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**Origin**

**al Article**

## **Psychosocial Disabilities in Patients with Schizophrenia**

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### **Abstract**

**Background:** This study aimed at reevaluating the psychosocial disabilities in schizophrenic patients.

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**Methods:** In an analytic-descriptive setting, schizophrenic patients were evaluated in Razi University Hospital during a one-year period (2009-10). The study group consisted of male and female patients aged 18-65 years, with the onset of disease for a minimum of 2 years and at least one psychological hospitalization in their medical record. The demographic data, as well as the results of the SANS, SAPS, GARF and SOFAS questionnaires were determined in each patient.

**Results:** Two hundred and eight patients, 53 females, and 155 males with the mean age of  $36.96 \pm 11.55$  (18-65) years were enrolled. Vocational, educational, social, familial, and self-hygiene related disabilities were seen in 63.5%, 21.2%, 93.8%, 13.9%, and 48.1% of the patients, respectively. Totally, psychosocial disabilities were reported in 98.1% of these patients. The mean age of the patients with educational or social disabilities was lower. Vocational problems were more common in male patients. Familial and social disabilities were positively related to the severity of positive and negative symptoms, with the predominance of the latter. Positive and negative symptoms were more frequent in patients with social and self-care related disabilities, respectively. The duration of the disease was significantly correlated with the positive symptoms and familial-social disabilities.

**Conclusion:** The current study described the high prevalence of psychosocial disabilities in patients with schizophrenia and may have implications for public health interventions.

**Keywords:** Psychosocial disabilities, Schizophrenia, Iran

### **Introduction**

Schizophrenia is known as a chronic syndrome with a variable, but always destructive, pattern affecting the perceptual, cognitive, and emotional aspects of the affected patients (1). The symptoms vary among patients but the sequels are generally considerable and persistent (2). The disorder, generally beginning at adulthood, initiates with the positive (delusions, hallucinations, disorganized speech and behavior) and negative signs and symptoms (avolition, isolation, restricted memory and poverty of speech). The positive symptoms dilute during the remission phase where the negative symptoms and social isolation become the most dominant features (1, 3). Regardless its well known etiology, the disorder has a big load of cost for the community. Schizophrenia has costs the United States an annual rate of 33 milliard dollars for its direct and indirect expenditure which is more than the whole cost for all kind of cancers (1).

Patients with schizophrenia bear the “stigma” of this disorder as well. Most of them feel to be “different”, “insufficient” or “incomplete”. Some studies tried to find the effective factors for occupational success for these patients (4). They are mostly unable to perform in occupations requiring the contest with no formal support. They generally lose the capacity to promote or gain educational opportunities and thus fail to reach a desirable function in individual jobs either. A German study demonstrated that 90% of these patients have social dysfunction (5). In US, 45% of homeless people are patients with schizophrenia (1). Other studies from different populations and different types of schizophrenia have reported social dysfunction to be present in 50 to 87.5% (6-13). Psychosocial disabilities and social dysfunctions have a great impact on patients with schizophrenia. While antipsychotic medications affect the positive and negative symptoms and do not directly decrease the social disabilities, such patients need rehabilitative and supportive programs. There is a serious lack of information regarding this point of view in Iran. The first step is to map the burden of the consequences that patients with schizophrenia are facing.

The aim of the current study was to evaluate the psychosocial disabilities of these patients in our community.

## **Materials and Methods**

The study was carried out during the year 2009-2010 in Razi Hospital, Tabriz University of Medical Sciences, Iran. The in-patients were diagnosed as having schizophrenia according to a structured interview based on the fourth edition of the diagnostic and Statistical Manual of Mental Disorders (DSM IV-TR). Patients were included if the symptoms were present for at least 2 years and they had the history of at least one hospital admission.

The current function of patients was evaluated by Social and Occupational Functioning Assessment Scale (SOFAS). The overall evaluation about the function of the family or other persistent relationships was made by Global Assessment of Relational Functioning (GARF). The Scale for Assessment of Negative Symptoms (SANS) and Scale for Assessment of positive Symptoms (SAPS) were used for scoring negative and positive symptoms of patients with schizophrenia as described above. These well-known standard questionnaires are being used in different nations and the validity and reliability of the tests are described elsewhere (3).

Substance related problems, personality disorder, mental retardation and another psychiatric diagnosis on axis one resulted in exclusion from the study.

The protocol was approved by regional Ethnic Committee and information of patients was kept secured. The data were included in the study after a written consent from care givers of the patients. No intervention was done because of this study and patients received their appropriate treatment independent form these results.

Statistical analysis was performed using Statistical Package for the Social Sciences (SPSS, version 13.0). The  $\chi^2$  test, t test, and fisher's exact were used for comparisons between groups, as appropriate. The level of significance was set at  $P < 0.05$ .

## **Results**

Out of 208 cases, 53(24.5%) were female and 155(74.5%) were male. The mean age (SD) was 36.96 (11.55) yr. Characteristics of the study population are described in Table 1. To distinguish the function of female patients fifteen females who could not perform their house works were considered unemployed.

