Original Article

Major Depressive Disorder: A Comparison of a Focused Psychodynamic Psychotherapy and Pharmacotherapy

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Objective: This study explored the therapeutic outcomes of psychodynamic psychotherapy for Major depressive disorder (MDD) in comparison with pharmacotherapy.

Methods: The focus of psychodynamic psychotherapy was on the superego pathology and its developmental backgrounds, while pharmacotherapy was done using SSRIs. A sample of 50 MDD patients was randomly selected by clinical interview using DSM-IV-TR. The presence and severity of the depressive symptoms were assessed using the MMPI-2 depression content scale as a symptom checklist, and the Beck Depression Inventory. Twenty five patients were selected for the psychoanalytic psychotherapy group and twenty five patients for pharmacotherapy. After 15 weeks, all the participants were assessed using the same instruments.

Results: The results indicated a comparable symptom reduction in the two groups.

Conclusion: Clinical observations confirmed the psychodynamic inferences about the role of the superego pathology in MDD.

Declaration of Interest: None.

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Introduction

Depression is a prevalent mental disorder with a high rate of recurrence (1). It induces disabilities and impairments in many areas, such as marital, family and interpersonal relationships, physical health and occupational functions (2-9). According to Rush (10), 33 to 50% of all outpatients with uncomplicated, non-chronic, non-resistant major depressive disorder (MDD) may achieve remission (i.e. the virtual absence of depressive symptoms). Amital et al (11) also argued that over 60% of patients with major depressive disorder do not respond fully to therapy and half of them will not respond at all. The World Health Organization (WHO) has ranked depression fourth in the list of the most urgent health problems worldwide (1).

Psychotherapy is an important treatment choice for depression (10,12-15). However, the number of studies on treatment of depression is not evenly distributed. For instance, the efficacy of psychodynamic psychotherapies in the treatment of depression has not been well documented, since most of the studies have compared pharmacotherapy with cognitive behavior therapy (15,16). In spite of the fact that there are very few controlled studies that support superiority of the psychodynamic approach (e.g. 17,18), there are good reasons to believe the efficacy and the importance of its principles (19-21).

Despite the criticisms (22-24), psychoanalysis is an accepted, valid, scientific branch of psychology and psychotherapy (25-27). However, the available researches into the psychoanalytic therapies raised to treat depression are mainly restricted to psychodynamic interpersonal or

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psychodynamic supportive therapies (e.g. 17,18,28,29) and there is a need to fill the gap by other approaches.

Psychoanalytic therapies have an exploratory nature (30) with a lengthy duration; an important barrier for treatment outcome research. In contrast, short-term methods may be more appropriate for outcome research and may neglect the treatment processes, which are central to psychodynamic approaches (31). However, as Dekker et al. (14) pointed out, treatment outcome research is necessary for realizing the efficacy of psychodynamic therapies that are time limited. These methods actively apply interventions and interpret clinical observations according to theoretical ideas.

The psychoanalytic understanding of depression emphasizes depressive reactions to particular situations (which are the focus of the psychodynamic interventions). Object loss, in reality or in fantasy, and anger turned inward (32-36), the conflicting mental structures –the ego, the superego and the id (37-41)-, and the oedipal conflicts (42,43) are among the important theoretical considerations of psychoanalysis.

All of recent evidences from neuroscience and advanced imaging technology presented supports for some of the psychoanalytic major concepts including the unconscious and the key role of early life events (44). The relationship between different adverse life events and depression (45,49) support this view partially.

In this study, it was tried to fill the gap in psychotherapy of depression by comparing the effects of focused psychodynamic psychotherapy and pharmacotherapy. We tried to explore the effect of psychodynamic psychotherapy with a focus on the superego and the developmental background (i.e. the oedipal conflicts) for major depressive disorder. Accordingly, one of the treatment choices of psychiatrists for major depressive disorder is SSRIs. Our hypothesis is that psychotherapy is as effective as pharmacotherapy in removing or reducing depressive symptoms in MDD patients with a mild to moderate severity. The symptom reduction at the determined time will be reported as an attempt to indicate the effects of both the therapies.

Materials and Methods

The current research was quasi-experimental with two comparison groups at their pretests and posttests. The study sample consisted of all the consecutive patients during 3 months, at two outpatient clinics, who accepted to be treated by either psychotherapy or pharmacotherapy. The main inclusion criteria were between 18 and 45 years of age, a minimum education of 10 years and DSM-IV-TR-defined major depressive episode (mild to moderate) with or without dysthymia. MMPI-2 depression content scale (DEP; 50) with baseline scores between 70 and 100, and 21-item BDI (51) with baseline scores between 17 and 63 points were also regarded as selection criteria. Patients were excluded if they had a history of bipolar disorder, psychotic symptoms, substance dependency, a mental disorder due to organic factors, or another axis I criteria of DSM-IV-TR (52).

