Family Stressors as the Cause of Rehospitalization in Psychotic Disorders

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Abstract

Objective: This study aimed to describe attributors of family stressors which cause rehospitalizations in patients with psychotic disorders.

Materials and methods: In a cross sectional study (during 2006-7) 203 randomly selected psychiatric readmitted patients with psychotic diagnosis and registered demographic and psychiatric clinical data were included. Family stressors as the possible cause of readmission were asked through a structured interview by the psychiatrist.

Results: Family factors were reported as a cause in 132 (60.6%) cases. Poor family support (n=88; 43.3%) and family conflict (n=58; 28.6%) were the two most prevalent family stressors, respectively. Bivariate analysis showed that admission due to family issues was different among men and women (79.1% vs. 38.7%, respectively p<0.001) and according to job situation (p<0.001), and literacy (p=0.036). According to logistic regression, gender (men) was the only predictor of admission due to family issues (OR=5.989, CI=3.220-11.141, p<0.001).

Conclusion: Family factors are prevalent causes of return to hospital in patients with psychotic disorders, and this is more prevalent in men. An approach to decrease the marital stressors is needed in patients with psychotic disorders. In this approach, increasing family support and decreasing family conflict are essential.

Key words: Psychosis, Psychotic disorders, psychiatric readmission, Cause of readmission, family issues

Introduction

Findings about frequent use of psychiatric inpatient services vary from study to study, which may be partially due to methodological issues. A group of research has tried to determine predictors of psychiatric readmissions. These series of studies-which are being conducted by case control or cohort design-have paid attention mostly to sociodemographic and clinical data (1-8). In this regard, age (4, 9), gender (3-5, 7-9), the disability due to primary disease, the number of previous admissions (1, 5, 10, 11) and the severity and degree of psychotic symptoms of major illness (6, 11) and also the presence of mental co morbid

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Table 1: General characteristics of rehospitalized psychiatric patients with psychotic disorders (n= 203)

Factors	Level	Frequency	Percent
Diagnosis	Schizophrenia	136	66.9
	Schizoaffective	67	33.1
Marital state	Single	110	54.2
	Married	70	34.5
	Spouse died	4	2
	Divorced	17	8.4
	Separated	2	1
Education Level	Illiterate	30	14.8
	Primary school	46	22.7
	Secondary school	54	26.6
	Diploma	56	27.6
	Upper Diploma	7	3.4
	BS	9	4.4
	MS	1	0.5
Occupation State	Unemployed after illness	66	32.5
	Unemployed before illness	14	6.9
	Retired	18	8.9
	Home keeper	75	36.9
	Student	4	2
	Employed	26	12.8
Income	No income	48	23.6
	Welfare organizations	24	11.8
	Others income (spouse, family)	87	42.9
	Less than one million Rials	14	6.8
	1-2 milion Rials	28	13.7
	More than 2 milion Rials	2	0.9
Sex	Female	93	45.8
Child	No	126	62.1
Residential place	City	177	87.2
Family member with disorder	Yes	108	53.2

diseases such as substance abuse (1-3, 7) and secondary diagnosis of personality disorder (5) are known risk factors of frequently inpatient psychiatric use. As known from the literature, apart from the above potentially significant predictors, there are some other factors which could be of importance for frequent use of psychiatric inpatient care. These include causes-not risk factors- and are found by second series of research usually using survey design describing readmitted patients, by description of perceptions of the cause of readmissions from the view point of patients, caregivers or staffs. Such studies have attributed the patients' rehospitalizations to denial of illness (3, 12), noncompliance with medication or treatment (1, 3), problems at work or unemployment (5, 6, 8, 9).

A significant part of the readmissions are preventable and this causes epidemiologists and health care planners to be interested in the prevention of hospitalizations (13, 14). In this regard, interviewing the patients and their families are important and should be considered (15). A considerable proportion of psychiatric patients are admitted due to family issues (16), and family characteristics may predict rehospitalizations (17); so family interventions can prevent rehospitalizations (18).

We aimed to describe a sample of rehospitalized patients with psychotic disorders by means of family stressors listed as attributors for rehospitalizations by physicians.

