

# Analysis of Factors Influencing the Recovery of Social Functions of Patients with Depression during the Rehabilitation Period

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**Abstract:** *Objective:* To analyze the factors influencing the recovery of social functions in patients with depression during the recovery period. *Methods:* From February 2024 to January 2025, 74 patients with depression in recovery were selected for a retrospective study in our hospital. The patients' social function recovery was evaluated and divided into a good social function recovery group and a poor social function recovery group. Data were collected for single-factor analysis and multi-factor analysis. *Results:* There were 54 cases in the good group and 20 cases in the poor group. The results of single factor analysis were the comparison of drug types, accompanying psychotic symptoms, medication compliance, family social support scores, number of attacks, cognitive function scores, stigma scores, and quality of life scores between the two groups,  $p < 0.05$ . Multifactor analysis confirmed that the independent risk factors for the recovery of social functions in patients with convalescent depression are taking typical antidepressants, accompanied by psychotic symptoms, poor medication compliance, low family social support score, more than 2 episodes, and low cognitive function,  $p < 0.05$ . *Conclusion:* There are many factors that influence the recovery of social functions in patients with depression during the rehabilitation period. In order to promote the effective recovery of social functions in clinical practice, it is recommended to select new antidepressants, strengthen medication management, enhance family social support, and pay attention to the improvement of patients' cognitive functions and the alleviation of stigma.

**Keywords:** Recovery period; Depression; Social function; Influencing factors

**Online publication:** February 26, 2026

## 1. Introduction

Depression is a chronic episodic mental disorder with a high incidence rate and great harm. It can cause patients to continue to have depressive mood and physical symptoms, and can also significantly damage patients' social functions such as interpersonal communication, work and study abilities, and family functions<sup>[1]</sup>. Even after entering the recovery period, some patients still have social functional deficits and find it difficult to return to society smoothly. Some studies have proposed that the core indicators for measuring the treatment effect and rehabilitation quality of patients with depression

include the recovery of social functions [2,3]. Based on this, clinical practice must clarify the key factors affecting the recovery of social functions of patients with depression during the rehabilitation period, optimize rehabilitation treatment plans, and promote significant improvement in patient prognosis. This article selected 74 patients for data research and analyzed the factors influencing the recovery of social functions of patients with depression during the recovery period.

## 2. Materials and methods

### 2.1. General information

In our hospital from February 2024 to January 2025, 74 patients with depression in recovery were selected for a retrospective study. The patients were aged 18–60 years old.

#### 2.1.1. Inclusion criteria

- (1) Consistent with disease diagnostic criteria;
- (2) Disease recovery period;
- (3) Informed consent.

#### 2.1.2. Exclusion criteria

- (1) Combined with other mental illnesses, such as bipolar disorder, schizophrenia, etc.;
- (2) Have severe physical and brain organic diseases;
- (3) Have a history of drug or alcohol dependence;
- (4) Be in lactation or pregnancy;
- (5) Have poor communication skills and cannot complete the scale assessment.

### 2.2. Method

The Social Function Deficiency Screening Scale (SDSS) was used to evaluate the recovery of social functions. The total score was 0 to 20, and  $\leq 2$  was considered good recovery. The patients were divided into good social function recovery group and poor social function recovery group. Data were collected for single-factor analysis and multi-factor analysis.

### 2.3. Observation indicators

- (1) Perform a single factor analysis to compare the two groups of drug types, accompanying psychotic symptoms, medication compliance, family social support scores, number of attacks, cognitive function scores, stigma scores, quality of life scores, etc. Involving family social support scale, cognitive function scale (MMSE), Link stigma scale, and mental illness quality of life scale (SQLS).
- (2) Conduct multi-factor analysis.

### 2.4. Statistical analysis

Statistical SPSS 28.0 software was used to complete the data calculation. To mean  $\pm$  standard deviation ( $\bar{x} \pm s$ ) describe the measurement data, *t*-test was performed. To describe the count data using %, the  $\chi^2$  test was performed. Logistic regression analysis was used for multi-factor analysis.  $p < 0.05$  was statistically significant.

## 3. Results

There were 54 cases in the good group and 20 cases in the poor group. The results of single factor analysis were the comparison of drug types, accompanying psychotic symptoms, medication compliance, family social support scores,

number of attacks, cognitive function scores, stigma scores, and quality of life scores between the two groups,  $p < 0.05$ , multi-factor analysis confirmed that the independent risk factors for the recovery of social functions in patients with convalescent depression are taking typical antidepressants, accompanied by psychotic symptoms, poor medication compliance, low family social support score, the number of episodes  $> 2$  times, and low cognitive function,  $p < 0.05$ . See **Table 1** and **2**.

