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The Effect of Social Work Interventions on Family Function Improvement in Schizophrenic Patients

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Abstract

This research is aimed to study effects of social work interventions on improvement of Schizophrenic patient's family functioning. The study was an appliedand semi-experimental research. The statistical universe included Schizophrenic patients' families. Such patients were hospitalized in Razi Psychiatric hospital in 2009. The sampling method was purposive and a total of 70 subjects were selected randomly who were placed into two experimental and control groups. Results indicated that both experimental and control groups have statistically significant difference which showed impact of social work interventions on increased Duration of relapse of schizophrenic patients to hospitals ($p<0.01$). Training the family about the disease and transfer of necessary skills to cope and deal with the disease will result in increased potential abilities of family.

Keywords: Social work interventions, Familyfunction, Schizophreni.

Introduction

Nowadays, psychotic disorders are of the most common diseases among which Schizophrenia has more serious destructive effects[1]. Care for patients with chronic mental disorders confronts the family with gradual erosion of physical and mental abilities and endangers the mental health of other family members[2]. The researchers believe that psychotic disorders are effective on social performance of patients in family, social, occupational and educational aspects[3]. They argue that such families can use assistances of a counselor, social worker, psychologist or psychiatrist to tackle mental pressures caused by living with the mental patient and reach desired results. Disease long duration and frequency of disease relapsegive rise erosion of the family's physical and mental resources which shows necessity of training for the family about how to tackle long-term and compatibility with corresponding conditions and care for patients[4]. In several reports, the authors have reported pressure amount of caregivers of patients with Schizophrenia higher than that of caregivers for other chronic mental patients[4,5]. Ghanbari indicates that functions of families having Schizophrenic patients are not normal and they have more dysfunctions compared to usual families. The family environment has a considerable effect on Schizophrenia progress and the family engagement is so important for treatment team to care such patients[6,7]. The family is represented as the best resource to care chronic mental patients [8] hence the family plays an important role in patients' satisfaction and quality of life[9].

Nowadays, impact of family training on psychotic patients' improvement has been the spotlight of many researchers on different parts of the world, including: Chien et al conduct a study titled "Effects of a mutual support group for families of Chinese people with schizophrenia: 18-month follow-up". This research was performed on 96 families having Schizophrenic patients in Hong Kong. The study shows that supportive and educational interventions are considerably effective on functioning and disease relapse reduction[10]. Also, Sherman et al, about family's collaboration on psychotic patients' treatment, argue that standardized plans (e.g. support and training for the family) can be so effective for the families with psychotic patients so that relapse risk and patients' costs will be decreased and social performance of the patient and his/family will be increased[11].

In another study by Sherman about effects of support and training plans for the family, increased family information about the disease and its symptoms, increased family capabilities, decreased anxiety and stress are emphasized. The results show that supportive and educational interventions (i.e. family's psych educational programs) play a very important role to improve functioning of patient and family, reduce disease relapse, decrease frequent hospitalizations and continue treatment[12].

In addition, Pitschel-Walz et al conduct a study titled "The effect of family interventions on relapse and rehospitalization in schizophrenia: a meta-analysis" in which 25 effective

interventions were analyzed on 60 patients' families and relative for Schizophrenia treatment. One of the major results is that relapse amount can be reduce up to 20 percent if patients' families and relatives are supported during the treatment and their problems are resolved. In case of family interventions for more than 3 continuous months, the regarding impact will be clear particularly. General analysis result shows that psych educational interventions are necessary for Schizophrenia treatment[13]. Beside, Cassidy et al conduct a study titled "Efficacy of a psych educational intervention in improving relatives' knowledge about schizophrenia and reducing rehospitalization" where 101 schizophrenic patient's relatives are attended in psych educational programs for 8 weeks. Their results also indicate that psych educational interventions can cause to reduce frequent hospitalizations[14].