Materials and Methods

Our descriptive cross sectional study was carried out between 2006 and 2007 on 203 randomly selected patients suffering from psychotic disorders. They aged between 18 and 65 years, living in the city of Isfahan, and were rehospitalized to psychiatric inpatient care. Patients were selected with a simple randomization using computer generated numbers from all registeries in 4 governmental hospitals in Isfahan, Iran (namely Noor, Alzahra, Farabi and Modarres

hospitals). Inpatient rehospitalization was defined as the admission more than 1 time during a 6 month period (19). Homeless people and those with neurological conditions or with two concomitant axis 1 psychiatric disorders were excluded. The study protocol was approved by the Ethics Committee of the Isfahan University of Medical Sciences. All patients signed a written consent. The individuals were examined at the time of rehospitalizations. The psychiatric diagnosis was assessed by the psychiatrist who addmitted the patients, and treated the patients in outpatient care. Psychiatrists' perspectives regarding the possible causes for readmission to inpatient mental health services were assessed through a structured interview using a checklist. Family stressors as the cause of readmission were asked through a structured interview by the psychiatrist.

Family stressors included 1) Poor family support, 2) Familial conflict, 3) To be excommunicated by the family, 3) Divorce, 4) Seperation from spouse, 5) Substance use in family members, 6) Die of a first degree relatives, 7) Spouse's disease or accident, 8) Marriage of child, 9) A new member to the family by marriage, 10) Pregnancy or delivery of spouse, 11) Birth of a child, 12) Seperating from child, 13) Marriage of ex-spouse, and Physical abuse.

The code list for entering the structured data in the computer program was prepared. Statistical Package for Social Sciences, i.e. SPSS-13 software, was used for the statistical analyses. The distribution of attributions in the study sample was shown with frequency tables. Bivariate analysis was done using independent sample t test and chi square. Forward logistic regression was applied to determine the predictors of admission due to family issues. P-value less than 0.05 was considered as significant level.

Results

The most prevalent diagnosis was Schizophrenia (n=136). Most patients were female, married, had no child, lived in city, and some educated. Table 1 presents baseline data of 203 rehospitalized patients with psychotic disorders. Family factors were reported as cause in 132 (60.6) cases. Poor family support (n=88; 43.3%) and familial conflict (n=58; 28.6%) were the 2 most prevalent family factors, respectively (table 2).

Chi square showed that admission due to family issues was different among men and women (79.1% vs. 38.7%, respectively p<0.001), employed, unemployed, and home keeper (72.5, 77.5, 34.7, respectively p<0.001), and also illiterate and literate (43.3 vs. 63.6, respectively p=0.036). Other qualitative variables were not associated with hospitalizatuon due to family issues (p>0.05). According to independent samples t test, mean age at admission, age at diagnosis and mental health disorder duration were not significantly different among those with and without admissions due to family related issues (p>0.05). According to logistic regression, gender (men) was the only predictor of admission due to family issues (OR=5.989, CI=3.220-11.141, p<0.001) (table 3).

Table 2: Family issues which possibly have caused rehospitalization

Factors	Frequency	Percent
All Family factors	123	60.6
Poor family support	88	43.3
Familial conflict	58	28.6
To be excommunicated by the family	20	9.9
Substance use in family members	14	6.9
Divorce	10	4.9
Die of a first degree relative	7	3.4
Spouse disease or accident	5	2.5
Separation from spouse	4	2
A new member to the family by marriage	3	1.5
Marriage of child	2	1
Pregnancy or delivery of spouse	1	0.5
Birth of a child	1	0.5
Separating from child	1	0.5
Marriage of ex-spouse	0	0
Physical abuse	0	0

Discussion

This study showed that family factors were reported in a considerable part of rehospitalizations of patients with psychotic disorders, which were more prevalent in men. Poor family support and familial conflict as the most prevalent family factors should be listed.

