

The Effectiveness of Psychoeducation to Families of Patients with Major Depressive Disorder on Adherence of Medical Prescriptions

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Abstract: *The aim of this study was to evaluate the effectiveness of psychoeducation to patients' families with major depressive disorder on adherence of medical prescriptions in Qods hospital of Sanandaj. The method of this study is a quasi-experimental design with pretest - posttest with control group. The study participants included all patients' families with depression who hospitalized in Qods hospital of Sanandaj in the second half of 2014. By using available sampling method, a total of 24 patients were selected and assigned into two experimental and control groups. Selected patients' families were trained by Family Protocol of Psychoeducation and patients were measured at pretest and posttest by Weekly Adherence Assessment Form. The results showed that psychoeducation for families caused adherence of medical prescriptions in the experimental group while the analysis of patients in the control group did not show a significant change. From the findings of this study, it can be concluded that the psychoeducation for the families can be effective in adherence of medical prescriptions among patients.*

Keyword: Family Psycho-Education, Major Depressive Disorder, Adherence of Medical Prescriptions

Introduction:

The World Health Organization (WHO) was established 60 years ago based on a constitution that in its first paragraph stressed that its principles are basic to the "happiness, harmonious relations and security to all people...". The stress on mental health aspects was repeated in the definition of health to show that this was not an incidental choice of words [1]. Again 30 years ago when the announcement of Alma Ata was introduced to the world [2], the meaning was reaffirmed and a new opening to scaling up mental health interventions through integration into primary health care was put forward. Yet, although considered formally an fundamental part of general health worldwide, and the WHO definition of health and its constitution implies that mental health is an integral part of health and as important as physical health [1], mental health is a somewhat paradoxical area of health. In reality, convincing data on the great burden of mental health [3,4] is juxtaposed with the low political will and insufficient resource allocation to deal with and avert the burden [5,6]. In fact, the low priority of mental health is not just a technical problem but an important moral one as well [7].

Depression is a frequent disease, with a lifetime prevalence of about 5–12% for men and 10–25% for women.(8-9) It is also known to be highly recurrent.(10-11) It causes large economic losses to society as it markedly decreases the ability of people to work, and is associated with increased medical service use and with suicide.(12) As relapse and recurrence are closely related to the family environment, (13-14) family psychoeducation may suggest an efficient measure to tackle the many problems involving the familial environment surrounding the patient and thereby reduce relapses or recurrences of major depression.

Our study was the first to show that psychoeducation limited to patients' families was efficient in adhering of medical prescriptions in the patients. Although individual psychotherapies have confirmed effectiveness for patients with depression, it can be stressful for them in the presence of many residual depressive and other symptoms. Intervention limited to families has a merit in that it does not burden the patients. It must also be emphasized that our family psychoeducation – consisting of six sessions and using videotapes and booklets specifically prepared for this programme – was brief and easy to disseminate. The updated projections of global mortality and burden of disease, 2002–2030 based on country projections for 192 WHO Member States in 2006 support the groundbreaking work of Murray and Lopez a decade earlier and indicate that the burden caused by mental disorders continues to rise as predicted by them [3,4]. In a recent review it has been highlighted that, in addition to the 14% of the global burden of disease attributed to neurological/psychiatric disorders, the indirect burden of mental health problems should be sought beyond the realm of mental disorders and encompass a wide range of communicable and noncommunicable diseases; in fact, the indirect burden may even negatively influence progress towards the achievement of the Millennium Development Goals [15].

In the case of major depressive disorder (MDD), interpersonal therapy, cognitive behavioral therapy and behavioral therapy have vast empirical support through many randomized controlled trials demonstrating their efficacy (16). The mainstream psychoeducational intervention for patients with depression is the 'Coping with Depression' (CWD) course, which is a cognitive behavioral intervention that treats and prevents depression in many target populations by providing them with instructions on how to cope with their psychological symptoms themselves (17,18). However, most of the studies using CWD are on complex target groups because of its flexibility, leading to low mean effect sizes (18). The intervention itself is complex and requires eight to 16 sessions. Still, group psychoeducation for MDD can be effective (19). Donker et al. did a meta-analysis of psychoeducation for depression and anxiety (20). This meta-analysis revealed that brief passive psychoeducational interventions for depression and psychological distress can reduce symptoms (20). However, all the above-referenced psychoeducations are focused on how to cope with their symptoms and none of them tried to focus on how to cope with their overcomplicated relationship due to depression.

