged Schizophrenia Patients (DSP) project was launched in 1987. Its purpose was to examine the changes since the beginning of the 1980s in the living conditions, clinical and social state, and the use of and need for care of deinstitutionalized schizophrenia patients (Salokangas et al. 1992).

A previous article related to the DSP project pointed out that the rapid deinstitutionalization process in Finland has led to a major change in the characteristics of discharged schizophrenia patients and concomitantly in their need for services (Salokangas and Saarinen 1998). Schizophrenia patients discharged at the beginning of the 1990s were older, more disturbed, and had been ill for a longer time than patients discharged at the beginning of the 1980s. Parallel to the change in clinical condition, community-based residential and day care services had been used increasingly often in the post-hospital period.

The aim of the present article—the second in a series of three papers—is to describe how the patients' clinical and functional status, as well as living conditions, changed during the rapid deinstitutionalization period in Finland.
from the psychiatric hospitals of 20 Finnish mental health/health care districts after January 1, 1982 (S82), January 1, 1986 (S86), and January 1, 1990 (S90), with the official place of residence in one of the study districts. In each of the districts, which together have a population of about 4 million (total population of Finland is 5 million), consecutive schizophrenia patients discharged from the psychiatric hospitals were included in the study until the samples consisted of 30 patients per 100,000 population. In one district the samples were half and in another double this size. The demographic structure and the socioeconomic situation of the population in the study districts as well as the health care services available were comparable with those available throughout the country.

Sampling was based on hospital discharge registers. The required number of schizophrenia patients who met the study criteria were selected in order of discharge from among those whose diagnosis was functional psychosis. In 1982 and 1986, the diagnoses were based on the International Classification of Diseases (World Health Organization 1967) and in 1990 on the Finnish Classification of Diseases 1987 (Lääkintöhallitus 1986; DSM-III-R [American Psychiatric Association 1987] criteria). The researcher-physicians in each district reviewed the case records and rediagnosed the patients using the Finnish Classification of Diseases 1987. The expected numbers of schizophrenia patients were 1,109 (S82), 1,109 (S86), and 1,170 (S90). Because of small sampling errors, the total number of schizophrenia patients included in the study was 1,081 (S82), 1,097 (S86), and 1,129 (S90).

On the basis of psychiatric case records, data were collected on patients’ psychiatric history and use of services during the 3-year period before discharge and the 3-year period after discharge. Data concerning the patient's overall level of functioning according to the Global Assessment Scale (GAS; Endicott et al. 1976), somatic health, working ability, and medication at discharge were also collected. With a few exceptions, complete data could be collected from the records by the psychiatric treatment teams.

Three years after discharge, the S86 and S90 patients were traced to seek their consent to participate in the study. With the exception of two districts in 1986, each district's psychiatric teams conducted the interviews using a structured interview schedule specifically designed for the present study. The interview schedule included well-defined questions concerning the patient’s current living conditions, personal relationships, as well as use of and need for various psychiatric, medical, and social services. The latter category included questions about a detailed list of services and treatments, as well as the patient’s satisfaction with his or her psychiatric care. Patients' clinical status (psychotic, neurotic, and depressive symptoms) was assessed by a psychiatrist during a normal clinical interview with the help of a separate symptom checklist. The psychotic symptoms classified included, for example, hallucinations, delusions, and strong feelings of depersonalization or derealization. The neurotic symptoms classified included, for example, feelings of worry, dysphoria, and anxiety; various symptoms including palpitations, dizziness, and tachycardia; social phobias; panic attacks; obsessional thoughts; and compulsive acts. Depressive symptoms included depressive mood, hopelessness, ideas of self-harm or suicide, reduced concentration and attention, disturbed sleep, and diminished or increased appetite. The severity of the symptoms was rated using five categories (i.e., no symptoms, mild, moderate, severe, constantly severe). Psychosocial functioning was assessed on the GAS. In addition to this global measure, patients’ functional ability was assessed using a modified version of the Medical Research Council Practices Profile, as described by Creer et al. (1982). In this version, 19 structured items included questions on housework, self-care (hygiene, use of toilet, eating, getting up/going to bed), taking medicine, taking responsibility for one’s own care, managing money, taking care of children, working, marital relationship, other interpersonal relationships, social contacts outside family, embarrassing behavior, social withdrawal, interest in events, activity, managing emergencies, and suicidal behavior. The patients were asked how they coped with these areas of social role behavior.

