

# Psychosocial Treatment Interventions for People with Severe Mental Illness in a Community

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## Abstract

We surveyed 80 people with severe mental illness living in the community in Malmö, Sweden in order to determine their views on the psychosocial interventions many had received from psychiatric services. No measurable differences in background aspects, including self-stated diagnosis and quality of life, were found between those who received interventions and those who did not. However, younger people were more often given cognitive behavior therapy, while individuals living in their own apartments tended to be the recipients of cognitive behavior therapy, assertive community treatment programs, and family interventions. Our findings showed that psychiatric services not only select people with a high quality of life for psychosocial interventions, but our results indicate that such interventions are generally directed toward people whose severe mental illness lies outside the spectrum schizophrenia disorders.

**Keywords:** severe mental illness (SMI), psychosocial interventions, quality of life, Sweden

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## Introduction:

Research and clinical evidence has often reported extensive social dysfunction in people with schizophrenia and severe mental illness (SMI) (Mueser et al., 1991; Ganev, 2000; Wiersma et al., 2000; Mubarak et al.; 2003; Lambert et al.; 2006; Goreishizadeh et al., 2012). People with SMI have significant impairments in areas of occupational activity, daily living, intimate relationships, and the use of specialist mental health services, regardless of evidence-based pharmacological treatment (Wheeler, 2007). The recovery approach to service delivery for people with schizophrenia and other SMIs comprises not only the treatment of the illness, but extends to addressing such fulfil basic needs as gainful employment and household management. The goal is to enable individuals to lead meaningful lives (Mental Health Commission, 1998). The optimal treatment for schizophrenia and SMI according to current clinical practice focuses on both alleviating symptoms and functional recovery using a range of pharmacological, psychosocial, and psychological interventions (Lehman et al., 2004; Dixon et al., 2010). Psychosocial treatments have been shown to enhance functioning beyond the improvements resulting from medication alone (Addington et al., 2010). This combination of psychosocial interventions and medications not only provides more health gain to patients, but also reduces hospitalization costs (Phanthunane et al., 2011)

Limited research has been done on the views of people with SMI living in the community with regard to the different psychosocial interventions provided to them by psychiatric services. As part of a larger study investigating the provision of formal and informal care, we will examine from the point of view of such people the relationship between background aspects and quality of life (QOL), and the provision of different psychosocial treatment interventions in an outpatient setting.

## Methods

### Design

The background of this study is a survey of support and treatment facilities for people with SMI who live in a Swedish community (Nordström et al., 2009; Östman & Björkman 2014). In 2008, psychiatric and social services staff members in two of the ten districts in the municipality of Malmö, the third largest city in Sweden, were asked to make an inventory of the people with SMI whom they served. The object was to learn what these patients thought their treatment needs were, and how they utilized and experienced the services available to them.

### Participants

To meet the inclusion criteria, an individual had to have an SMI and reside in one of the two districts in Malmö where the study was conducted. The districts had populations of 18,000 and 32,000 inhabitants, respectively. We defined SMI in accordance with the World Health Organization (WHO) as a diagnosis of psychiatric illness of more than two years duration that also involved a disability in functioning (WHO, 2001). Participants had to be over 18 years of age and unable to manage their everyday lives without help from others in consequence of a functional psychiatric disability. The assistance needed could be either permanent or recurring, but had to have persisted for at least six months at the time of the investigation.

The clinical staff compiling the inventory identified 153 people who met the inclusion criteria, of whom 43 declined to take part in the study and another 30 could not be contacted. Thus, 80 people agreed to participate. (No information was available on those who could not be reached or would not participate.) The mean age of the participants was 47 years (range 19 to 81). Most were men (72%), single (87%), and lived in their own house or own apartment, or in a rented home (74%). Sixty percent self-reported a diagnosis of schizophrenia and 84% were on medication prescribed by psychiatric services. The participants' first contact with psychiatric services took place on average 18 years previously (range 1 to 53 years). Almost half (43%) were engaged in everyday occupations. Background characteristics and living conditions are shown in Table 1.