The first source of information about the subjects was the regular clinical interview using DSM-IV-TR by professionals for every new client in the counseling centers. Through it, the eligible patients were selected from the lots of the clients. We needed two instruments for quantifying the diagnosis and assessing the severity in the baselines and treatment outcomes. MMPI-2 depression content scale (DEP; 50) is a good instrument for quantifying the diagnosis of depression and Beck Depression Inventory (BDI; 51,53,54) is one of the most common instruments for evaluating depression severity after a valid diagnosis.

Table 1. Demographic and clinical characteristics of the patients

	Psychotherapy (N=20) (n) %	Pharmacotherapy (N=22) (n) %
Sex		
Male	(7) 35	(7) 31.8
Female	(13) 65	(15) 68.2
Age		
18-30 yr	(11) 55	(9) 41
31-45 yr	(9) 45	(13) 59
Educational level		
<high school diploma	(3) 15	(4) 18.2
high school diploma>	(9) 45	(10) 45
high school diploma	(8) 40	(8) 36.3

The MMPI-2 is one of the most widely used psychometric instruments. The content

scales of MMPI-2 are composed of items that are related conceptually and statistically to the content areas that they are meant to assess. The interpretation of the MMPI-2 content scales is based on the assumption that participants want to reveal themselves through the test. As such, the subject's responses to content scale items are considered to be a direct source of information about that subject's thoughts and feelings. The Depression Content Scale has a very high test-retest reliability (ranging from 0.87 to 0.94), as well as strong empirical and face validity (55,50). MMPI and MMPI-2 were frequently used as the subjects of studies and the research instruments for a reliable and valid psychometry (56-59). No difference has been found between English and Farsi versions of MMPI-2 (60) and it has presented good psychometric properties (61).

BDI is also a widely used instrument for assessing depression with acceptable reliability and validity (54,62). It prepares a general assessment of depression and makes it possible to quantify its severity. BDI was widely used and evaluated in Iran. Fathi Ashtiani (1995) showed the validity of BDI in discriminating the depressed populations according to the performed researches in Iran. Its test-retest reliability was between 48% and 86%. Its correlations with Hamilton Test and with Zong scale were 73% and 76% respectively. Its assessed Alfa was 87%. Its internal consistency was evaluated to be between 23% and 68% and its splitting reliability using Spirman-Brown method was 81% (63,64).

From 65 patients suitable for the study, 50 were eventually randomized. The remaining 15 patients refused randomization and preferred to choose their treatment. Before the treatments, all the participants were evaluated using the MMPI-2 DEP scale and BDI. After starting the treatments, five patients of the psychotherapy group (N=5; 20%) and three patients of the pharmacotherapy group refused the treatments (N=3; 12%). These between-group differences were not significant (X2=.595; df=1; p=.44). The numbers of patients included in the per protocol analysis (patients actually continued the treatment) were 20 for the psychotherapy group and 22 for the pharmacotherapy group. After 15 weeks, all the participants were assessed using the same instruments.

Psychodynamic psychotherapy includes a wide range of therapy interventions that focus on the different psychodynamic aspects of the affective, behavioral and cognitive factors (14). The new psychoanalytic approaches focus on attachment, object-relations and the self-theory (65). In this research, we concentrated on the punitive superego as a metaphor for particular mental functioning and the oedipal conflicts as the emotional base of depressive symptoms. Our main aim was to uncover the oedipal conflicts. An appropriate choice for such an aim is Davanloo's Intensive Short-Term Dynamic Psychotherapy. One of the aims of this method was to uncover the oedipal feelings (66). Della Selva (67) did modifications on this technique to facilitate this purpose. Hence, the applied method of psychodynamic psychotherapy in this research was the modified form of Davanloo's intensive short-term dynamic psychotherapy according to Della Selva, with the aim of uncovering the oedipal conflicts. The sessions were supervised based on the audiotaped materials. The trained students of M.Sc. degree of clinical psychology did the evaluations, and the researchers did the therapeutic interventions (either psychotherapy or pharmacotherapy).

Pharmacotherapy was carried out using citalopram 40 mg (mean daily dosage). Patients had fortnightly appointments with psychiatrists. Fifteen weekly sessions were determined as the total length of the psychotherapy in this research. The time of psychotherapy might change according to the psychodynamic approach and the patient's mental state. However, this time was appropriate for pharmacotherapy to show its effects.