Psychoeducation is a professionally delivered cure modality that integrates and synergizes psychotherapeutic and educational interventions. Many forms of psychosocial intervention are based on traditional medical models designed to treat pathology, illness, liability, and dysfunction. In contrast, psychoeducation reflects a paradigm shift to a more holistic and competence-based approach, stressing health, collaboration, coping, and empowerment (21, 22). It is based on strengths and focused on the present. The patient/client and/or family are considered partners with the provider in treatment, on the premise that the more knowledgeable the care recipients and informal caregivers are, the more positive health-related outcomes will be for all. To prepare participants for this partnership, psychoeducational techniques are used to help remove barriers to comprehending and digesting complex and emotionally loaded information and to develop strategies to use the information in a proactive fashion. The assumption is that when people confront major life challenges or illnesses, their functioning and focus is naturally disrupted (23). Psychoeducation is among the most effective of the evidence-based practices that have emerged in both clinical trials and community settings. Because of the flexibility of the model, which incorporates both illness-specific information and tools for managing related circumstances, psychoeducation has broad potential for many forms of illnesses and varied life challenges. Psychoeducation has demonstrated effectiveness for patients with depression as a first step in the treatment protocol in the NICE (National Institute for Health and Clinical Excellence) guidelines (24), especially when used together with medication. There have been a variety of psychological therapies demonstrated to be effective for the treatment of mood disorders (25). Among them, psychoeducation is widely accepted as it fits very well with the medical model of illness by being a clinically focused, commonsense-based intervention (19). Moreover, it is relatively simple and can be administered by therapists of various disciplines without extensive training.

Most of the research on psychoeducation for patients with mood disorders has been conducted with bipolar disorders. Colom and his colleagues (2003) investigated the effects of group psychoeducation for those with bipolar I and II disorders on the course of the disorders and showed that group psychoeducation significantly reduced the number of relapsed patients and the number of recurrences per patient. Colom and his colleagues (2009) also explored the efficacy of group psychoeducation for those with bipolar II disorders only and showed that psychoeducation plus medication significantly decreased the number of

episodes and days spent in mood episodes and increased levels of functioning. Research has demonstrated the effects of family psychoeducation on the course of bipolar disorders. Compared to the control group, the family psychoeducation group showed less experience of any mood recurrence and longer relapse-free intervals (26).

Method

The method of this study is a quasi-experimental design with pretest - posttest with control group. In which the independent variable is family psychoeducation and dependant variable is Adherence of Medical Prescriptions. The study participants included all patients' families with depression who hospitalized in Qods hospital of Sanandaj in the second half of 2014. By using available sampling method, a total of 24 patients who were diagnosed with major depression disorder and were willing to cooperate, were selected and assigned randomly into two experimental and control groups (12 patients in each group). Selected patients' families in experimental group were trained by Family Protocol of Psychoeducation and patients were measured at pretest and posttest by Weekly Adherence Assessment Form.

The psychoeducational protocol was designed by Mottaghi pur et al. in 2012 (27). And this protocol was published entitled "Major depression Training Guide" by Gisa publication in the same year. Group psychoeducation was conducted to the patients' family of experimental group for six sessions which were held on a weekly basis. Each session was about 1.5 hour: the first 20–30 minutes were used for a lecture and were followed by group discussions using problem-solving techniques and procedures of Medical Prescriptions Adherence.

The Weekly Adherence Assessment Form (Appendix 1) by by [Safren](#), [Gonzalez](#) and [Soroudi](#) (28-29) was published by Oxford in 2008, in the book untitled "Coping with Chronic Illness: A Cognitive-Behavioral Approach for Adherence and Depression (Treatments That Work)". The Weekly Adherence Assessment Form has Likert scoring scale and includes 4 aims. These objectives include: (1) taking the exact dose of medication, (2) non-arbitrary use of other drugs, (3) no discontinuation (on the recommendation of a friend, expensive medicines, and deny or assume of recovery), (4) inform the doctor if the side effects of drugs observed or drugs completed. Each of the Goals has 6 rating scale (Very poor, Poor, Fair, Good, Very good, Excellent). At the beginning of the study from both experimental and control groups, this assessment was done before the family psychoeducation. In the next step, after 6 sessions of psychoeducation of the experimental group, this re-evaluation was done again.

Result

To analyze the data related to this hypothesis, the analysis of Independent T was used. In this analysis, the mean and standard deviation of examination group in post-test were compared with the mean and standard deviation of control group.