Above mentioned studies clearly show psycho-educational interventions importance for psychotic patients' families. Providing social, educational and consultancy supports can play a key role to reduce hospitalization times and days, disease relapse and treatment costs. Furthermore, family psych educational interventions may provide suitable information and solutions to decrease patient and his/her family stress. Therefore, present work tried to study effects of social work interventions on improvement of Schizophrenic patient's family functioning.

Material and Methods

Present research was aimed generally to study impact of systematic pattern of social work interventions on reduced times of Schizophrenic patients' hospitalization times. This work was an applied and semi-experimental research. The statistical universe included Schizophrenic patients' families who were in charge of care for their patients. Such patients were hospitalized inRazi Psychiatric hospital in 2009. The sampling method was purposive and a total of 70 subjects were selected randomly who were placed into two experimental and control groups. Furthermore, patient's family means the person who is in charge of caring the patient and has the most relations with him/her. Both subject groups were gotten uniform in terms of some variables, including: age, gender, educations, family relation with the patient and insurance services, previous hospitalizations, and duration of illness for the patient with Schizophrenia.

However, present work was conducted by social work interventions in order to improve Schizophrenic patients' families' functioning including: Family psychosocial education and Advocacy.

The former was performed for Schizophrenic patients' families before patient discharge from the hospital into four sessions: Session 1: Members' introduction, initial evaluation of the group, a better recognition of Schizophrenia, a description for disease symptoms including Delusions and hallucinations. Session 2: Review of former session discussions, verifying the impact of disease on family, problem solving and communicational skills. Session 3: Review of former session contents, family problems and needs, family members' attitudes toward the disease and members' responsibilities about the each other. Session 4: Review of former session contents, solving the problems within the family, verifying the interactions within the family, constraints to discharge the patient and family economic problems, planning for necessary follow-ups, conclusions and final evaluation. In fact, such sessions were aimed to resolve family and patient's problems which are predisposing factors for disease recurrence and patients' readmission.

Advocacy**:** Intervention (advocacy) was held into three sessions and for three months among subjects' families during which following items were studied and followed up: Family Counseling, Career creation for the patient as much as possible, Following up patient's insurance status and his/her family, Helping the families in solving problems affecting recurrence, Identifying available sources of support and informing the families, Ethical considerations were taken into account well. For this purpose, collecting necessary data and information was performed by agreement and collaboration of studied departments and obtaining written consent.

Here, two demographic questionnaires provided by the researcher were used among which one is related to the patient's specifications and another included specifications of the person caring for patient. Also, FAD (Family Assessment Device) questionnaire was used to measure family's functioning as pre-test and post-test in both experimental and control groups. This pattern determines structural, occupational and interactive specifications and specifies six aspects of family's functioning. FAD includes 60 items among which 6 cases are related to "problem solving" aspect, and 9, 11, 6, 7, 9, and 12 cases are related to "relationship", "roles", "emotional involvement", "emotional accompanying", "behavior management" and "general functioning", respectively.

Ethical considerations were taken into account well. For this purpose, collecting necessary data and information was performed by agreement and collaboration of studied departments and obtaining written consent.

The results were analyzed by SPSS software and Mann-Whitney U Test / Wilcoxon Rank Sum Test was used to compare hospitalization times.

Results and Discussion

Totally, among caregivers participated in experimental group 13 ones were male (37.1%) and 22 ones were female (62.9%). In the control group, 12 invigilators were male (34.3%) and 23 caregivers were female (65.7%). These results indicate the similarity of two groups in terms of gender.

Also, patients' caregivers mean age in experimental group and control group was 47.5±9.921 and 47.3±10.357, respectively. Using correlated t-test, the mean age of patients in experimental and control groups did not have statistically significant difference (p=0.925) and the groups were consentient also in terms of age.

The mean duration of illness of schizophrenic patients in experimental and control groups was 3.94±2.274 and 4.49±2.672, respectively. Parametric t-test showed that the groups did not have statistically significant difference which indicated the consistency of groups in this indicator (p=0.473).