The S86 patients from two districts (altogether 107 patients) were interviewed by a researcher-physician (T.H.), who was not responsible for the patients’ treatment. In these interviews, more sophisticated methods were used for the assessment of patients’ clinical state and need status (Present State Examination [PSE]: Wing et al. 1974; Social Behavior Schedule [SBS]: Wykes and Sturt 1986; MRC Needs for Care Assessment: Brewin et al. 1987). The more detailed methodology has been presented in our earlier reports (Salokangas et al. 1992, 1996; Stengård et al. 1993; Honkonen 1995).

The interview data are presented from the S86 and S90 cohorts only. Altogether, interviews were successfully held with 775 patients (71%) of the S86 cohort; 40 patients (4%) were examined by other means, 137 (12%) declined to participate in the study, 96 (9%) were not located, and 49 (4%) had died. The figures for the S90 cohort were 742 (66%) interviewed, 96 (9%) examined by other means, 156 (14%) declined to participate, 63 (6%) not located, and 72 (6%) had died. There were no statistically significant differences in sociodemographic background factors between the patients who took part in the follow-up study and those who did not. At the time of discharge, the overall level of functioning (GAS) was poorer and the daily dose of neuroleptic drugs higher among the
patients followed up compared to dropouts. The follow-up patients had also used psychiatric services to a greater extent both before and particularly after discharge.

For further analyses, the subjects were also classified according to their duration of illness, just as in the previous article about the DSP project (Salokangas and Saarinen 1998). The analyses were carried out on the groups at the extreme ends on this variable, that is, the group with a short duration of illness (SDI; < 5 years) versus that with a long duration of illness (LDI; > 20 years). In the SDI group there were 291 patients in the S82 cohort, 223 in the S86 cohort, and 194 in the S90 cohort. The numbers in the LDI groups were 141, 235, and 245 patients, respectively.

In statistical analysis, chi-square tests were used when the data were categorical. In the case of quantitative data, one-way analysis of variance (ANOVA) was applied. A probability level of < 0.05 was regarded as significant.

Results

Patients’ Somatic Health and Mortality During the Follow-up Period. According to the medical records, the proportion of patients with somatic illness at discharge became more common during the observation period of the study (16.4% for S82, 19.0% for S86, 22.4% for S90; p = 0.002). Three years later, at follow-up, the proportion of patients with somatic illness was higher in the latter two cohorts compared with the first one (18.0% for S82, 27.1% for S86, 26.8% for S90; p < 0.001). There was a strong correlation between patients’ age and somatic illness—both at discharge and at follow-up. Thus, it seems that at both times the increase in the proportion of patients with somatic illness was explained by the increase of the average age in various cohorts.

In each cohort about one-third of the LDI patients were having somatic problems whereas SDI patients had somatic health problems less frequently (LDI = 30.8% and SDI = 11.5% for S82, p < 0.001; LDI = 36.4% and SDI = 18.8% for S86, p < 0.001; LDI = 39.0% and SDI = 17.8% for S90, p < 0.001).

There was relatively little variation in mortality figures during the 3-year follow-up period (5.0% for S82, 4.5% for S86, 6.4% for S90). The differences between the cohorts were not statistically significant. There was a slight increasing trend regarding natural deaths (1.3% for S82, 1.8% for S86, 2.1% for S90) and suicides (1.0% for S82, 1.4% for S86, 1.9% for S90) as well, but this was not statistically significant either.

Clinical Status at Follow-up. The results regarding the clinical status of the S86 and S90 cohorts were based on both medical records and clinical interviews with the patients. Patients of the first cohort (S82), on the other hand, were not interviewed by the psychiatric teams. Thus, it was not possible to obtain comparable data regarding their clinical status at follow-up.

Between 1989 (S86 patients) and 1993 (S90 patients) the proportion of patients with psychotic symptoms increased (59.9% for S86, 69.5% for S90; p < 0.001). At least moderately severe psychotic symptoms were displayed by 40 percent in both cohorts. An increase also appeared in the number of psychotic symptoms among SDI patients (52.0% for S86, 65.3% for S90; p = 0.015).