**Table 1.** Single factor analysis

Factors		Total number of cases (n = 74)	Good group (n = 54)	Poorer group (n = 20)	$t/\chi^2$	$p$
Gender	male	33	25	8	0.234	$> 0.05$
	female	41	29	12		
Age	18–40	48	27	9	0.146	$> 0.05$
	41–60	26	27	11		
Education level	High school and above	26	19	6	0.175	$> 0.05$
	Junior high school and below	48	35	14		
Marital status	Married	40	30	11	0.002	$> 0.05$
	Single/divorced/widowed	34	24	9		
Duration of disease (years)	$\leq 2$	33	24	8	0.118	$> 0.05$
	$> 2$	41	30	12		
Drug type	New antidepressants	59	51	8	26.768	$< 0.05$
	Typical antidepressants	15	3	12		
With psychotic symptoms	Yes	23	13	10	4.580	$< 0.05$
	None	51	41	10		
Medication Adherence	good	56	49	7	24.634	$< 0.05$
	Poor	18	5	13		
Number of attacks	$\leq 2$	47	40	7	9.620	$< 0.05$
	$> 2$	27	14	13		
Family social support score (points)	-	74	$39.57 \pm 6.33$	$32.44 \pm 6.17$	6.939	$< 0.05$
MMSE score (points)	$\geq 24$	44	40	5	14.749	$< 0.05$
	$< 24$	30	14	15		
LinkStigma Scale score (points)	$\geq 92$	28	16	12	5.723	$< 0.05$
	$< 92$	46	38	8		
SQLS score (points)	$\geq 60$	23	12	11	7.320	$< 0.05$
	$< 60$	51	42	9		

**Table 2.** Multi-factor analysis

Independent variable	$\beta$ value	SE value	Wald $\chi^2$ value	<i>p</i> value	OR value	95% CI
Type of medication (typical antidepressants)	1.351	0.386	9.067	< 0.05	3.861	1.812–8.228
With psychotic symptoms (yes)	1.418	0.392	9.228	< 0.05	4.129	1.915–8.902
Medication compliance (poor)	1.272	0.378	8.902	< 0.05	3.568	1.701–7.485
Family social support score	-0.114	0.032	111.328	< 0.05	0.892	0.838–0.950
Number of attacks (>2 times)	1.168	0.365	8.767	< 0.05	3.216	1.572–6.576
Cognitive function (low)	1.094	0.381	7.536	< 0.05	2.986	1.415–6.301

## 4. Discussion

Even if patients with depression are in the recovery period, they still have social functional impairment, which affects the patient's return to society. Therefore, in the field of psychiatric medicine, it is necessary to clarify the factors affecting the recovery of social functions. This article selected 74 patients to conduct single-factor and multi-factor logistic regression analysis to identify independent risk factors and provide reference for clinical optimization of intervention plans.

The factor that significantly affects the recovery of social functions is drug selection<sup>[4]</sup>. Multivariate analysis showed that taking typical antidepressants was an independent risk factor, with 5.6% (3/54) of the good group using it and 60.0% (12/20) of the poor group ( $p < 0.05$ ). Clinical studies have shown that typical antidepressants (such as tricyclics) have a high incidence of side effects, and patients are prone to social avoidance due to physical discomfort, and the drugs are insufficient to improve symptoms related to core social functions. New antidepressants (SSRIs, SNRIs) are used for patients, which have higher receptor selectivity and are safer to use. Some drugs can simultaneously improve patients' attention and memory. In this study, 86.4% (51/59) of the 59 users recovered well.

Patients with psychotic symptoms (hallucinations, delusions, etc.) will significantly increase the risk of poor recovery. The incidence rate was 50.0% (10/20) in the poor group and 24.1% (13/54) in the good group ( $p < 0.05$ ). The results suggest that patients are accompanied by psychotic symptoms, are seriously ill, and have more significant disorders of neurotransmitter systems such as serotonin and dopamine, which will cause direct damage to the patient's cognitive and social cognitive abilities. The patient's delusions of persecution lead to a lack of interpersonal trust. The patient's abnormal perception interferes with task execution. Because of his thinking disorder, it affects communication, and the patient is prone to social isolation<sup>[5]</sup>. In addition, the analysis concluded that patients require long-term treatment, and it is difficult to control symptoms. Residual symptoms during the recovery period will still hinder the patient's reestablishment of social roles and delay functional recovery.

