The Importance of Personal Recovery and Perceived Recovery Support Among Service Users With Psychosis

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Objective: More knowledge is needed about whether personal recovery, as defined by the CHIME framework (connectedness, hope, identity, meaning and purpose, and empowerment), is considered important by service users with psychosis. This study examined the importance of personal recovery for a large, heterogeneous group of service users with psychosis and their perceived support from clinicians for personal recovery.

Methods: This cross-sectional study used baseline data from 321 service users with psychosis from 39 clinical units across Norway. The INSPIRE Measure of Staff Support for Personal Recovery (based on CHIME) was used to examine personal recovery and perceived support provided for recovery. Twenty support-for-recovery items were each rated on importance (yes or no) and on the extent of support received (5-point scale). Bivariate and multiple linear regression models assessed variables associated with rated importance and support.

Results: Most service users rated personal recovery items as important, regardless of their symptomatology and functioning. Previous experience with Illness Management and Recovery, knowledge about coping with stress and illness, and having a plan for early detection and prevention of relapse were significantly associated with higher perceived support. Higher self-reported depressive symptoms, lower score on the Global Assessment of Functioning symptom subscale, and male sex were significantly associated with less perceived support.

Conclusions: Most service users with psychosis found personal recovery important, regardless of symptomatology and functioning, which has implications for clinical practice and provides empirical evidence that recovery-oriented treatments are relevant for most service users with psychosis in various mental health services.

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Personal recovery refers to changes in one's attitude to life and illness, with emphasis on hope and the establishment of a meaningful life (1–3). Connectedness, hope, identity, meaning and purpose, and empowerment have been identified as key themes in the personal recovery concept—and have provided the acronym CHIME (4). Personal recovery has been contrasted with clinical recovery, where symptom reduction and increased functioning are the main treatment focus (2).

There has been debate over the relationship between personal recovery and the traditional clinical recovery goal of reduced symptomatology and improved functioning (5). This has important clinical implications. Some studies have shown that people with psychosis can participate in working toward personal recovery regardless of their clinical and functional competence (6), whereas others have shown that service users with more clinical symptoms and a lower functioning level prefer clinical recovery goals, such as reducing symptoms and confusion (7). Some have argued that personal recovery is more of a self-realization concept, in accordance with Maslow's pyramid (8, 9), and that for some

service users, more basic needs must be met before self-realization can occur (10, 11). Because CHIME is widely endorsed in the recovery literature (12), more knowledge

HIGHLIGHTS

- This study examined the importance of personal recovery for a large and heterogeneous group of service users with psychosis and their perceived support from mental health clinicians for personal recovery.

- Most participants rated personal recovery as important, regardless of their level of symptoms and functioning.

- Previous experience with Illness Management and Recovery was significantly associated with higher perceived support for recovery, whereas high levels of general symptoms and depression were significantly associated with less perceived support.

- The findings have implications for clinical practice, providing empirical evidence that recovery-oriented treatments are relevant for most service users with psychosis in various mental health services.

about the applicability of the framework is needed. An important step toward increased knowledge is to clarify whether personal recovery, as conceptualized by the CHIME framework, is considered relevant to most people with psychosis. A better understanding of this issue can help inform mental health services and the development of recovery-oriented practices. A few studies have used qualitative data to investigate the applicability of the CHIME framework, and results have supported the category structure (13, 14) but have also suggested an expanded conceptualization of recovery, in which experienced difficulties are more prominent (14). However, no studies have quantitatively examined the applicability of the framework.

Support of and focus on personal recovery have become increasingly important aspects of mental health services in many countries (5, 15). Lately, several recovery-oriented interventions have been developed and implemented in mental health systems internationally (16). For example, Illness Management and Recovery (IMR) treatment (17) aims to improve the ability of individuals with severe mental illness to better manage their illness in areas such as symptomatology, functioning, knowledge, progress toward goals, and hope (18, 19). However, one of the biggest obstacles to the implementation of recovery-oriented practices is the lack of knowledge about how recovery can be best supported (20). More knowledge about factors associated with perceived support for personal recovery is important for improving treatment and health service development and bridging the gap between the personal recovery vision and clinical practice.