Depressive and neurotic symptoms became more prevalent toward the end of the observation period. Depressive symptoms appeared among 54.9 percent of the S86 patients and 61.2 percent of the S90 patients, and neurotic symptoms occurred among 49.5 percent and 56.8 percent of the patients, respectively; both differences were statistically significant (p = 0.008 and p = 0.002, respectively). Among LDI patients there was also an increase in the amount of both depressive (50.8% for S86, 61.6% for S90; p = 0.023) and neurotic (40.0% for S86, 52.0% for S90; p = 0.012) symptoms.

Neuroleptic Medication and Side Effects. Daily neuroleptic doses at follow-up were high, and during the observation period they became even higher (daily equivalents of chlorpromazine: 643 mg for S82, 661 mg for S86, 796 mg for S90; F = 12.680, df = 2, p < 0.001). One-third of the patients received neuroleptics by injection. Side effects of medication were recorded only for the S90 cohort. On the basis of the medical records, over one-third of the patients were experiencing extrapyramidal side effects.

Alcohol Abuse. About 10 to 20 percent of the schizophrenia patients were abusing alcohol at least temporarily at follow-up. During the period of the study, problematic behavior had decreased rather than increased (17.8% for S82, 12.1% for S86, 11.6% for S90; p < 0.001). In all the cohorts, men were abusing alcohol significantly more often than women (p < 0.001). LDI patients were having problems less frequently than those in the SDI group (LDI = 8.5% and SDI = 21.1% for S82, p = 0.003; LDI = 5.1% and SDI = 12.9% for S86, p = 0.008; LDI = 6.7% and SDI = 15.3% for S90, p = 0.005).

Functional Ability. At follow-up, impairment in social functioning was found in somewhat more than 80 percent of the patients (table 1). In the early 1990s impairment of social functioning became even more prevalent. Schizophrenia patients seemed to experience increasing difficulties in taking responsibility for their own care, including medication, as well as in managing money and...
Table 1. Disabilities in social functioning among schizophrenia patients at follow-up (%)

<table>
<thead>
<tr>
<th>Area of functioning</th>
<th>1989</th>
<th>1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doing housework</td>
<td>17.8</td>
<td>20.3</td>
</tr>
<tr>
<td>Hygiene</td>
<td>9.1</td>
<td>13.2</td>
</tr>
<tr>
<td>Use of toilet</td>
<td>0.5</td>
<td>1.4</td>
</tr>
<tr>
<td>Eating</td>
<td>3.9</td>
<td>5.1</td>
</tr>
<tr>
<td>Getting up/going to bed</td>
<td>7.7</td>
<td>8.8</td>
</tr>
<tr>
<td>Taking medicine</td>
<td>16.9</td>
<td>22.0</td>
</tr>
<tr>
<td>Taking responsibility for one's own care</td>
<td>18.5</td>
<td>20.9</td>
</tr>
<tr>
<td>Managing money</td>
<td>21.0</td>
<td>26.6</td>
</tr>
<tr>
<td>Marital relationship</td>
<td>6.7</td>
<td>5.0</td>
</tr>
<tr>
<td>Taking care of children</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>Working</td>
<td>67.4</td>
<td>68.8</td>
</tr>
<tr>
<td>Other interpersonal relationships</td>
<td>24.3</td>
<td>28.0</td>
</tr>
<tr>
<td>Social contacts outside family</td>
<td>25.2</td>
<td>25.5</td>
</tr>
<tr>
<td>Embarrassing behavior</td>
<td>9.6</td>
<td>11.5</td>
</tr>
<tr>
<td>Social withdrawal</td>
<td>23.7</td>
<td>31.1</td>
</tr>
<tr>
<td>Interest in events</td>
<td>16.2</td>
<td>20.9</td>
</tr>
<tr>
<td>Activity</td>
<td>27.4</td>
<td>32.6</td>
</tr>
<tr>
<td>Managing emergencies</td>
<td>16.4</td>
<td>22.4</td>
</tr>
<tr>
<td>Suicidal behavior</td>
<td>2.0</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Number of disabilities

None: 18.3 17.6
1-3: 47.1 42.9
4-6: 20.2 18.9
7-9: 7.9 11.4
10-14: 6.3 8.0
15-20: 0.2 1.2

Mean number of disabilities: 3.2 3.7

At follow-up, patients were asked whether they had any close person whom they could trust

emergencies. A concurrent increase in social withdrawal and passivity also emerged.

