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ORIGINAL ARTICLE

Predictors of Full Recovery in Patients with Early-Stage Schizophrenia Spectrum Disorders

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ABSTRACT

Introduction: In the last 20 years, there has been an increase in research on self-stigma among persons with severe mental illness. **Objectives:** The main objective of the study is to find the predictors of full recovery in patients with early-stage schizophrenia spectrum disorders.

Material and methods: This cross-sectional study was conducted in Wah medical college / POF hospital Wah Cantt during 2021-2022. Data was collected with the permission of ethical committee of hospital. At the time of analysis, 57 patients with early-stage psychosis had enrolled. Early-stage was defined as the duration of adequate antipsychotic treatment of more than 4 weeks but less than or equal to 2 years. We restricted analysis to individuals diagnosed as having SSD (schizophrenia [SZ] and schizophreniform disorder [SZFD]) and PNOS.

Results: Data were collected from 34 patients. Mean age of the patients was 28.4 ± 8.5 years. There were 8 (39.0) males and 26 (61.0) female patients. 2.37% patients were unemployed. There were 28 (94.9) patients with family history of diseases. A comparison of the demographic and clinical characteristics of subjects being followed up versus those that had dropped out revealed no significant differences, with the exception of education and intensity of suicidal ideation.

Practical implication: This study will help us to find the predictors of full recovery in patients with early-stage schizophrenia.

Conclusion: It is concluded that significant predictors for full recovery were duration of untreated psychosis (DUP), family intimacy and physical activity. We observed similar or better results on remission, recovery, and relapse rates compared to other previous studies.

Keywords: Early, Relapse, Compared, Recovery, DUP, Physical, Significant

INTRODUCTION

In the last 20 years, there has been an increase in research on self-stigma among persons with severe mental illness. The findings of various pieces of research have demonstrated that this stigma is an overlooked but crucial issue in the course of illness for patients with severe mental disorders[1]. Patients who accept and internalize the prejudices and unfavorable stereotypes associated with having a severe mental illness develop self-stigmatizing attitudes. Patients develop self-stigma when they internalize the prejudices and unfavorable preconceptions associated with having a severe mental illness, and this has a negative impact on many aspects of their lives, including increased depressive disorders, suicidal ideation, impaired self-esteem, quality of life, social relationships, empowerment, resilience, adherence to treatment, and psychiatric care[2]. In schizophrenia, self-stigma is linked to poor social contact and lower perceptions of social support, which has a negative impact on recovery results. This reduces the chances of clinical and subjective recovery, and plays an important role in personal recovery, given that it affects hope and self-esteem. Increased internalized stigma affects social exclusion and self-marginalization, which makes it challenging to obtain and uphold social roles. This has an impact on functionality as well. According to several longitudinal studies, higher self-stigma at baseline and follow-up predicted less recovery at 1 and 2 years[3]. Other findings showed that relationships between internalized stigma dimensions and sociodemographic factors show that the disease duration is related to the perceived discrimination subscale and that self-stigma and depression correlate strongly over time[4].

Schizophrenia (SZ) is a chronic and disabling disease, including in terms of social and occupational functioning. However, there is increasing recognition that psychotic patients, especially those experiencing first-episode psychosis (FEP), can achieve favorable clinical outcomes such as symptomatic remission and functional recovery. Over the last three decades, a number of prospective cohort FEP studies have been conducted to examine the prevalence and predictors of remission and recovery. Such studies can identify prognostic factors in the early stages of the disorder, while minimizing the confounding effects of treatment interventions and secondary disabilities[5].

In the last two decades, widespread attention has been accorded to the insight that, in psychosis, the first contact with mental health services is frequently preceded by a period of evolving disorder whose duration is of several years. Early recognition and early intervention have fanned hopes of preventing or postponing psychosis onset, reducing severity of illness or at least ameliorating the personal and social consequences involved. In the wake of the pioneering work of McGorry and his Melbournebased group, early recognition and intervention centres for psychosis have sprung up in many countries[6].

Kraepelin already described "minor changes in mood, which may be recurrent or persist for weeks, months or even for years as the only premonitory signs of an imminent mental disorder". The first systematic analyses of the prodrome of schizophrenia were conducted by Sullivan and Cameron, with the aim of initiating early intervention, but these attempts failed. After World War II, Conrad and Docherty et al proposed stage models of evolving illness, but these models could not be adequately replicated and failed to offer an opportunity for developing effective approaches to early intervention[7].

Objectives: The main objective of the study is to find the predictors of full recovery in patients with early-stage schizophrenia spectrum disorders.

MATERIAL AND METHODS

This cross-sectional study was conducted in Wah medical college / POF hospital Wah Cantt during 2021-2022.