This cross-sectional study aimed to answer the following research questions: Is personal recovery as defined by the CHIME framework considered important for service users with psychosis? Are there any differences between service users with different levels of rated importance? How much perceived support for personal recovery do the service users receive? And what covariates are associated with perceived support?

METHODS

Design
The study had a cross-sectional design, with baseline data from a Norwegian research project—a randomized trial of implementation of the Norwegian national clinical guidelines for treatment of psychosis (ClinicalTrials NCT03271242: "A pairwise randomized study on implementation of guidelines and evidence based treatments of psychoses"). The study was approved by the Regional Committee for Medical and Health Research Ethics (REK Sørøst B 2015/2169), following the principles in the Declaration of Helsinki.

Sample and Setting
Inclusion criteria were mental health service user, age ≥16, and *ICD-10* diagnosis of psychosis (F20–29) (21). Exclusion criteria were an inability to understand and answer the questionnaires in Norwegian. A total of 325 service users participated in the project. Service users (N=4) with

missing data on the INSPIRE measure were excluded from analysis in this study. A total of 39 clinical units and hospital departments with outpatient clinics, day units, mobile teams, and inpatient wards from six health authorities across Norway participated, including three university hospitals.

Measures
Service user–rated measures. The INSPIRE Measure of Staff Support for Personal Recovery was used to examine the importance of personal recovery and to assess experienced support from a mental health clinician. The INSPIRE is a 27-item self-report questionnaire that measures perceived staff support for personal recovery (22). It consists of two subscales: support (20 items) and relationship (7 items). The relationship subscale was not completed in this study. The support items cover five domains: connectedness, hope, identity, meaning and purpose, and empowerment, which were identified through a systematic review and given the acronym CHIME (4). Participants first rate each support item for whether they consider it important for their recovery (e.g., "An important part of my recovery is: Feeling supported by other people"—yes or no). If yes, participants rate the extent of support they experience from their mental health clinician ("I feel supported from my worker with this") on that item on a 5-point Likert scale (0, not at all; 1, not much; 2, somewhat; 3, quite a lot; and 4, very much).

The number of "yes-important" responses was used as the dependent variable to examine whether personal recovery was considered important and whether any differences existed between service users with different levels of rated importance. The support score was used as the dependent variable to examine perceived support for personal recovery and covariates associated with perceived support.

The Behavior and Symptom Identification Scale (BASIS-24) is a brief self-report measure of six domains of mental well-being and functioning, with good validity and reliability for assessing mental health status from a service user perspective (23, 24). Two of the six domains were used. The depression-functioning domain was included as a measure of the level of participants' depressive symptoms. The substance abuse domain was also included and was transformed into a dichotomous variable (substance abuse versus no substance abuse). Abuse was defined as a score of 3 (often) or 4 (always) on any of the items in the domain. Item 22 ("Did anyone talk to you about your drinking and drug use?") was excluded because it was considered irrelevant. Subdomain scores were calculated as described in the BASIS-24 instruction guide (25), providing a score between 0 and 4, with higher scores indicating more severe problems.

Participants' satisfaction with life was assessed with one item from the Manchester Short Assessment of Quality of Life (MANSA) (26). "How satisfied are you with your life as a whole?" was rated on a 7-point scale (1, couldn't be worse; 7, couldn't be better).

Participants also rated six statements about their overall experience with getting help to manage their lives and their

illness for the past 6 months. The six statements pertaining to overall experience were named as follows. Setting goals: "I have been well trained in setting goals and working to achieve them." Increased knowledge: "I have gained useful knowledge about stress, vulnerability, and social support." Coping: "I have gained useful knowledge about coping with stress and illness." Health service use: "I have gained useful knowledge about how to use health services better." Medication: "I have gained useful knowledge about the medicines I use." Early detection and prevention of relapse: "I have prepared a plan for the early detection of any signs of aggravation, and what should be done then." The questions were rated on a 5-point scale (1, strongly disagree; 5, strongly agree), with an additional option of answering "not relevant."