On the basis of the medical records, the overall level of functioning at discharge—as measured by the GAS score—decreased during the observation period (4.4 for S82, 4.3 for S86, 4.1 for S90; $F = 14.360, df = 2, p < 0.001$). Patients discharged in the beginning of the 1990s seemed to be more disturbed at the time of their discharge than those discharged in the early 1980s. Although the effect of age was taken into account, the differences between the patients’ psychosocial functioning remained significant.

With regard to LDI and SDI patients, the psychosocial functioning at discharge decreased during the observation period as well (4.4 for S82, 4.2 for S86, 4.1 for S90; $F = 3.296, df = 2, p = 0.038$ among LDI patients and 4.5 for S82, 4.5 for S86, 4.1 for S90; $F = 9.656, df = 2, p < 0.001$ for SDI patients). In the S86 cohort the psychosocial functioning of LDI patients at discharge was worse than that of SDI patients (4.2 and 4.5, $p < 0.001$, respectively).

The results regarding the overall level of functioning at follow-up were based on medical records and clinical interviews. (Patients of the first cohort (S82) were not interviewed; thus, it was not possible to get comparable data on their functional ability at follow-up.)

Altogether at follow-up the GAS scores were assessed as poor (0–2) in about 5 percent of the patients. The average GAS score of the S86 patients was as good as that of the S90 patients (4.6 for both). In the last two cohorts the psychosocial functioning of LDI patients was worse than that of SDI patients (4.2 and 4.9, respectively, for S86, $p = 0.001$; 4.5 and 4.8, respectively, for S90, $p = 0.040$).

Working Ability. At follow-up, the majority of the patients were on disability pension, clearly more patients in the last cohort compared with the first two (85.7% for S82, 86.0% for S86, 93.8% for S90; $p < 0.001$). Nearly all patients were on disability pension for psychiatric reasons. About 1 percent in each cohort were either retired or on disability pension for somatic reasons. There were no statistically significant differences between the three cohorts in the LDI and SDI groups. With regard to the S82 and S86 cohorts, LDI patients were more often on disability pension than those in the SDI group (LDI = 97.5% and SDI = 86.2% for S82, $p < 0.001$; LDI = 98.5% and SDI = 80.7% for S86, $p < 0.001$).

Marital Status and Present Life Situation. At follow-up, about 70 percent of the patients in each cohort were single. Patients were living more often alone and less often with family members or in institutions in the 1990s compared with the 1980s (table 2). In 1993, 45 percent of the schizophrenia patients lived alone and 7 percent in institutions.

During the observation period an improvement in patients’ housing conditions corresponded to that of the general population. Homelessness was rare (<1%) throughout the study period and seemed not to increase during the course of the study. All patients recorded as homeless at follow-up were based on medical records and clinical interviews. (Patients of the first cohort (S82) were not interviewed; thus, it was not possible to get comparable data on their functional ability at follow-up.)

At follow-up, patients were asked to rate their living conditions and financial situation according to three categories (poor, moderate, good). Nine percent of the S86 patients and 4 percent of the S90 patients regarded their living conditions and financial situation as poor. Nearly one-fourth of the patients in the S86 and S90 groups assessed their financial situation as poor.
and confide in if in trouble. Two out of three patients in the S86 and S90 cohorts had at least one close personal relationship. For both groups, nearly 15 percent had a spouse, about 40 percent had a relative, and 30 percent a friend whom they could trust. In addition, nearly half the patients considered themselves close to someone on the health care or social service staff.

Concomitant Use of Various Services. In 1993, 96 percent of schizophrenia patients were using services of the health care or the social welfare system; the corresponding figure for 1989 was 90 percent. During the same period, the proportion of those receiving care provided by the psychiatric treatment system had increased (79.2% for S86, 86.6% for S90; \( p < 0.001 \)). The proportion of patients using only social services declined (3.7% for S86, 1.4% for S90; \( p = 0.002 \)), while that of patients using both psychiatric and social services increased (28.3% for S86, 34.7% for S90; \( p = 0.004 \)).