Table 1: Characteristics of the study population

		n (% of total) or mean (SD)
Marital status	Single	109 (52.4)
	Married	64 (30.8)
	Divorced	31 (14.9)
	Widowed	4 (1.9)
Occupational status	Unemployed	67 (32.2)
	Housewife (females)	38 (18.3)
	Official work	11 (5.3)
	Self employment (males)	45 (21.6)
	Farmer/workman	47 (22.6)
Duration of education (years)		6.41 (4.85)
Previous hospitalization		3.12 (1.62)
Duration of schizophrenia (months)		11.38 (8.66)
SANS *		60.55 (23.440)
SAPS †		61.81 (23.57)
GARF ‡		35.58 (12.19)
SOFAS **		36.89 (15.30)

\* Scale for Assessment of Negative Symptoms

† Scale for Assessment of Positive Symptoms

‡ Global Assessment of Relational Functioning

\*\* Social and Occupational Functioning Assessment Scale

The most common psychosocial disability faced by these patients was disability in social functioning (93.75%), followed by occupational problems (63.46%), poor personal health maintenance (48.08%), educational problems (21.15%) and divorce or other family problems (13.9%) while only 1.92% had no psychosocial disabilities.

The duration of the illness was positively correlated with positive symptoms ( $P=0.025$ ,  $r=0.155$ ) and negatively correlated with score of GARF ( $P=0.033$ ,  $r=0.148$ ) and SOFAS ( $P=0.037$ ,  $r=0.144$ ). The scores of GARF and SOFAS were negatively correlated with

positive and (to a stronger degree with) negative symptoms ( $P < 0.001$ ,  $r = 0.563$ ). Negative symptoms were correlated with poor self-care ( $P < 0.001$ ).

Younger patients were more subject to educational problems ( $P < 0.001$ ). Considering being a “housewife” as a job for females, occupational problems were more reported for men ( $P = 0.004$ ). The other factors related to family problems and social disabilities are described in Table 2 and 3.



Table 2: Factors related to family problems including divorce in patients with schizophrenia, as mean (SD)

		No family problems n=179	With family problems n=29	P
Gender	Female	44(24.6%)	9(31.0%)	0.493
	Male	135(75.4%)	20(69.0%)	
History of hospitalization	One	41(22.9%)	9(31.0%)	0.761
	Two	34(19.0%)	5(17.2%)	
	Three	26(14.5%)	2(6.9%)	
	≥Four	78(43.5%)	13(44.8%)	
Age (yr)		36.45(11.55)	40.14(11.24)	0.111
Duration of illness (months)		11.36(8.91)	11.48(7.05)	0.945
Duration of education(yr)		6.50(4.78)	5.86(4.80)	0.511
Negative symptoms		59.97(23.80)	64.14(21.16)	0.376
Positive symptoms		60.64(23.63)	69.10(22.24)	0.074

**Table 3:** Factors related to social problems in patients with schizophrenia, as mean (SD)

		No social problems n=13	With social problems n=195	P
Gender	Female	2(15.4%)	51(26.2%)	0.523
	Male	11(84.6%)	144(73.8%)	
Marital status	Single	5(22.9%)	104(53.3%)	0.644
	Married	5(19.0%)	59(30.3%)	
	Divorced	3(14.5%)	28(14.4%)	
	widowed	0	2(2.1%)	
History of hospitalization	One	1(7.7%)	49(25.0%)	0.223
	Two	4(30.8%)	35(17.9%)	
	Three	1(7.7%)	27(13.8%)	
	≥Four	0	19(9.7%)	
Age (yr)		46.38(15.04)	36.66(11.04)	0.002
Duration of illness (months)		12.46(9.40)	11.31(8.63)	0.643
Duration of education (yr)		6.31(5.00)	6.42(4.86)	0.936
Negative symptoms		56.38(22.29)	60.83(23.55)	0.509
Positive symptoms		44.38(19.86)	62.97(23.38)	0.006

## Discussion

The current study evaluated psychosocial disabilities in patients with schizophrenia, which in the best of our knowledge is the first report from Iran. Disturbance in social functioning was observed in 93.8% of our study population, which is compatible with other reports from different countries. Occupational disabilities have been reported in 66 to 77% of these patients in different reports (14-17) which was observed in 63.5% of our study population as well.

Despite one study reporting no correlation between the age of onset and social disability (18) most of the reports consider younger age of onset as a prognostic factor for later problems in social functioning (19) which was obvious in the current study as well. It may be explained by a more psychological demolition in a longer duration (1, 3). The other finding that was compatible with previous reports again, was the effect of duration of illness on decreasing familial and social functioning (scored by SOFAS and GARF) (20-23).

In general, a worse outcome is predicted for men compared to women with schizophrenia (1, 3, 24). However; the current study reported only reduced occupational function for men. This is largely influenced by the fact that men are mostly supposed to have a career out of home in the culture of this country. Moreover, the current study did not evaluate the overall outcome and prognosis of patients, which may be the same between different populations.

The negative correlation between (especially) negative and positive symptoms is described in other reports as well (25-28). Only one study reported a same value for these two types of symptoms (29) which both had a negative correlation with function of patients.

In conclusion, the current study emphasized the considerable psychosocial disability among Iranian patients with schizophrenia (influenced by negative and positive symptoms of the disorder) wasting a part of the productive population as well as costs of the disorder. It seems that together with the effective pharmacological treatments, the public and these patients will benefit from psychoeducation to family, and educating different occupational and social skills to patients.

### **Ethical considerations**

Ethical issues (Including plagiarism, Informed Consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc) have been completely observed by the authors.

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