The participants also reported whether they had participated in IMR groups during the past 6 months (yes or no). This variable was named IMR experience.

Clinician-rated measures. The Clinical Global Impressions Scale (CGI) was originally developed for use in National Institute of Mental Health–sponsored clinical trials (27). This study included the CGI severity component (CGI-S), in which clinicians rate the severity of service users' mental illness in the past 7 days on a 7-point scale (1, normal, not at all ill; 7, among the most extremely ill service users) (28).

The Global Assessment of Functioning Scale (GAF) is a standardized assessment of impairment caused by mental factors (29) in which clinicians rate the level of functioning and severity of service users' symptoms on a scale from 1 to 100. Lower scores indicate more severe symptoms and lower levels of functioning. The split version of the scale used in this study has two subscales: symptom (GAF-S) and functioning (GAF-F) (30).

First, we identified covariates on service user characteristics (age, gender, ethnicity, community treatment order status, and mental health care history), service user–rated measures (depression-functioning, satisfaction with life, and substance abuse), and clinician-rated measures (GAF-S, GAF-F, and CGI-S). These were chosen on the basis of prior research as described above and were factors that we hypothesized might affect or mediate the outcomes in the study.

Second, because of the small part of the variation explained by these variables in the regression models, we included data on health service characteristics, such as the six statements pertaining to overall experience (overall experience) and IMR experience variables, to determine whether this explained more of the outcome. We hypothesized that experience with IMR and related recovery themes (overall experience) might increase both level of importance and perceived support.

Procedures
Clinicians at participating clinical units recruited service users and performed the clinical ratings. Questionnaires were administered to service users by the secretary or other personnel at the clinics. Service users were provided a place

to sit to fill out the questionnaires or took the questionnaire home with them. When the service user was finished, the questionnaire was put in an envelope, which was closed and returned to the clinic. Recruitment began in June 2016. Eligible service users already in contact with the clinic at the time and newly referred service users assessed to have psychosis were asked to participate. Recruitment continued until March 2017. Only participants who gave written informed consent were included.

Analysis
To assess the characteristics associated with number of yes-important answers and with the total support score, bivariate and multiple linear regression models were estimated. First, models with participant characteristics (age, gender, ethnicity, community treatment order status, and mental health care history), participant-rated measures (depression-functioning, satisfaction with life, and substance abuse), and clinician-rated measures (GAF-S, GAF-F, and CGI-S) were estimated. Next, covariates on service users' overall experiences in managing their life and illness (overall experience statements) and whether they had participated in IMR (IMR experience) were added. Because participants were recruited to the study by different units, a hierarchical structure (cluster effect on unit level) could have been present in the data. Assessment by an intraclass correlation coefficient (ICC) found that there was essentially no cluster effect in outcome variables (ICC=0.001 for number of yes-important answers and ICC=0.01 for support score). Hence, no adjustment for within-unit correlations was needed. Correlation analysis did not identify any multicollinearity issues among covariates. Residual diagnostics did not show any significant deviations from linear regression model assumptions. Both bivariate and multiple models were estimated for cases with no missing values on covariates. Results with p values below 0.05 were considered statistically significant. The analyses were performed with SPSS, version 25.

Imputation of missing values on the GAF (N=40), the MANSA (N=8), and the overall experience (N=25) scales was performed by first generating the empirical distribution for each variable. A random number was drawn from that distribution and used to replace the missing value. The process was repeated until all missing values were imputed. Missing values on demographic variables were not imputed.

RESULTS

Sample Characteristics
The characteristics of the 321 participants are shown in Table 1.