Satisfaction With Life Situation. Satisfaction with life situation was assessed by the patients by means of a 10-point scale. A high score indicated a perceived better life situation. In addition to the situation prevailing at follow-up, patients also retrospectively assessed their life situation at discharge. In both cohorts patients were more satisfied with their life situation at follow-up than at discharge (6.8 and 5.4, \( p < 0.001 \), respectively, for S86, 6.9 and 5.6, \( p < 0.001 \), respectively, for S90).

Satisfaction With Treatment. About 80 percent of the patients were satisfied with the treatment they had received. Explicit dissatisfaction was reported by only about 10 percent. No essential change occurred here between 1989 and 1993. Patients reported greater satisfaction with outpatient treatment than with hospital in-patient care.

Discussion

The present study covered the period during which a sweeping process of deinstitutionalization was gathering momentum across Finland. Consecutive schizophrenia patients discharged from the psychiatric hospitals after January 1, 1982, 1986, and 1990 were included in the study, until the samples consisted of 30 patients per 100,000 population. It would have been epidemiologically correct to take a random sample from the total number of annual discharges. In that case, however, the study would have been much more difficult to carry out in practice. Therefore, we decided to take consecutive patients after a certain starting point.

The analyses of dropouts showed that the patients examined at follow-up were more severely disturbed and used psychiatric services more often. There was no indication, however, that the difference between those patients who took part in the follow-up study and those who did not was systematically different in the cohorts studied. The limitations related to the sampling procedure as well as to the generalizability of the results have been discussed in more detail elsewhere (Salokangas and Saarinen 1998).

In a previous article dealing with the same three cohorts of schizophrenia patients, it was pointed out that the deinstitutionalization process in Finland has led to a major change in the characteristics of discharged patients (Salokangas and Saarinen 1998). Schizophrenia patients discharged at the beginning of the 1990s were older, more disturbed, and had been ill longer than those discharged at the beginning of the 1980s. It is reasonable to expect that the rapid deinstitutionalization process might also have had an effect on schizophrenia patients' psychosocial functioning and life situation at follow-up. Thus, the present study set out to assess how the patients' clinical and functional status as well as living conditions at follow-up had changed during the observation time.

There appeared to be more discharged patients with physical problems over time, apparently because of the increase in patients' mean age. Despite the increase in patients with somatic illness during the observation time, the need-for medical services seemed to be adequately met in the beginning of the 1990s (Salokangas and Saarinen 1998). Although there have been worries that deinstitutionalization might lead to an increase in mortality rates (Mortensen and Juel 1990), the present study identified no statistically significant increase in the mortality figures during the observation time. The slight increase between the last two cohorts seems to be explained by the increase of patients' mean age. Although the differences between the cohorts did not reach statisti-

<table>
<thead>
<tr>
<th>Table 2. Living situation of schizophrenia patients 3 years after discharge from a psychiatric hospital (%)</th>
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<tbody>
<tr>
<td>Living partner/housing situation</td>
</tr>
<tr>
<td>Alone</td>
</tr>
<tr>
<td>Spouse</td>
</tr>
<tr>
<td>Children</td>
</tr>
<tr>
<td>Parent</td>
</tr>
<tr>
<td>Other person</td>
</tr>
<tr>
<td>Hostel</td>
</tr>
<tr>
<td>Institution</td>
</tr>
<tr>
<td>Not specified</td>
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<tr>
<td>No permanent residence</td>
</tr>
</tbody>
</table>
patients' overall functioning seemed to be as good in the
1990s as in the 1980s. Thus, patients' functional status
had become somewhat better during the 3-year follow-up
in the 1990s compared with the 1980s.

With regard to the patients with a long history of ill-
ness, the situation was somewhat worrisome. In the last
two cohorts the overall psychosocial functioning of these
patients seemed to be worse, compared with those whose
illness had lasted for a short time. This is in accordance
with the fact that patients with a long duration of illness
had an exceptionally high increase in readmissions and
these patients seemed to be losing out on their share of the
residential outpatient services during the observation
period (Salokangas and Saarinen 1998).

The reliability of the GAS scores has limitations that
have to be taken into account. The number of different
interviewers in the present study was high. The GAS
assessment, on the other hand, has been in routine use in
Finnish mental hospitals since the middle of the 1980s
and the scale has fairly clear criteria on which the assess-
ments are based. However, comparisons among studies
coming from different countries are certainly difficult and
the reliability comparisons presuppose well-trained inter-
national study groups.