Table 1. The Analysis of Independent T

group	N	Mean	Std. Deviation	Std. Error Mean
TDP experiment	12	2.1875	.84695	.24449
control	12	.0000	.35355	.10206

The information contained in Table 1 indicates that: the mean of experimental group is 2.1875 and the mean of control group is 0.000. Also the standard deviation of experimental group is 0.84695 and the standard

deviation of control group is 0.35355. To conduct with analysis of family psychoeducation and medication compliance adherence, the Levene's Test for Equality of Variances and Independent T-test were consi

Table 2. Levene's Test for Equality of Variances

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
TDP	Equal variances assumed	3.708	.067	8.257	22	.000	2.18750	.26494	1.63804	2.73696
	Equal variances not assumed			8.257	14.721	.000	2.18750	.26494	1.62186	2.75314

dered to be performed.

As can be seen in Table 2, the Levene's Test for Equality of Variances in medication compliance adherence in $p > 0.05$ is meaningful and it is equal to 0.067. Thus, zero hypothesis based on the lack of difference between two groups is rejected and in other words, family psychoeducation affects on increasing medication compliance adherence in patients and this impact is significant.

Discussion and Conclusion

This study demonstrated that group psychoeducation consisting of six sessions was effective in adherence of medical prescriptions and decreasing of major depressive disorder. Time to adherence of medical prescriptions was significantly longer in the psychoeducation group than in the control group. These findings were not related to the drug treatment. There have been several studies demonstrating the effectiveness of psychoeducation on the course and outcome of mood disorders but our programme is distinct from the pre-existing ones in the following aspects. There are several factors that can explain the effectiveness of patient psychoeducation for major depression. One possibility is being associated with medication adherence. However, in our sample, adherence to the antidepressant treatment was not different between the experiment and control groups. Another possible explanation is the effect of the psychoeducation. The identification of the warning signs and a consequent early intervention might have been more effectively accomplished in the educated group. The patients in our experience group may or may not have recognized more of their early signs/symptoms of relapse leading to successful coping with the situation.

Family psychoeducation is effective in the prevention of relapse in adult patients with major depression. It is also possible that our family psychoeducation, although focusing on adhering of medical prescriptions and reducing major disorder, might have exerted its influence through routes other than patient education. The families of patients with mental disease are often markedly distressed themselves, and they are likely to be socially isolated. Psychoeducation can provide needed information to such families. Meeting other families in a similar situation in a group setting may also reduce their mental distress. Reducing the family's burden may have created a more supportive environment to the patient at home. Our study design comparing psychoeducation against treatment as usual does not allow for analyses in any greater detail. The exact mechanism of family psychoeducation can be helpful and effective in adhering of medical prescriptions and reducing major disorder (30).

There may be different ways to influence the family and the patient and their family. Psychoeducation can be performed with or without the patient being present. Although it is impossible to know the differential effects of the two approaches in major depression (because ours is the only published study on this topic), two studies of depression affective disorder have shown interesting differences. Miklowitz *et al*, using a family and

patient approach, found prophylactic efficacy for depression, (31) whereas Reinares *et al*, using a family group psychoeducation approach (groups of relatives without patients), found prophylactic efficacy for mania but not depression (32). Whether and how the conjoint psychoeducation involving both family members and patients might differ from our family-only approach in depression needs to be explored in future studies.

Given the great number of people affected by depression – both patients and their families – we believe that our study has paved a new way to their effective care. A replication study with a larger sample is warranted in order to confirm its effectiveness and to elucidate its mechanisms.

Limitations

First, the majorities of our subjects suffered from major depression and were middle-aged. This patient profile is very popular in outpatient treatment settings in Iran. However, the generalizability of our findings to other types of depression and other types of patients may not be taken for granted. Second, the number of patients was small so that we may have missed some significant effect modifiers. For example, there may be some variables related to the outcome other than psychoeducation. Third, we fell short of examining important effect modifiers in the psychoeducation. The mechanism of psychoeducation should be examined in more detail with assessment tools longitudinally measuring the knowledge and behavior of the participants. Fourth, our programme consisted of narrowly defined patient psychoeducation plus problem-solving-based techniques. The patients also enjoyed long and close contact with mental health professionals at a high staff/patient ratio. We could not separately examine which of these specific and nonspecific factors were responsible for the observed effectiveness. Despite these weaknesses, our method of group psychoeducation, that is simple and easily introduced. Furthermore, it must be emphasized that it may well be more cost-effective both for the training and the provision of the treatment than individual psychotherapies. Further studies of psychoeducation in patients with major depression are warranted to replicate and extend the usefulness and effectiveness of this psychosocial treatment.

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