Table 1. Background characteristics of the participants (n = 80)

	n	%
<i>Age (mean, range) 47, 19-81</i>		
<i>Gender (n = 79)</i>		
Men	57	72
<i>Marital status (n = 77)</i>		
Single	67	87
Married/in partnership	10	13
<i>Children in the family</i>		
Have children	28	35
<i>Education</i>		
University	19	24
College	34	42
Primary school	27	34
<i>Living situation</i>		
Own house or apartment, or rented accommodation	59	74
Assisted living, institution	21	26
<i>Occupation</i>		
Regular occupation	34	43
<i>Diagnosis (self-reported)</i>		
Schizophrenia or other psychosis	48	60
Other, including diagnosis unknown	32	40

<i>Medication</i>		
Receiving medication from psychiatric services	67	84

## Instruments

### Questionnaire

Information about the user’s life circumstances and the support received from formal and informal caregivers was gathered at a personal interview. A questionnaire was employed based on an instrument used in a Swedish survey investigating the life circumstances of people with a psychiatric disability (Nordström et al., 2009). The instrument contained 76 items organized in four domains: socio-demographic data and present living situation; support from formal organizations; support from informal organizations; and health and illnesses.

### Psychosocial interventions

In order to determine whether a participant received psychosocial treatment interventions, we developed a questionnaire based on both the Schizophrenia Patient Outcomes Research Team (PORT) study (Lehman & Steinwachs, 1998) and the Swedish National Board of Health and Welfare recommendations of evidence-based psychosocial interventions for people with schizophrenia (2011). The questionnaire asked participants to respond with a “yes” or “no” if they had previously been given any information on family education, social skills training, cognitive behaviour therapy, assertive community treatment, or work rehabilitation/supported employment. They were also asked whether they had participated in any of the above psychosocial interventions.

### Overall QOL

The Manchester Short Assessment of Quality of Life (MANSA) was used to measure overall QOL (Priebe et al., 1999). It is administered as a structured interview containing 16 items (4 objective and 12 subjective), and includes an individual’s subjective rating of general life satisfaction and satisfaction with specific domains of QOL. These include work, finances, social relations, leisure, living situation and the individual one lives with, security, family relations, sexual relations, and physical and psychological health. Ratings are made on a scale from one (worst) to seven (best), allowing an overall subjective QOL score to be calculated. The MANSA has been translated into Swedish and found to be psychometrically sound (Björkman & Svensson, 2005).

### Statistical analysis

MANSA total mean values were used to assess QOL. Items measuring categorical variables were dichotomized. Experiences of psychosocial interventions were analysed individually and divided into subgroups: a) no interventions, b) one or two, c) more than two. Statistical differences between groups were investigated using the chi-square test for categorical values and one-way analysis for continuous variables. The probability level required to demonstrate significance was set at not above 0.05. Statistical analyses were conducted using SPSS software.

### Ethical considerations

All persons eligible to participate in the investigation were provided with oral and written information about the study through a contact person known to them. Those who agreed to take part gave their written informed consent after the study had been fully explained to them and prior to being interviewed. Since people with SMI living in a community are generally known to be hard to reach, they constitute a neglected group in research studies, which may justify analysis of the data despite the relatively high number of drop-outs.

Our data was obtained directly from the individual suffering from SMI, supported by a contact person from psychiatric care or social services (often a social worker or a nurse chosen by the interviewee). Each participant selected the time and place for the questionnaire to be administered. Those conducting the interviews had considerable experience in caring for people with SMI. The researcher who analysed the data had no affiliation with any of the service providers who supported the participants. Data gathering was done in accordance with the Helsinki Declaration. Permission for the study was obtained from the Regional Ethics Committee in Lund (Dnr 238/2007).

## Results

### Treatment and support

Seventy-six of the participants had received care of some kind from psychiatric services, the majority as outpatients. The most common support provided was medication (84%), followed by advice, psychosocial interventions, and psychotherapy. Forty-eight per cent had a contact pattern of once a week; 34% were seen monthly. Most were treated by a psychiatrist (67%) or a nurse (53%). Of the patients who came in contact with psychiatric services, 77% said they were satisfied with the support they received. The 23% who were dissatisfied wanted more effective medications, additional psychotherapy, or both.