ANCOVA analyses were used to test inter-group differences including differences in baseline parameters as co-variants. Pearson Chi-square calculations were used to compare the dropout rates. Data-analyses were performed on the sample, which consisted of all patients who actually started and finished the treatments. Efficacy was defined as the inter-group differences at first and last

sessions and was expressed in terms of differences in mean scores. Dropout was defined as stopping medication intake or changing the doctors in the pharmacotherapy group, while it was defined as discontinuing the treatment, cancelling or irregularity in the appointments in the psychotherapy group.

Results

Table 2 presents the analysis of covariance to compare the effects of the treatments on participants' depressive symptoms. The independent variables were the treatments and the dependent variables were BDI scores and MMPI-2 DEP scale, administered after the specified period of time for the treatments. The participants' scores in the pretests were used as the covariate in this analysis. Preliminary checks were conducted to ensure that there was no violation of the assumptions of normality, linearity, homogeneity of variances and homogeneity of regression slopes. After adjusting for pretest scores, there was no significant difference between the two groups in BDI posttest, F (1,39) = .43, p=.837, eta square=.002 and the posttest of MMPI-2 DEP scale, F (1,39) = 2.532, p=.123, eta square= .083. There was not a strong relationship between the pretest and posttest scores on both the scales, as indicated by the eta-squared values.

Discussion

The history of depression is possibly as long as human history. Likewise, there has always been a need for documented therapeutic methods. This study compared the effects of psychoanalytic psychotherapy and pharmacotherapy in the treatment of patients with major depressive episodes. Our psychotherapy choice was focused psychoanalytic therapy because the efficacy of these methods seemed to be overlooked by many of clinicians and our major focus was on the superego and the oedipal conflicts to pay a special attention to etiological concepts of depression. Our comparison group was pharmacotherapy because it is among the first-line treatments for depression (68). It seems that mono-therapy is more helpful for exploring the effects of treatments. The outcome instruments did not detect between-group differences. There was not a significant difference between the MMPI-2 DEP scores and BDI scores of subjects in the comparison groups after controlling pre-scores. Even though this study was short to show full potentials of psychodynamic psychotherapy, a relation has been supported between early response to therapy and eventual therapeutic outcome (14,69,70).

Our findings generally agree with the idea that psychodynamic psychotherapy is effective in reducing depression in outpatients with mild to moderate severity (17-19,71,72). Accordingly, the results present assumptions of a similar value for psychodynamic psychotherapy of depression with SSRIs.

In our study, the results were as significant as they were expected. However, both of groups had problems in rates of remission according to the dropout rate (5 and 3 from psychoanalytic therapy and pharmacotherapy groups respectively). The subjects who leave a therapy could not probably be helped through it. It can make hesitant the generalizability of the conclusions. It was not possible for us to classify the subjects according to their demographic conditions or symptoms because of their low frequency. The necessity of adapting to the therapeutic situation for the clients may be important for an appropriate course of therapy. However, its problems may come from factors such as interactions among the therapeutic strategies, reciprocities of personality traits and types of mental disorders.

Table 2. Descriptive statistics of pretest and posttest of both groups and Analysis of Covariance of the effects of the therapies on the depression scales

	Psychotherapy				Pharmacotherapy					
	Pretest		Posttest		Pretest		Posttest			
Variable	M	SD	M	SD	M	SD	M	SD	F	$\eta 2$
MMPI-2 DEP scale	80.73	6.86	58.6	16.2	84.06	8.87	57.87	15.67	2.532	.083
Pretest									.214	.008
BDI	30.27	8.19	13.13	8.42	34.44	10.36	13.44	9.67	.43	.002
Pretest									1.79	.06

It is not possible to speak about psychodynamic psychotherapy without referring to its view on the etiology. The results may encourage us to discuss some etiological assumptions about depression from a psychoanalytic view. It is not methodologically reasonable to conclude the etiology of the mental disorders or the truth of the psychodynamic concepts from treatment. However, it is reasonable to speak about some psychotherapy concepts from this approach. Psychopathology concepts point to etiological factors and psychotherapy concepts refer to ideas which are applied for therapeutic purposes (and do not necessarily discriminate etiology). Hence, we can conclude some causality legitimately between the therapeutic tasks and symptom remission. In other words, we may be able to conclude useful psychotherapy concepts which may modulate changes in the patients' psychopathology. There are a number of documented psychotherapy concepts for depression in various approaches (73-79).

Our study had some shortcomings in the low sample size, low therapists' number, lack of a follow up of the treatment outcomes and few comparison groups. We had also limitations, in this research, on restricting the treatment to single therapy methods and the control group. First, it is not ethical to restrict the patients to a single treatment for a long time, especially for the patients who do not respond conveniently. Second, even though there is no longitudinal assessment for validating the achieved results, evidence shows that early response is related to the maintenance of treatment gains (70,71). Third, in spite of the importance of a control group, we saw it unethical to postpone the treatment of a group of patients. Therefore, this study had only two comparing groups.

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