An important independent risk factor for the recovery of social functions in patients with depression during recovery is poor medication compliance. 90.7% (49/54) of the patients in the good group had good compliance, and 35.0% (7/20) of the poor group ( $p < 0.05$ ). For depression, long-term medication is necessary to maintain the balance of neurotransmitters. If compliance is poor, for example, discontinuation of medication due to lack of cognition, fear of side effects, etc., it will have a direct impact on the fluctuation of efficacy<sup>[6]</sup>. Recurrent symptoms will cause patients to suffer from depression, lack of energy, and the inability to continue to participate in social activities. In the case of repeated fluctuations, patients will lose confidence in recovery.

The factor significantly related to poor recovery of social functions in patients with depression during recovery is low family social support score. The score of the good group ( $39.57 \pm 6.33$ ) was significantly higher than that of the poor group ( $32.44 \pm 6.17$ ) ( $p < 0.05$ ). Combining the results of the social support theory analysis, it can be found that the companionship and understanding of the patient's family can alleviate the patient's sense of shame, supervise the patient's medication, and help the patient rebuild his family role<sup>[7]</sup>. Analyzing from the social level, the bridge back to society is community rehabilitation, employment support, etc., which will promote the recovery of the patient's social functions.

Factors that significantly increase the risk of poor recovery of social functions in recovering depression patients include those with more than 2 episodes, with 65.0% (13/20) in the poor group and 25.9% (14/54) in the good group ( $p < 0.05$ ). In the case of repeated attacks of the disease, patients will accumulate damage to brain structures such as the hippocampus, reducing memory, emotional regulation and cognitive functions. It will also weaken the patient's confidence in recovery, causing the patient to lose their social role, forming a rift in family relationships, and making it more difficult for the patient to recover social functions [8].

Independent risk factors for the recovery of social functions in patients with depression during recovery also include low cognitive function. 74.1% (40/54) of the patients in the good group had an MMSE score of  $\geq 24$  points, and 25.0% (5/20) of the poor group ( $p < 0.05$ ). Because patients with depression have inattention, memory decline, etc., they will have a direct impact on social functions. Among them, attention problems will hinder communication and work, executive dysfunction will lead to difficulty in making plans, and social cognitive deficiencies will affect the patient's interpersonal understanding.

The results of univariate analysis showed that stigma and quality of life are related to the recovery of patients' social functions. In the poor group, 60.0% (12/20) of the patients scored  $\geq 92$  on the Link stigma scale, and in the good group, 29.6% (16/54). The results showed that the patients' social functions recovered well and their stigma was relieved. The analysis concluded that high stigma will cause patients to avoid social interactions, conceal their condition, and thus reduce treatment compliance. Comparing the data on quality of life, it can be found that 55.0% (11/20) of the poor group had a SQLS score of  $\geq 60$  points, and 22.2% (12/54) of the good group. The above results can fully demonstrate that social functional deficits and quality of life interfere with each other. Poor social function means poor quality of life.

Identifying the above influencing factors is of great significance and can provide a clear direction for clinical intervention in patients with depression: in the clinical treatment of patients, new antidepressants should be given priority. Symptom changes need to be fully integrated when formulating individualized plans for patients. In patient medication management, patients should be given health education, medication reminders, and family supervision to significantly improve patients' medication compliance. As for social support, providing corresponding education to patients' families, improving community rehabilitation and employment guidance, alleviating stigma, and providing patients with cognitive behavioral therapy and attention and memory training can promote the effective recovery of patients' social functions. For patients with  $> 2$  attacks, long-term maintenance treatment plans should be formulated for them, and follow-up should be strengthened to prevent the recurrence of the disease.

Analyze the limitations of the study in this article, which are as follows: a single-center retrospective design and a small sample size led to limited extrapolation of the results. In addition, the patient follow-up time is short. Therefore, multi-center prospective studies can be conducted in future studies to expand the sample size and extend the follow-up.

In summary, there are many factors that influence the recovery of social functions of patients with depression during the recovery period. In order to promote the effective recovery of social functions of patients in clinical practice, new antidepressants should be given priority, the medication management of patients should be strengthened, compliance should be improved, the family social support system of patients should be strengthened, and attention should be paid to the improvement of patients' cognitive functions and the alleviation of stigma.

## Disclosure statement

The author declares no conflict of interest.

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