### Information provided about psychosocial treatment interventions

More than half of the participants acknowledged that they had been informed of at least one of the five psychosocial interventions we investigated. Of these, 60% had been offered cognitive behavior therapy, 57% assertive community treatment, 53% work rehabilitation, 34% social skills training, and 18% family interventions.

Sixty-three out of 80 participants (71%) said that they received psychosocial treatment interventions at some time: 21 had one intervention (26%), 23 had two (28%), and 19 had more than two (24%).

Of the 141 interventions received by people with SMI, 43 were cognitive behavior therapy, 38 assertive community treatment programs, 30 work rehabilitation assistance, 22 social skills training, and only 8 family interventions.

Comparing participants who received some psychosocial intervention with those who received none, we found no significant differences in any of the background variables measured, including diagnosis or QOL. Additional analyses investigating differences between participants subjected to three or more psychosocial interventions ( $n = 19$ ) and those subjected to no interventions ( $n = 15$ ) found only one significant difference: participants who had received three or more interventions were generally in independent living, chi-square = 4.23;  $p = .040$ .

### Comparisons of psychosocial interventions and background variables

As shown in Table 2, we found few significant differences between the psychosocial intervention given and background variables. People who received cognitive behavior therapy tended to be of younger age (43.4 vs. 50.8) ( $t = -2.23$ ;  $p = .008$ ); they generally lived in their own apartments, (chi-square = 11,36;  $p = .001$ ), and showed a higher MANSA mean score (4.9 vs. 4.4) ( $t = -2,2$ ;  $p = .031$ ). Those who experienced assertive community treatment programs more often lived in their own apartments (chi-square = 5,05;  $p = .025$ ); the same was true of people who were given family interventions (chi-square = 3.88;  $p = .049$ ).

**Table 2. Patient characteristics and living conditions in relation to five psychosocial interventions**

		FI a)	ESL b)	CBT c)	ACT d)	WR e)
Sex		n.s.	n.s.	n.s.	n.s.	n.s.
Age, mean		n.s.	n.s.	t = -2.2	n.s.	n.s.
				p = .008		
Living in own apartment	chi2 3.88	n.s.	chi2 11.36	chi2 5.05	n.s.	
		p = .049		p = .001	p = .025	
Regular occupation	n.s.	n.s.	n.s.	n.s.	n.s.	
MANSA, mean	n.s.	n.s.	t = -2.2	n.s.	n.s.	
				p = .031		

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- a) FI, family intervention
  - b) ESL, social skills training
  - c) CBT, cognitive behavioral therapy
  - d) ACT, assertive community treatment
  - e) WR, work rehabilitation
  - n.s., non-significant

### MANSA QOL scale correlated to psychosocial factors

When assessing satisfaction with life domains (Table 3), we found that living accommodations, personal security, those people with whom one lives, and family relationships were the areas participants rated as their sources of greatest satisfaction, while sexual relations and finances were reported as areas giving the least satisfaction.

There were no differences in the total mean value of QOL between people who had received one to three psychosocial interventions and those who had received none, and between those who had received more than three interventions compared to those without such experiences.

**Table 3. Satisfaction with QOL domains assessed according to Manchester Short Assessment of Quality of Life (MANSA) (n = 80)**

	N	Min	Max	Mean	s.d.
Sexual relations	71	1	7	3.7	1.8
Finances		80	1	7	3.9
Leisure		80	1	7	4.3
Physical health	80	1	7	4.3	1.5
Work		80	1	7	4.4
Psychological health	79	1	7	4.4	1.6
Friends		80	1	7	4.8
Family relations	79	1	7	5	1.6
Personal safety	79	1	7	5.2	1.3
Living situation (social)	80	1	7	5.2	1.5
Living situation (physical)	79	2	7	5.5	1.3

## Discussion

As an alternative to examining whether psychosocial interventions had been carried out in accordance with psychosocial models that were based on strong evidence, or linked to fidelity scales as recommended when evaluating psychosocial interventions (Dixon et al., 2011), our study investigated the extent to which people with SMI living in the community had been informed that psychosocial interventions were available and had been provided with them.