Using nonparametric chi-square test, the family relativity of caregivers in experimental and control groups were studied and obtained probability showed that caregivers statistically had no significant difference and groups were consistent (P=0.467) (table-1).

However, table-3 presents mean and standard deviation of family functioning measurement subscales before and after social work interventions. Using Mann–Whitney U statistical test, subscales scores for experimental and control groups were compared before and after social work interventions where statistically no significant difference was observed. While, after social work interventions, a significant difference was existed statistically in all family functioning measurement subscales of two groups. Also, pre-test and post-test results were compared using Wilcoxon test in which results indicated significant difference only in experimental group. (p<0.01)

In table-4, the mean frequency of hospitalizations in both experimental and control groups were studied and compared using Mann–Whitney U non-parametric test and resulted probability value showed that the mean frequency of hospitalizations in both groups had statistically no significant difference before social work interventions which indicated groups consistency (p=0.476). But in contrast, the mean frequency of hospitalizations in both groups had statistically significant difference after social work interventions which indicated groups consistency (p=0.001). Also, using Mann–Whitney U non-parametric test, frequency of hospitalizations in both groups before and after social work interventions were studied and compared and the resulted probability value showed that the mean frequency of hospitalizations had statistically a significant difference in experimental group which indicated impact of social work on in experimental group (p=0.001). While, such an indicator had significant difference in the control group which indicates lack of frequency of hospitalizations reduction in control group (p=0.157).

The mean duration of patients return to hospital is presented in Table 5. The analysis of results indicated that both experimental and control groups have statistically significant difference which showed impact of social work interventions on increased Duration of relapse of schizophrenic patients to hospitals (p<0.01).

Table -1
Distribution of family relativity for schizophrenic patients' caregivers separated by experimental and control groups

	Experimental group		**Control Group**		**Total**	
Family Relativity	Quantity	Percent	Quantity	Percent	Quantity	Percent
Father	8	22.9	8	22.9	16	22.9
Mother	10	28.6	9	25.7	19	27.1
Sister	5	14.3	7	20.0	12	17.1
Brother	5	14.3	5	24.3	10	14.3
Spouse	7	20.0	6	17.1	13	18.6
Total	35	100.0	35	100.0	70	100.0

Furthermore, using nonparametric chi-square test Table 2 shows that, two groups had no significant difference in terms of level of education and both groups were consistent. (P=0.259)

Table-2
Distribution of level of education for schizophrenic patients' caregivers separated by experimental and control groups

	Experimental group		Control Group		Total	
Level of education	Quantity	Percent	Quantity	Percent	Quantity	Percent
Academic	3	8.6	4	11.4	7	10.0
High School	8	22.9	8	22.9	16	22.9
Guidance School	7	20.0	6	17.1	13	18.6
Primary School	9	25.7	9	25.7	18	15.7
Spouse	7	20.0	6	17.1	13	18.6
Total	35	100.0	35	100.0	70	100.0
Illiterate	8	22.9	8	22.9	16	22.9
Total	35	100.0	35	100.0	70	100.0

Table-3
Distribution of statistical indicators related to 7 subscales for Family Assessment Device (FAD) test in experimental and control groups

Subscale		Experimental Group		Control Group		Probability Value
		Mean	Standard Deviation	Mean	Standard Deviation	
Problem Solving	Before intervention	20.06	2.559	20.00	0.642	0.929
	After intervention	11.31	0.676	20.03	0.568	0.001
		<0.001		0.827		
Communication	Before intervention	29.37	0.843	29.31	0.796	0.797
	After intervention	12.77	0.942	29.54	0.505	0.001
		<0.001		0.110		
Roles	Before intervention	30.23	1.087	30.37	0.910	0.778
	After intervention	16.46	1.245	30.40	0.604	0.001
		<0.001		0.110		
Affective Responsiveness	Before intervention	24.49	1.827	24.60	1.631	0.870
	After intervention	14.17	1.098	24.77	0.877	0.001
		<0.001		0.096		
Affective involvement	Before intervention	24.77	2.702	24.37	2.474	0.217
	After intervention	15.26	1.578	24.57	2.253	0.001
		<0.001		0.180		
Behavior Control	Before intervention	32.69	0.993	32.74	1.094	0.652
	After intervention	17.49	1.463	32.94	0.765	0.001
		<0.001		0.259		
General Functioning	Before intervention	48.69	0.832	48.71	0.926	0.474
	After intervention	27.17	4.515	48.89	0.583	0.001
		<0.001		0.275		