Importance of Personal Recovery
The 321 participants rated the 20 INSPIRE support items as important or not important to their recovery. The percentages who gave a rating of important to each item ranged from 66% to 91% (Table 2). Ten (3%) participants rated all 20 items as not important. A total of 167 participants (52%)

TABLE 1. Characteristics of 321 participants with psychosis

Characteristic	Missing	N	%
Female	1	133	41
Ethnicity	5		
Norwegian		277	88
Other		39	12
Age (M±SD)[a]	11	40±12.7	97
Diagnosis	25		
Schizophrenia		158	53
Schizoaffective disorder		59	20
Other		79	27
GAF subscale (M±SD)[b]			
Symptom		53±13	100
Functioning		51±11.3	100
Under a community treatment order	7	42	13
Time in mental health care	14		
<6 months		20	7
6–23 months		28	9
2–5 years		50	16
6–10 years		64	21
>10 years		145	47
Education	11		
Did not complete primary school		9	3
Primary school		96	31
Upper secondary school		81	26
Vocational education		53	17
Higher education		62	20
Other		9	3
Satisfaction with life (M±SD)[c]	0	4.5±1.4	
Overall experience (M±SD)[d]			
Setting goals	1	3.4±1.1	
Increased knowledge	2	3.3±1.2	
Coping	2	3.3±1.1	
Health service use	1	3.2±1.1	
Medication	1	3.5±1.1	
Early detection and prevention of relapse	2	3.1±1.3	
Illness Management and Recovery experience	4	98	31

[a] Range, 16–77.
[b] The Global Assessment of Functioning (GAF) split version assessed symptom severity and psychosocial functioning. Possible scores range from 0–100, with higher scores indicating less severe symptoms and better functioning. Scores in the sample ranged from 26 to 90 on the symptom subscale and 20 to 85 on the functioning subscale.
[c] Assessed with one item from the Manchester Short Assessment of Quality of Life. Possible scores range from 1 to 7, with higher scores indicating a greater satisfaction.
[d] Possible ratings on receipt of help to manage life and illness in the six indicated areas range from 1 to 5, with higher ratings indicating more help.

gave an "important" rating to between 17 and 20 items. Figure 1 further illustrates participants' ratings of items as important to personal recovery.

Differences Between Service Users With Different Levels of Rated Importance

A multiple linear regression model examined characteristics associated with ratings of important (Table 3). The model explained 4.8% of the total variation in the number of ratings of important. When covariates on service users' overall experience with managing their life and illness for the past 6 months (the six statements) and information on participation in IMR groups for the past 6 months (IMR experience) were included, the model explained 8.1% of the total

variation. No significant associations were found in the multiple linear regression model.

Support for Personal Recovery

Participants rated the level of support they had experienced from their mental health clinician in terms of the 20 IN-SPIRE support items. The ratings per item ranged from 2.27 to 2.83 (Table 2), showing that, on average, the service users reported levels of support from somewhat (rating of 2) to quite a lot (rating of 3).

A multiple linear regression model examined characteristics associated with experienced support (Table 4). The model explained 14.8% of the total variation in experienced support. When covariates on service users' overall experience with managing their life and illness for the past 6 months (the six statements) and information on participation in IMR groups for the past 6 months (IMR experience) were included, the multiple linear regression model explained 31.1% of the total variation in experienced support. In the multiple model, lower GAF-S score, higher depression-functioning score, and male sex were significantly associated with lower levels of perceived support. Also, higher scores on the coping statement ("I have gained useful knowledge about coping with stress and illness") and the statement about early detection and prevention of relapse ("I have prepared a plan for the early detection of any signs of aggravation, and what should be done then") were significantly associated with higher perceived support, as was having participated in IMR groups during the past 6 months (IMR experience).

DISCUSSION

This study showed that most service users with psychosis considered personal recovery, as operationalized with the CHIME framework, to be important. The study found no differences between service users who rated personal recovery as less important and those rating it as more important. Overall, service users experienced only moderate support for personal recovery from their mental health clinician. Higher self-reported depressive symptoms, lower GAF-S score, and male sex were significantly associated with less perceived support. Having participated in IMR groups, having gained knowledge about coping with stress and illness, and having a plan for early detection and prevention of relapse for the past 6 months were significantly associated with higher perceived support.