We found that a considerable number of our interviewees were both informed of and had experienced different kinds of psychosocial interventions. This may be because a majority of them were currently undergoing treatment from psychiatric services, which was well aware of the value of psychosocial interventions for people with SMI living in the community. Psychiatric services might also have known of the relationship between psychosocial interventions for people with schizophrenia and the reduction of hospitalization costs, as earlier studies have shown (Panthunane, 2011). Almost all participants in our study managed to live in the community without requiring hospitalization, which may be attributable to the support they received from psychosocial interventions.

Our study found, in accordance with earlier research, that there is a limited provision of family interventions for people with SMI. According to a report from the US, less than 8% of all patients with schizophrenia attended formal support programs with their families (Resnick, Rosenheck, Dixon, & Lehman, 2005). In Germany, Austria, and Switzerland only 2% of family members of patients with schizophrenia had taken part in psychoeducational interventions (Rummel-Kluge, Pitschel-Walz, Bäuml, & Kissling, 2006).

Although participants who received more than three different psychosocial interventions were generally in independent living in apartments of their own we do not know if this is an effect of psychosocial interventions they received, or whether service providers are more likely to support those living independently with such interventions. Additionally, we do not know if the relationship found between being younger, having a higher assessed QOL and receiving cognitive therapy might manifest a service provider's more willing engagement with younger people or if younger people are more amenable to being supported by psychotherapies.

We found no difference in experiences of psychosocial interventions between people with a self-stated dia-

gnosis of schizophrenia or any other diagnoses, or no known diagnosis. This might validate the use of our broader inclusion criteria, that is, a population with SMI instead of a more restricted schizophrenia spectrum disorder. Other researchers have similarly employed this wider criteria (Ruggeri et al., 2000). However, our findings may also be the result of services putting into practice the PORT recommendations that psychosocial interventions be implemented not only for people with a pure diagnosis of schizophrenia but for a more general SMI population.

Researchers in areas of psychosocial interventions mostly focus on the long-term outcome of a disorder for chronic cases, such as individuals in their first episode of schizophrenia (Addington, 2010) evidence-based psychosocial intervention models are favored. In a cross-sectional study like ours, the impact over time of treatment for a serious mental disorder cannot be inferred from the findings: they merely provide a snapshot of the social and functional status of outpatients, irrespective of their current treatment plan. Furthermore, investigating aspects of the lives of people with SMI living in the community that have not been previously studied requires new approaches in order for assessments procedures to be established. Since we found no instrument measuring the users' own point of view with regard to participation in a psychosocial intervention, our initial task was to develop an instrument whose psychometric properties will still need to be tested.

Our method of investigation and analysis does not allow us to distinguish cause from effect, although our findings suggest that psychiatric services do not only select well-functioning individuals with a relatively high QOL for psychosocial interventions (NIMH Strategy Plan, 2008). However, since we determined a relationship between receiving psychosocial interventions and being in independent living, other factors may also be involved.

Our method has certain shortcomings. A number of individuals we found eligible for the survey could not be contacted or did not want to participate in the investigation. We presume that people who are dissatisfied with the care they receive are more likely to avoid taking part in a study related to satisfaction with care. Furthermore, it has been shown that asking someone with SMI living in a community to participate in a study lowered the rate of participation without individuals giving a specific reason for their decision (Beebe, 2010). Another shortcoming might be that interviewing a participant in the presence of their contact person may make the subject feel obliged to please the contact person by giving more positive answers, since the contact represents the services under investigation. Accordingly, participants in our study may have overrated their satisfaction with the care they received. Finally, although psychosocial interventions are evidence-based, they can be delivered in many different formats according to the environment in which they are applied.

A strength of this study is that the data was gathered through patient interviews by means of extensive questionnaires that collected specific information. This methodology is useful when investigating a limited number of participants who are not constrained by time.

Our study confirmed that in a population including people with an SMI living in the community, many of the latter were either informed of or received various psychosocial interventions in addition to their regular symptom reduction treatment, in accordance with international recommendations (Mental Health Commission 1998), independently of their experienced QOL. Moreover, it shows the limited amount of psychosocial family interventions in relation to other psychosocial interventions the psychiatric services place at people with SMI's disposal. A finding which may be of importance for these services if aiming to support the relationship between people with SMI and their families.

In order to generalise the findings of this study, a broader population of people with SMI as well as populations of different countries and settings, would have been studied.

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