Table -4
Comparing the mean frequency of hospitalizations for schizophrenic patients before and after social work interventions separated by experimental and control groups

	Experimental Group			Control Group			
Frequency of hospitalizations	Quantity	Mean	Standard Deviation	Quantity	Mean	Standard Deviation	Probability Value
Before intervention	35	1.6	0.502	35	1.5	0.507	0.476
After intervention	35	0.2	0.382	35	1.5	0.505	<0.001
Probability Value	0.001			0.157			

Table -5
Mean and Standard Deviation of duration of schizophrenic patients return to hospital (per day) separated by research groups

	Experimental Group			Control Group			
Variable	Quantity	Mean	Standard Deviation	Quantity	Mean	Standard Deviation	Probability Value
Duration of return to hospital	35	87.57	5.98	35	2.63	8.73	<0.001

Due to having financial, emotional and spiritual support, the family is a very good resource to keep and enhance schizophrenia patients' mental abilities. Training the family about the disease and transfer of necessary skills to cope and deal with the disease will result in increased potential abilities of family and may partly cover lack of outpatient and inpatient in psychiatric centers. Since disease relapse symptoms, frequent hospitalizations and family dysfunction are of Schizophrenic patients and their families' specifications[15], this work tried to pay attention to needs and problems of Schizophrenic patients' families then aided the families to care better from their patients and have more consistency with the patient and corresponding issues by performing some social work interventions and follow ups based on a systemic pattern.

Given the results, Schizophrenic patients suffer from unsuitable functioning of their families. Family functioning had a lower level in subscales including problem solving, communication, roles, affective responsiveness, affective involvement, behavior control and general functioning. Family dysfunction was improved significantly after social work interventions. This finding is in line with former studies such as Chien et al as well as Sherman et al. Mentioned studies address that continuous supports and mental training programs arise substantial improvements in functioning and performance style of patients and their families. Another finding indicated that social work interventions (family mental training and advocacy) are effective on reduced hospitalization frequency and return duration of Schizophrenic patients so that the return duration to hospital became longer and disease relapse was reduced. Pitschel-Walz et al approve this finding. They address that in case of support for Schizophrenic patients' family and relatives during treatment and resolving their problems, relapse rate can reduced up to 20 percent. Also, other researchers including Chien et al, Sherman et al and Cassidy et al also present results in line with present work. Since pressure from family plays a key role in disease relapse symptoms and frequent hospitalizations, family mental training here resulted in reduced disease relapse and frequent hospitalizations of Schizophrenic patients.

Conclusion

Along with the radical changes in mental health service delivery as well as importance of schizophrenia patients' transfer from treatment centers to family environment and psychiatric care, paying attention to effective factors on disease relapse and re-hospitalization is of high importance. As mentioned before, caring Schizophrenic patients- who compose a considerable percent of mental patients- is so costly for the state and causes some consequents for the family. Mental training for the family and continuous support and follow ups after discharge from medical centers are of the methods to tackle such consequents. Ultimately, it can be argued that systematic pattern of social work interventions (i.e. psycho-social training for family and advocacy) can result in reduced hospitalization frequency of Schizophrenic patients, increased duration of return to medical centers and improved functioning for corresponding families in all aspects. Our results can be a guideline for social workers employed in psychiatric centers in order to involve the family in treatment process and get better results from treatment by inclusion of family training programs, supporting and following up.

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