The main finding was that the great majority of a large, heterogeneous group of service users with psychosis across several clinical units reported that personal recovery was important to them, regardless of age, ethnicity, symptomatology, functioning, community treatment order status, and time in mental health care. This finding has implications for clinical practice, providing empirical evidence that recovery-oriented treatments are relevant for most service users with psychosis in various mental health services.

TABLE 2. Ratings by participants with psychosis of items related to support for personal recovery from the INSPIRE Measure of Staff Support for Personal Recovery

	Importance to recovery				Perceived support from mental health clinician												
	Not important		Important		Rating[a]		Not at all		Not much		Somewhat		Quite a lot		Very much	
Domain and item	N	%	N	%	M	SD	N	%	N	%	N	%	N	%	N	%
Connectedness																
Feeling supported by other people	37	11	284	89	2.83	.85	1	<1	16	6	78	28	125	44	64	22
Having positive relationships with other people	30	9	290	91	2.73	.89	4	1	22	8	73	25	140	48	51	18
Having support from people who use services	98	31	217	69	2.61	.92	5	2	12	6	84	39	78	36	38	17
Feeling part of my community	74	23	246	77	2.62	.99	4	2	33	13	61	25	103	42	45	18
Hope																
Feeling hopeful of my future	58	18	259	82	2.61	1.02	7	3	25	10	87	33	83	32	57	22
Believing I can recover	40	12	280	88	2.79	.96	6	2	16	6	80	29	107	38	71	25
Feeling motivated to make changes	68	21	250	79	2.62	1.02	9	4	22	9	73	29	96	38	50	20
Having hopes and dreams for the future	51	16	268	84	2.62	1.06	6	2	34	13	80	30	83	31	65	24
Identity																
Feeling I can deal with stigma	91	30	214	70	2.27	1.12	19	9	27	13	74	34	66	31	28	13
Feeling good about myself	70	22	247	78	2.59	.98	5	2	26	11	83	34	85	34	48	19
Having my spiritual beliefs respected	99	32	215	68	2.61	.96	7	3	16	7	67	31	89	41	36	17
Having my ethnic, cultural, racial identity respected	105	34	207	66	2.71	1.11	11	5	16	8	53	26	70	34	57	27
Meaning and purpose																
Understanding my mental health experiences	63	20	251	80	2.73	.10	8	3	18	7	65	26	102	41	58	23
Doing things that mean something to me	34	11	285	89	2.74	.91	3	1	24	8	75	26	125	44	58	20
Rebuilding my life after difficult experiences	52	16	264	84	2.78	.98	5	2	19	7	74	28	98	37	68	26
Having a good quality of life	40	13	278	87	2.69	.99	6	2	25	9	82	30	102	37	63	23
Empowerment																
Feeling in control of my life	55	17	262	83	2.70	1.03	8	3	26	10	63	24	104	40	61	23
Being able to manage my mental health	37	12	281	88	2.80	.94	4	1	20	7	72	26	117	42	68	24
Trying new things	104	32	216	68	2.53	.10	5	2	25	12	77	36	69	32	40	18
Building on my strengths	46	14	271	86	2.61	.98	9	3	20	7	89	33	102	38	51	19

[a] Rated on a 5-point Likert scale (0, not at all; 4, very much).

However, although the great majority of participants reported personal recovery to be of high importance, they experienced only a moderate degree of personal recovery support from their mental health clinician. Several factors can influence the level of experienced support for recovery, not the least being the degree to which various clinicians and various mental health units are recovery oriented. Our findings show that previous experience with IMR and related themes, such as knowledge about coping with stress and illness and having a plan for early detection and prevention of relapse, were significantly associated with higher perceived support. This suggests that recovery-oriented treatments such as IMR and related themes may be effective in helping people feel supported in their process of personal recovery, a result in line with a recent meta-analysis showing greater improvement in personal recovery outcomes when service users were involved in recovery-oriented mental health treatment versus usual care or other types of treatment (31). Future research should examine perceived support and IMR treatment in relation to the different CHIME domains.

In addition, we found that higher self-reported depressive symptoms, lower GAF-S score, and male sex were significantly associated with less perceived support.

