

## Original Research

# Investigating the Effect of Family Therapy on Depression and Job Burnout of Divorced Nurses

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### Abstract

**Background:** The purpose of this study is to investigate the effect of family therapy on depression and job burnout of divorced nurses.

**Method:** The statistical population includes all divorced nurses in Tehran hospitals, 30 nurses were selected by the available random method and 15 people were in the experimental group and 15 people were in the control group. The research design was pre-test-post-test with a control group. The research sample responded to the research tools including Mezlach's burnout questionnaire (1981) and Lavibond and Lavibond's (1995) depression, anxiety and stress questionnaire. Analysis of covariance (MANCOVA) method was used to analyze the data.

**Results:** The results of data analysis showed that family therapy reduced depression and job burnout among divorced nurses in the experimental group compared to the control group.

**Conclusion:** In this research, it was found that family therapy is effective in reducing depression and job burnout of divorced nurses by changing vulnerable thoughts and beliefs about family support.

**Keywords:** Family Therapy, Burnout, Depression, Nurses.

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## Introduction

Divorce is a stressful phenomenon that doubles the vulnerability of people, especially women, with physical and psychological problems. One of the emotional consequences of divorce that affects divorced women is depression. Depression is the most common mood and emotional disorder and the biggest mental illness of this century (1). In simpler words, it is a psychological-biological reaction against the pressures and stresses of life. Such a reaction in mood disorder is not limited to a specific time and place and can appear at any time and place and for any person in any situation (2). In fact, a person's mood is the result of a set of emotional reactions in a specific situation and a certain time, in other words, mood is an underlying emotional field that is full of instinctive emotional tendencies and mental states are gives both pleasant and unpleasant feelings for humans. It oscillates between the two poles of pleasure and pain. A noticeable change with a deviation from the normal and balanced state of mood can be characterized as sadness (3).

If sadness exceeds the normal limit or if it appears as a significant disorder in a specific situation, it can turn into a depressed mood (4). Depression can be seen in any way, it defines the way a person sees himself, others and the world. Depression weakens judgment and causes irrational behavior. In each of the cases, the person cannot have a normal daily life (5). Depression can cause a person to suffer from other physical and mental disorders. Among these disorders that can have a significant impact on the work activities of divorced nurses is burnout. Job burnout is a state of physical, emotional and mental fatigue that is created as a result of direct and long-term contact with people in emotionally exhausting conditions (6). The most common definition of job burnout is physical, mental and mental fatigue caused by long-term work in mentally exhausting conditions (7).

Today, burnout is a product of long-term stress at work and one of the main factors in reducing the efficiency and loss of human resources of employees, which is a problem in all systems. Job burnout has a set of emotional, behavioral, psychophysical and organizational signs and symptoms (8). In the attitudinal dimension,

negative attitudes such as fault-finding, blaming, and lack of empathy towards the patient appear, and the person gradually feels low job value, mistrust of work and colleagues, and negligence. Behavioral symptoms include reduced job performance, limited social and recreational activities, and increased interpersonal problems and high-risk behaviors such as drug abuse, alcohol, and smoking. In the emotional dimension, it causes symptoms such as using insincere ways with the patient, feelings of helplessness, job dissatisfaction and depression (9).

Job burnout is an accumulated and long-term response to current and chronic job stress; Hence, it is almost stable and continuous. This has become an important issue in health, health and medical organizations around the world, because it affects the health and safety of nurses and their job satisfaction and performance, and on the other hand, it is considered a risk to the health of patients and clients (10). From the point of view of experts, many physical and mental disorders can be cured with the support of the family. For this purpose, in this research, the effect of family therapy on depression and job burnout of divorced nurses is investigated.

In fact, a kind of emotional system governs the family structure, which can be transmitted between generations, and a person's mental health depends on the degree of separation and separation from this system (11). Considering the age of this approach and the fact that this method of therapy deals with issues such as family structure, coalitions in the family, family subsystems and boundaries, and it is a comprehensive and complete method in clarifying these issues in the family; It leads the therapist from the first therapeutic movements, which are the explanation of therapeutic goals, to certain final movements during the effective functioning of the family (12). Therapists use family therapy with the aim of helping to improve the interaction of people, for this reason, they do not separate the client from the family, but target and treat the family system with each of its members (13). In their research, Imanian and Niknejadi (2023) investigated the effectiveness of differentiation training based on systemic family therapy on marital burnout and communication patterns. The results of

covariance analysis showed that differentiation training based on systemic family therapy has an effect on marital burnout. Also, the results of covariance analysis showed that differentiation training based on systemic family therapy has an effect on communication patterns among women referring to counseling centers in Najaf Abad city (14).