Data collection: Data was collected with the permission of ethical committee of hospital. At the time of analysis, 57 patients with early-stage psychosis had enrolled. Early-stage was defined as the duration of adequate antipsychotic treatment of more than 4 weeks but less than or equal to 2 years. We restricted analysis to individuals diagnosed as having SSD (schizophrenia [SZ] and schizophreniform disorder [SZFD]) and PNOS. Ultimately, 34 patients with early-stage psychosis were included in the study. Two experienced psychiatrists from each institute participated in the diagnostic evaluation and reached a consensus on final diagnosis through discussion. All participants provided written informed consent in accordance with the protocol approved by the

Ethics Committee of hospital. A 30-item scale that evaluates psychotic symptoms in individuals with schizophrenia assessed 5 dimensions of the disease presentation: positive symptoms, negative symptoms, excitement symptoms, depressive symptoms, and cognitive symptoms. Sociodemographic data (age, sex, education, type of medical insurance, and job type) were obtained at baseline.

Statistical analysis: The demographic and clinical variables were tested initially using univariate regression analysis; variables with p-values of $p \leq 0.10$ were then further evaluated using stepwise regression.

RESULTS

Data were collected from 34 patients. Mean age of the patients was 28.4 ± 8.5 years. There were 8 (39.0) males and 26 (61.0) female patients. 2.37% patients were unemployed. There were 28 (94.9) patients with family history of diseases. A comparison of the demographic and clinical characteristics of subjects being followed up versus those that had dropped out revealed no significant differences, with the exception of education and intensity of suicidal ideation.

Table 1: Demographic and baseline clinical characteristics of participants

	Mean ± SD
Gender	
male	08 (39.0)
female	26 (61.0)
Age, years	28.4 ± 8.5
Education	
Elementary school	5 (0.9)
Middle school	05 (38.4)
University	24 (60.7)
Job type	
Unemployment	2 (2.37)
Non-professional	28 (93.2)
Professional	4 (4.7)
Family history of psychosis	
No	6 (6.1)
Yes	28 (94.9)
Diagnosis	
Schizophrenia	7 (7.7)
Schizophreniform disorder	10 (11.9)
Psychotic disorder NOS	17 (82.4)

Psychotic disorders have huge effects in terms of disruption to personal psychosocial development, caregiver burden, and medical costs. To help patients with early-stage psychosis recover, it is critical to understand the disorder's trajectory including remission, recovery, and relapse.

Table 2: Predictors of full recovery at 3-year follow-up in patients with early stage psychosis

	OR	95% CI	p-value
Log(DUP + 1)	0.534	0.364–0.758	0.001
PANSS, negative	0.948	0.892–1.004	0.078
FI, mean	2.262	1.361–3.967	0.003
PAR, intensity	1.231	1.013–1.512	0.040

DISCUSSION

In Asian populations, symptomatic remission rates at the 1- and 3-year follow-ups have been reported at 60% and 59%, respectively. The most recent study reported that 70% of FEP patients achieved symptomatic remission within the first 24 months of treatment [8]. With regard to recovery rate, studies have reported 17% (9–20%) over 10 years in SZ and 38% (30–46%) with a mean follow-up of 7.2 years in FEP. Overall, our findings on remission and full recovery are similar to or better than those of previous studies[9]. We applied more strict criteria of symptom improvement for full recovery (≤2 on the eight items of the PANSS) compared to most earlier studies, and used Andreasen et al.'s (2005) remission criteria (≤3 on the eight items of the PANSS). We were eager to compare our results with other studies using the same criteria as ours, but we could only find one study that reported a 9.9% recovery rate over a mean period of 10.2 years of follow-up; notably, those authors applied 2 years of sustained improvement, and participants were at various stages of illness[10]. Especially, it was of interest to observe higher remission and recovery rates in SZFD and PNOS compared to SZ at 6- and 12-month follow-ups. This finding is in line with our previous report and other studies[11].

In a majority of studies, a prolonged DUP turned out to be a predictor of an unfavourable illness course. It was associated with a more severe course of the first episode and all the consequences associated with the latter (e.g., greater risks, more inpatient days, higher costs). A small number of studies have also reported sustained neuropsychological deficits, higher scores on negative symptoms and disorganization, and an unfavourable functional outcome[12]. It is still an unsettled question whether a prolonged DUP is also associated with more psychotic relapses, as reported by several authors, because long-term follow-ups are rare[13].

Kraepelin assumed that florid bouts of illness (psychotic episodes) lead to a certain amount of irreversible consequences, which he called defects. This construct implies that schizophrenia has a deteriorating course consisting of downward steps produced by each psychotic episode. Reviving Kraepelin's model, Wyatt and Lieberman et al postulated that untreated psychosis might constitute an active morbid process toxic to the brain[14]. That process has to be treated and suppressed early enough, in order to prevent it from becoming chronic. McGlashan and Johannessen hypothesized that the plasticity of the brain can be preserved by both antipsychotic medication and social stimulation at that sensitive stage. Lieberman et al interpreted the results of a 2-year controlled clinical trial as indicating that the administration of proper doses of olanzapine can halt the process of toxic brain damage[15].

CONCLUSION

It is concluded that significant predictors for full recovery were duration of untreated psychosis (DUP), family intimacy and physical activity. We observed similar or better results on remission, recovery, and relapse rates compared to other previous studies. Effective psychosocial intervention should be provided to shorten the gap between remission and recovery rates and to address DUP, family issues, and exercise to enhance recovery.

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