This finding is of clinical importance. That is, it is important not to be blinded by high levels of general symptoms or depression, because these service users nevertheless believe that personal recovery is important. Although we cannot draw conclusions regarding causality among

FIGURE 1. Number of items on support for personal recovery rated as important by 321 study participants with psychosis[a]
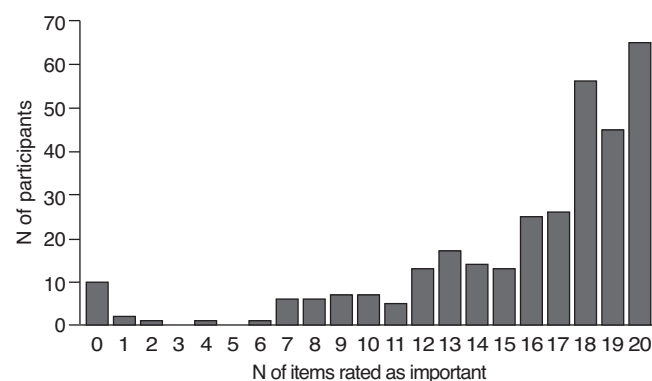
[a] Items were from the INSPIRE Measure of Staff Support for Personal Recovery.

TABLE 3. Linear regression model of variables as associations of the number of items rated as important to personal recovery by 275 participants with psychosis[a]

Variable	Bivariate model			Multiple model		
	Coefficient	95% CI	p	Coefficient	95% CI	p
Global Assessment of Functioning symptom subscale	−.01	−.06, .03	.515	−.02	−.09, .04	.471
Global Assessment of Functioning functioning subscale	−.00	−.05, .05	.862	−.01	−.08, .06	.799
Clinical Global Impressions Scale severity component	−.16	−.55, .24	.436	−.13	−.64, .38	.622
Service user−rated depression-functioning	−.62	−1.22, −.03	.040	−.56	−1.34, .23	.165
Service user−rated satisfaction with life	.29	−.12, .69	.161	−.14	−.64, .37	.596
Age	.02	−.03, .06	.410	.03	−.03, .08	.368
Female (reference: male)	1.00	−.12, 2.13	.081	.71	−.51, 1.93	.252
Other ethnicity (reference: Norwegian)	−.10	−1.84, 1.65	.915	−.42	−2.29, 1.45	.660
Under community treatment order (reference: no)	.84	−.78, 2.46	.307	1.00	−.74, 2.74	.259
Time in mental health care (reference: >10 years)						
<6 months	−.29	−2.67, 2.09	.812	.49	−2.05, 3.03	.705
6−23 months	.50	−1.59, 2.59	.637	1.26	−.97, 3.49	.267
2−5 years	1.09	−.49, 2.67	.177	1.42	−.35, 3.19	.116
6−10 years	−.83	−2.33, .66	.273	−.61	−2.28, 1.05	.469
Substance abuse (reference: no)	−.84	−2.46, .78	.308	−.24	−2.01, 1.53	.789
Overall experience						
Setting goals	.51	−.01, 1.04	.054	.34	−.34, 1.02	.325
Increased knowledge	.33	−.15, .81	.173	.11	−.78, 1.00	.806
Coping	.30	−.22, .81	.255	−.24	−1.13, .66	.216
Health service use	.06	−.46, .57	.831	−.42	−1.10, .25	.057
Medication	.60	.09, 1.11	.021	.58	−.02, 1.17	.253
Early detection and prevention of relapse	.38	−.07, .83	.100	.33	−.24, .90	.617
Illness Management and Recovery experience (reference: no)	−.53	−1.76, .70	.400	−.35	−1.73, 1.03	.617

[a] The final sample was reduced to 275 because of missing values.

these associations, our results point to the importance of providing support for personal recovery, even among service users with high levels of general symptoms and depression. Future research should examine how patterns of importance ratings change over time and how perceptions of support are influenced by treatment.