Sabzevari et al. (2023) presented a research titled comparing the effectiveness of Boen's family-centered approach and Minuchin's structural family therapy on improving communication patterns and marital conflicts of women suffering from emotional divorce. There is a significant difference between the effectiveness of the two experimental groups (Boen and Minuchin) on the communication patterns of women with emotional divorce, and comparing the averages indicated that Minuchin's structural family therapy works better; And there is no significant difference between the effectiveness of the two experimental groups (Boen and Minuchin) on the marital conflicts of women with emotional divorce, and only in the dimension of reducing communication with relatives, Minuchin's structural approach was more effective. Conclusion: Bowen and Minuchin's therapeutic approach can be beneficial in reducing the amount of marital conflicts and improving the communication pattern of women with emotional divorce, and subsequently, reduce emotional divorce and increase marital compatibility (15).

Guderzi et al. (2020) in a research compared the effectiveness of the family therapy program based on attachment and emotion on the depression of gifted teenagers. The results of analysis of variance with repeated measurement showed that the depression post-test scores of the attachment-based family therapy group were significantly lower than the emotion-based family therapy group. Also, a pairwise comparison showed that the effect of the attachment-based family therapy program on depression is stable (16).

The results of Barnes et al.'s research (2018) show that the lower the level of job burnout, the more efficient teachers (17).

Kenneth et al. (2017) investigated the effect of stress arousal and burnout as mediators of negative relationships between stressors and

job outcomes (satisfaction, performance and turnover goals) and concluded that stressors mediate Stress arousal and individual burnout dimensions have a negative effect on job results (18).

### Method

In this research, a quasi-experimental research method (pre-test and post-test design with an equal control group) was used. The statistical population includes all divorced nurses in Tehran hospitals, 30 nurses were selected by available randomly method and 15 people were placed in experimental and 15 people were placed in control groups.

In this study, two questionnaires were used to collect information as follows:

- Depression Anxiety Stress Scales (DASS-21): This instrument was prepared in 1995 by Lavibond and Lavibond. This scale "anxiety", "depression" and "stress" has two forms. The short form has 21 items that evaluate each of the psychological constructs by 7 different expressions. There are 4 options to answer. The range of responses varies from never to always. Scoring is from 0 to 3. Lavibond and Lavibond (1995) in order to evaluate the psychometric properties of this scale, implemented it on a non-clinical sample of 2914 people. The reliability of this scale was obtained by Cronbach's alpha for depression, anxiety and stress subscales at an acceptable level of 84%, 84% and 91% respectively. The validity of the depression, anxiety and stress scales using correlation with the scores of the tests that were administered at the same time was equal to 78%, 62% and 72%, respectively. In the study of Afzali et al. (2007), Cronbach's alpha calculated for anxiety scale was 98%, depression scale was 84% and stress was 93% (19). In this study, Cronbach's alpha coefficient was 0.76.

- Mezlach's job burnout questionnaire (1981): this questionnaire includes 4 subcategories of emotional exhaustion, depersonalization, sense of personal sufficiency and conflict. For grading each question, 2 grades are considered, the frequency grade and the intensity grade so that each person gets a score from 1 to 6 in frequency and from 1 to 7 in intensity. Finally, according to the questions, each subtest is calculated separately (20). The Cronbach's

alpha coefficient of the questionnaire in the present study was 0.79.

In this project, the studied nurses were selected through available sampling and voluntarily replaced in the experimental and control groups. Also, before the implementation of family therapy, divorced nurses selected in both groups were measured by a pre-test of depression and job burnout. The role of the pre-test in this plan was to control and compare the depression and burnout of the experimental and control groups in the pre-test and post-test. After the family therapy sessions on the experimental group, a post-test was taken from both groups and as a result, it was determined whether there were changes in depression and burnout caused by the family therapy sessions in the studied divorced nurses.