In line with our results regarding the high proportion of family issues in rehospitalization of patients with psychotic disorders, literature shows that family characteristics are important, and even may be more important than the clinical data, in regard of rehospitalizations of psychiatric patients (20). As a result, a meta analysis showed that the relapse rate can be reduced by 20 percent if relatives of schizophrenia patients are included in the treatment. Long term fami-

Table 3: Comparison of admission due to family issues in participants with different data (n= 203)

Variable	Admission due to family issues N (%)	P-Value
Gender		
Men	87 (79.1)	<0.001
Women	36 (38.7)	
Marital status		
Single	71 (64.5)	
Married	42 (60)	0.169
Separated/divorced	10 (43.5)	
Educational level		
Illiterate	13 (43.3)	0.036
literate	110 (63.6)	
Living place		
Urban area	108 (61)	0.746
Rural area	15 (57.7)	
House status		
Own	52 (56.5)	
Rental	6 (50)	0.322
Others	65 (65.7)	
Job Status		
Employed	35 (72.5)	
Unemployed	62 (77.5)	<0.001
Home keeper	26 (34.7)	
Mental health disorder		
Schizophrenia	83 (61)	0.856
Schizoaffective	40 (59.7)	
Mental health disorder in family members		
Yes	72 (66.7)	0.059
No	51 (53.7)	
Supported by welfare organization		
Yes	13 (54.2)	0.493
No	110 (61.5)	

ly interventions have more prominent effects. The important issue is to consider family as a comprehensive approach and the type of family interventions is less important (18). According to the literature in Iran, there is less published research focusing on family related issues in readmission of psychiatric patients in the country. The only study with the aim of describing the cases of psychiatric readmissions (any psychiatric diagnosis) in 2 tertiary hospitals in Tehran, including 669 psychiatric readmissions during two years of 2000-2001, mostly focused on noncompliance and medication adherence. In that study, 40-60% of re-hospitalizations had been attributed to poor compliance, in its different causes, and marital issue was neglected (21).

According to the higher prevalence of family related issues in men, one study reported similar findings in regression (22). In another study during 10 years with respect to rehospitalizations and length of time in the hospital multivariate regression techniques were used to test for gender differences across multiple outcomes. The women experienced fewer rehospitalizations and shorter stays than did the men (23).

According to the current study, by means of family factors, the most important causes of rehospitalizations included poor family support and familial conflict. As well, by means of personal and social factors, being ignored by coworkers and unemployment were the most common causes. According to the literature, social and family problems also seem to be important sources for frequent use of inpatient psychiatric care (24, 25). Interacting with the lack of social contact, many frequent users also have a deficiency of social support (12, 24). Eighty two percent of the frequent users have been found not to have an intimate, sustained relationship (26). Apart from this, mentally ill frequent users of inpatient care are significantly less satisfied with their family relationships than ordinary users (11). To decrease the impact of family stressors on hospitalizations, training the members of families of the patients about psychotic disorders is essential. To decrease the family related factors, enhancing family support may probably decrease the rate of psychiatric re-hospitalizations (27).

The interest to determine predictors of hospital readmissions have been carried out since the 1970s, because rehospitalized patients account for high health care costs through their high utilization of inpatient services. It is still unclear if such service utilization of these patients is avoidable under certain conditions or not (25). One point which should be considered is the fact that most studies have not found a standardized definition of how many hospital admissions per period are necessary in order to speak of rehospitalization (1-5, 7, 8). It is difficult to give reasons why admissions more than 1 time during a 6 month period (19) are considerd as rehospitalizations, and for example two admissions over 7 months are not readmission. Such definitions might be causally related to the findings of previous research about rehospitalizations which, until now, have been relatively differ-rent. The second point which should be considered is the fact that according to the attributions theory, attributions for rehospitalizations may be different for patients and psychiatrists. Psychiatrists may attribute the problem to something internal to the patient, however, they were likely to see the cause as

patient effort, which is under patient control; psychiatric patients may tend to give internal attributions for their readmission and believe that the cause is not under their control (27). For example, one study has shown that staff tend to overestimate the risk of rehospitalization in patients with a poor therapeutic alliance, low global function, or initial involuntary admission and to underestimate the risk in patients with alcohol use disorders or four or more previous psychiatric hospitalizations (28).

To name the study limitations, we can point to not measuring the exact psychiatric co morbidities. Cross sectional design and not using survival analysis (to determine time at readmission) may have limited our findings. Not registering the medications and outpatient compliance care adherence may be another limitation of our study. Further research is needed with prospective design and with considering these limitations.

As conclusion, family factors are reported as prevalent factors by means of cause of return to psychotic patients to hospital. An approach to decrease the marital stressors is needed for patients with psychotic disorders. In this approach, increasing family support and decreasing family conflict are essential.

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