TABLE 4. Linear regression model of variables as associations of the sum of ratings of perceived support for personal recovery by 264 participants with psychosis[a]

Variable	Bivariate model			Multiple model		
	Coefficient	95% CI	p	Coefficient	95% CI	p
Global Assessment of Functioning symptom subscale	.19	.03, .35	.021	.22	.01, .43	.039
Global Assessment of Functioning functioning subscale	.23	.04, .42	.017	−.06	−.29, .17	.617
Clinical Global Impressions Scale severity component	−.93	−2.41, .55	.218	.88	−.77, 2.52	.295
Service user−rated depression-functioning	−4.82	−7.01, −2.64	<.001	−3.79	−6.37, −1.21	.004
Service user−rated satisfaction with life	2.75	1.27, 4.22	<.001	−.21	−1.85, 1.43	.800
Age	.12	−.05, .28	.180	.07	−.11, .24	.473
Female (reference: male)	6.86	2.69, 11.03	.001	5.15	1.18, 9.11	.011
Other ethnicity (reference: Norwegian)	2.75	−3.78, 9.28	.408	2.87	−3.23, 8.96	.355
Under community treatment order (reference: no)	.65	−5.35, 6.65	.830	1.57	−4.03, 7.17	.582
Time in mental health care (reference: >10 years)						
<6 months	−5.35	−14.40, 3.70	.245	−3.28	−11.62, 5.05	.438
6−23 months	−6.04	−13.91, 1.84	.133	−2.99	−10.29, 4.30	.420
2−5 years	−3.34	−9.20, 2.53	.263	−3.06	−8.77, 2.66	.293
6−10 years	−1.07	−6.75, 4.62	.712	.21	−5.48, 5.52	.994
Substance abuse (reference: no)	−3.19	−9.17, 2.80	.295	4.33	−1.39, 10.05	.137
Overall experience						
Setting goals	5.67	3.81, 7.54	<.001	1.71	−.51, 3.93	.131
Increased knowledge	4.85	3.17, 6.52	<.001	.06	−2.82, 2.93	.969
Coping	6.33	4.58, 8.08	<.001	3.91	1.03, 6.80	.008
Health service use	4.39	2.56, 6.22	<.001	.86	−1.36, 3.07	.446
Medication	3.62	1.74, 5.49	<.001	.55	−1.37, 2.47	.572
Early detection and prevention of relapse	4.55	2.93, 6.17	<.001	2.13	.26, 4.00	.025
Illness Management and Recovery experience (reference: no)	.09	−4.55, 4.72	.971	4.62	.08, 9.16	.046

[a] The final sample was reduced to 264 because of missing values.

Previous research has shown that affective symptoms seem to be more closely linked than psychotic symptoms to personal recovery and related themes, such as quality of life (5, 32, 33). Our finding that a higher level of self-reported depression was related to less perceived support underlines the important notion of an association between affective symptoms and personal recovery among service users with psychosis.

A major strength of this study was the broad group of participants with psychosis and the many different units that participated, which allowed us to gain information that can be generalized to a range of mental health services for service users with psychosis. A limitation of the study was the lack of data on the representativeness of the sample. Because participants were not randomly selected, they may not accurately represent the overall Norwegian population of individuals with psychosis. Other important limitations were the cross-sectional nature of the study, which prevented conclusions regarding causality, and that interrater reliability between the GAF scales and the CGI scale was not assessed.

CONCLUSIONS

This study showed that the great majority of a large, heterogeneous group of service users with psychosis across several clinical units reported that personal recovery was important for them, regardless of age, ethnicity, symptomatology, functioning, community treatment order status, and time in mental health care. This finding has implications for clinical practice, providing empirical evidence that recovery-oriented treatments are relevant for most service users with psychosis in various mental health services. Recovery-oriented treatments such as IMR, and related themes, such as help for coping with stress and illness and having a plan for early detection and prevention of relapse, appeared to help people with psychosis feel supported by clinicians in their personal recovery process. Specific attention should be given to service users with high levels of general symptoms and depression, because these service users experienced less support for personal recovery, even though personal recovery was equally important for them.

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