In order to analyze the research data, descriptive and inferential statistical methods have been used.

### Results

The descriptive statistics of the research are as follows:

As can be seen, for the depression of divorced nurses in the pre-test stage, the mean and standard deviation in the experimental group were 19.24 and 2.34; in the control group 20 and 1.64 and in the post-test stage for the experimental group 11.04, 2.35 and for the control group 20.51, 1.41; for emotional fatigue in the pre-test stage for the experimental and control groups, respectively 18.37, 1.71 and 16.77, 2.35 and in the post-test stage for the experimental and control groups, respectively, 10.57, 1.66 and 11.18, 2.06; for depersonalization in the pre-test stage for the experimental group 18.57, 1.66; for the control group 16.56, 2.46 and in the post-test stage for the experimental group 10.44, 1.50 and for the control group 19, 2.23; For the need of personal inadequacy in the pre-test stage in the experimental and control groups, 19.37, 1.15 and 17.36, 1.63 respectively and in the post-test stage in the experimental and control groups, respectively, 11.31, 1.31, and 1.37, and finally for high involvement in the pre-test stage, 18.11, 2.05 for the experimental group, and 2.57 for the control group. 17, 2.10 and in the post-test stage, 11.37, 1.31 and 18.17, 1.39 were obtained for the experimental and control groups, respectively.

Multivariate analysis of covariance (MANCOVA) method was used to check the research hypotheses, and the results are presented in the following tables.

The first hypothesis of the research indicated that "family therapy is effective on the depression of divorced nurses".

The second hypothesis of the research indicates that "family therapy is effective on job burnout of divorced nurses".

As it is known, with the pre-test control of the significant levels of all the tests, they indicate that there is a significant difference between the nurses of the experimental and control groups at least in terms of one of the dependent variables (depression and burnout) ( $F = 519.71$  and  $p < 0.001$ ). In order to find out in terms of which variable there is a difference between the two groups, two one-way analysis of covariance was performed in MANCOVA's text, and the results are presented in Table 4. The effect or difference is equal to 0.93. In other words, 93% of the individual differences in post-test depression and job burnout scores of divorced nurses are related to the effect of family therapy. Statistical power is equal to 1, in other words, there was no possibility of second type error.

As it is known, with the pre-test control, there is a significant difference between the nurses of the experimental group and the control group in terms of depression ( $p < 0.001$  and  $F = 138.98$ ). In other words, according to the mean of depression of the nurses in the experimental group compared to the mean of the control group, family therapy has reduced the depression of the experimental group. The effect or difference is equal to 0.85. In other words, 85% of the individual differences in depression post-test scores are related to the effect of family therapy. Therefore, the first research hypothesis is confirmed.

As shown in Table 3, with the pre-test control between the nurses of the experimental group and the control group in terms of emotional exhaustion ( $p < 0.001$  and  $F = 68.10$ ), depersonalization ( $p < 0.001$  and  $F = 78.47$ ), personal inadequacy ( $p < 0.001$  and  $F = 137.22$ ) and high involvement ( $p < 0.001$  and  $F = 149.83$ ) have a significant difference. In other words, according to the average burnout of the nurses in the experimental group, family therapy has

reduced the burnout of the experimental group compared to the average of the control group. The amount of effects or differences shows that the individual differences in the scores after the clay test are related to the effect of family therapy. Therefore, the second research hypothesis is confirmed.

### **Discussion**

The purpose of this study is to investigate family therapy on depression and job burnout of divorced nurses. The results of the research are presented as follows:

The main hypothesis of the research on the effect of family therapy on depression and job burnout of divorced nurses showed that the main hypothesis was confirmed at the level of 0.001, and there is a significant difference between the nurses of the experimental and control groups in terms of one of the dependent variables (depression and job burnout) and the effect or difference was equal to 0.93, which showed that 93% of individual differences in depression post-test scores. And job burnout of divorced nurses is related to the effect of family therapy.

The first hypothesis of the research indicated that "family therapy is effective on the depression of divorced nurses".