At follow-up, about 10 to 20 percent of the dis-
charged patients were abusing alcohol at least temporar-
ily. During the observation time there appeared to be no
increase in problems with alcohol. Consistent with data
from other studies (Drake et al. 1990; Kozaric-Kozaric et
al. 1995), patients with alcohol abuse in all the cohorts of
the present study were more often men than women.
Patients with comorbid schizophrenia and substance
abuse are at high risk for very poor outcome (Drake et
al. 1996). Even though alcohol abuse is a major abuse in
Finland, the view of substance abuse in the present study
was too narrow because we collected data for use and
abuse of alcohol only.

With regard to patients' life situation, it seems that
living alone and being on disability pension had become
more common during the observation period, while living
in an institution or with family members had become less
common. Nearly half the patients were living alone at fol-
low-up in the 1990s. The aging of schizophrenia patients
and their long-lasting hospitalizations may have weak-
ened their social relationships. On the other hand, due to
the development of an extensive outpatient system during
the 1980s, patients with schizophrenia may have received
more support from various outpatient services in the
1990s than they did earlier. Thus, there may have been
better opportunities for them to live alone in the commu-
nity. Lamb (1988), however, has stated that the increased
number of schizophrenia patients living alone during the
deinstitutionalization process may weaken their ability to
cope with stress. This may cause difficulties with self-
care, including taking medication, which, in turn, may lead to rehospitalization.

Somewhat surprisingly, patients' housing conditions seemed to be fairly good and during the observation period they had become even better, corresponding to those of the general population. The issue of homelessness among mentally ill people has attracted considerable attention since the early 1980s, especially in the United States (Lamb 1984; Appleby and Desai 1985; Bachrach 1992). Scott (1993) has recently reviewed the literature on homelessness and mental illness, finding that significant mental illness is present in 30 to 50 percent of the homeless. Nordenfelt et al. (1992) studied the extent of homelessness among 1,581 psychiatric patients in Denmark and found that about 1 in 5 of those in contact with the psychiatric services had serious housing problems. In Finland, however, homelessness among deinstitutionalized schizophrenia patients seemed to be rare—less than 1 percent of patients in this study were homeless throughout the observation period—and no other major housing problems appeared either.

On average, patients appeared to be more satisfied with their life situation at follow-up compared with their situation at discharge. In addition, most patients seemed to be satisfied with the treatment they were receiving. In the present study, however, patients were interviewed by the psychiatric teams responsible for their treatment, which may have affected their answers about satisfaction with services. Honkonen (1995), for example, noted that patients interviewed by an independent researcher more often reported dissatisfaction with treatment. Therefore, the proportion of dissatisfied patients in the present study may be too low.

Altogether, despite its shortcomings, the psychiatric treatment system seemed to be able to meet the patients' expectations to a relatively great extent. Importantly, the situation had not deteriorated in this respect from the 1980s to the 1990s. The impairment in patients' mental status and overall situation in the early 1990s was reflected most clearly in the results concerning treatment and supportive services, particularly in the increased number of individuals under psychiatric care and the increase in the concomitant use of psychiatric and social services. Despite the rapid reduction of psychiatric hospital beds in Finland, there was still slightly over 1 hospital bed per 1,000 population remaining in the mid-1990s (Salokangas et al. 1996). Furthermore, the development and expansion of the psychiatric outpatient care system—which had already begun—was still continuing. In Finland, Health Districts (at the time of the study, Mental Health Districts; mean population of 250,000) form catchment areas that have, under the same administration, one or more psychiatric hospitals and several Community Mental Health Centers responsible for the psychiatric care of all people living in the district. In these Health Districts there are also alternative outpatient services, including day hospitals, day centers, rehabilitation homes, and supported hostels or homes. Thus, the deinstitutionalization process in Finland is lagging by a considerable degree behind that of the United States, where the number of occupied State psychiatric hospital beds was reduced between 1955 and 1994 from more than 3 beds per 1,000 population to 0.29 per 1,000 (Lamb 1997). However, despite the fairly successful deinstitutionalization process in Finland, the psychiatric care system should pay more attention to the increasing difficulties in social contacts as well as to the social withdrawal of long-term schizophrenia patients living alone in the community after discharge.

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Drake, R.E.; Mueser, K.T.; Clark, R.E.; and Wallack, M.A. The course, treatment, and outcome of substance


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