According to the results, there is a significant difference between the nurses of the experimental group and the control group in terms of depression with pre-test control. In other words, according to the mean of depression of the experimental group nurses, compared to the mean of the control group, family therapy reduced the depression of the experimental group. Therefore, the first research hypothesis was confirmed.

The second hypothesis of the research indicated that "family therapy is effective on job burnout of divorced nurses".

According to the results, with the pre-test control, there is a significant difference between the nurses of the experimental group and the control group in terms of emotional exhaustion, depersonalization, personal inadequacy and high involvement. In other words, family therapy reduced the burnout of the experimental group nurses with respect to the average burnout of the experimental group nurses compared to the average of the control

group. Therefore, the second research hypothesis was confirmed.

### **Conclusion**

Divorced nurses have high depression in dealing with life problems due to psychological challenges and stressful conditions. They are emotionally restless and have depression and despair. In this research, it was found that family therapy reduces the depression of this group of nurses. Family therapy changes the patient's perceptions and mental experiences by changing the relationship between the person and the familiar environment in which the person works. Therefore, family therapy in divorced nurses, because it causes the cessation of the unbalanced pattern of uncertain beliefs and the beginning of new beliefs and attitudes in effective communication between people, makes people have more ability to control depression.

Divorced nurses with job burnout have incompatible and negative beliefs about their personal and social life due to the deterioration of their mental state and complete lack of mental coherence. Based on this, their feeling of not being accepted and supported by the family is activated and processed in problematic situations. But in this research, it was found that family therapy is effective in reducing the job burnout of divorced nurses by changing the vulnerable thoughts and beliefs of the family.

Among the limitations of the research, we can point out the problems encountered in providing the correct information and data needed to use the questionnaire. It is suggested that this therapeutic approach be used in other disorders such as hope and concentration to ensure the generalization of the results.

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### **Authors Contributions**

The author contributed to the data analysis. Drafting, revising and approving the article, responsible for all aspects of this work.

### **Ethical Consideration**

None

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dimensions of teacher-student interaction in students' happiness, Thought and Child, 14(1).

## Tables

**Table 1.** Mean and standard deviation of depression and burnout scores of the experimental and control groups in the pre-test stage.

Variable	Stage	Statistical index	mean	standard deviation	Number
		group			
depression	Pre-test	experiment	19.24	2.34	15
		Control	20	1.64	15
	Post-test	experiment	11.04	2.35	15
		Control	20.51	1.41	15
emotional exhaustion	Pre-test	experiment	18.37	1.71	15
		Control	16.77	2.35	15
	Post-test	experiment	10.57	1.66	15
		Control	18.11	2.06	15
depersonalization	Pre-test	experiment	18.57	1.66	15
		Control	16.56	2.46	15
	Post-test	experiment	10.44	1.50	15
		Control	19	2.23	15
Personal inadequacy	Pre-test	experiment	19.37	1.15	15
		Control	17.36	1.63	15
	Post-test	experiment	11.31	1.31	15
		Control	19	1.37	15
High conflict	Pre-test	experiment	18.11	2.05	15
		Control	17.57	2.10	15
	Post-test	experiment	11.37	1.31	15
		Control	18.17	1.39	15

**Table 2.** The results of multivariate covariance analysis on the mean post-test depression and burnout scores of the experimental and control groups with pre-test control.

title of exam	amount	The DF of hypothesis	The DF of error	F	P	Effect size	Statistical power
Pillai effect test	0.93	6	17	519.71	0.001	0.93	1
Lambda-Wilks test	0.05	6	17	519.71	0.001	0.93	1
Hotelling effect test	18.55	6	17	519.71	0.001	0.93	1
The largest root test	18.55	6	17	519.71	0.001	0.93	1

**Table 3.** The results of one-way analysis of covariance in the MANCOVA's text on the mean depression and burnout scores of the experimental and control groups with pre-test control.

Variable	sum of squares	DF	mean square	F	P	Effect size	Statistical power
depression	401.69	1	401.69	138.98	0.001	0.85	1
emotional exhaustion	261.88	1	261.88	68.10	0.001	0.74	1
depersonalization	296.27	1	296.27	78.47	0.001	0.77	1
Personal inadequacy	230.43	1	230.43	137.22	0.001	0.85	1
High conflict	248.19	1	248.19	149.83	0.001	0.86	1