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COGNITIVE-BEHAVIORAL THERAPY EFFECTS OF FAMILY IN TREATMENT OF POSTPARTUM DEPRESSION: CASE STUDY

Siyamak Tahmasebi¹, Nahid Hoseyninezhad², Javad Bijani³, Kave Rostami⁴ and *Mansoureh Karimzadeh¹

¹*Department of Preschool Education, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran*

²*Department of Psychology Faculty of Educational Psychology in family counseling, Tehran University, Tehran, Iran*

³*Department of Psychology Faculty of Educational Psychology in Family Counseling, Allameh Tabatabaee'i University, Tehran, Iran*

⁴*Department of Psychology, Faculty of Educational Psychology, History and Philosophy of Educational, Allameh Tabatabaee'i University, Tehran, Iran*

**Author for Correspondence*

ABSTRACT

Depression during pregnancy and after childbirth is always considered to be one of the biggest threats to mother's health. Hence diagnosis and proper therapy in this case is of significant importance. The prepared study aims to examine the effectiveness of cognitive behavioral family therapy in postpartum depression. Thus, using a single-subject design (Type A-B) the subject of study who had thirty eight years old was diagnosed to suffer from depression throughout clinical interviews and diagnostic tests. The subject received cognitive behavioral family therapy. The results confirmed the effectiveness and practicality of the above-mentioned therapy on postpartum depression by teaching the subject techniques such as solving problem, optimism, cognitive restructuring and stress relieving.

Keyword: *Childbirth, Depression, Family Therapy, Cognitive-Behavioral Therapy*

INTRODUCTION

Depression during pregnancy and after childbirth is always considered to be one of the biggest threats to mother's health which also affects the family member. Hence diagnosis and proper therapy in this case is of significant importance (O'Hara, 1995). According to the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders criteria (DSM-IV), postpartum depression is considered as main depressive disorder which the symptoms include depressed mood during a day, marked decline in interest in all or almost all activities, Significant weight loss or gain and decrease or increase in appetite, insomnia or sleeping too much, psychological-moving disorder or dullness, exhaustion or lack of energy, feelings of worthlessness or excessive guilt, decreased ability to think and concentrate, frequent thoughts of death. In order to diagnose depression, there must be five or more symptoms within a two-week period which begins four weeks after childbirth (American Psychiatric Association, 2004).

However, it seems that this period is not sufficient for many doctors and psychotherapists and it requires more than four weeks from the first year after childbirth to diagnose postpartum depression. Even many experts have expanded the treatment period to two years after childbirth (Kleiman, 2009). The bio-psycho-social model which was developed by Migrom *et al.*, (1999) to understand the postpartum depression, it suggests that the nature of postpartum depression is influenced by several factors: Biological factors (genetic effects, mood changes associated with hormones), psychological factors (experiences of origin family, ways of coping with stress, defense mechanism) and social factors (marital roles and cultural expectations).

Furthermore, recent studies have shown that postpartum depression experience or anxiety during pregnancy, previous experience of depression, a stressful event in pas and low social support are considered among the factors predicting postpartum depression symptoms (Nusrat *et al.*, 2012). The rate of postpartum depression prevalence is 21.9 percent in the first year after childbirth (Miler, 2001; quoted

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by Jamshidi *et al.*, 2013). At least 33 percent of women who have had postpartum depression might have the mentioned symptoms in their following childbirths (Epperson, 1999). Women who have stress during pregnancy are more vulnerable to postpartum depression (Moline *et al.*, 2001). Negative life events (for example serious illness of a family member or unemployment) increase depression during pregnancy or after childbirth.

They are also related to the high levels of postpartum depression (O'Hara *et al.*, 1982). It is estimated that 50 percent of women who experience postpartum depression are remained unknown (Ramsay, 1993 quoted by Keiliman, 2009). Postpartum depression can be relieved or reduced during the first six months (O'Hara, 1987) in which early detection and treatment is associated with better recovery (Kennedy *et al.*, 2002; Campagne, 2004).

Various types of therapies such as supporting, psychotherapy, cognitive-behavioral and interpersonal therapy are effective in postpartum depression treatment. Among the above mentioned methods, cognitive-behavioral and interpersonal therapies are two types that are more tied to postpartum depression treatment. Interpersonal psychotherapy treatment is structured for short-term. The base of this approach is that the problems in relationships may increase the disorder condition. Therapist and authorities initially consider four areas of the problem; Role transitions, interpersonal conflicts, grief, failure in interpersonal relationships.

This kind of treatment is helpful through training how to communicate effectively with others, emotional support, problem solving and goal setting when people are dealing with role transition and other stressors (Keliman, 2009). Kellerman and Wissmann (1991) studies on 150 patients with depression in 8 months indicated that the mentioned treatment improves social and interpersonal relationships in addition to the treatment of depression despite medicinal drugs, however it had little effect on signal return (Procheska and Noverkras, 2007).

Cognitive-behavioral therapy seeks depressive mood causes in negative thoughts and behaviors. The assumption that negative perceptions would decrease self-confidence, energy, motivation and increase stress levels is considered important in regard with women having postpartum depression (Keliman, 2009).

Appleby *et al.*, (1997) studies indicated that cognitive-behavioral therapy significantly decreases the postpartum depression symptoms. Furthermore, Kalijpers *et al.*, (2008) Beld Sou, grout, (2006) studies showed that according to the reports, cognitive-behavioral therapy is the most effective method to decrease postpartum depression among all the methods (quoted by Kaani *et al.*, 2013). Postpartum depression treatment must not restrict to mothers; concentration on family prepares a better condition to monitor the relationships and ensure the proper functioning. The quality and stable relationship of a woman with her husband is related with severity of the postpartum depression (Keliman, 2009). Research in this field also supports this; Lack of social support is related with severity of the postpartum depression.

Women who suffer the postpartum depression feel unable to speak openly about their problems with their husbands (O'Hara, 1986). On the other hand, they have negative feelings toward their husbands as well as inappropriate relationships with them (Paykel *et al.*, 1980). If the husbands experience a lot of stress in their business environment, their wives depression inserts additional pressure on them, causing their hatred of the condition (Zelkowitz and Milet, 1997). Spouses of depressed women often suffer from depression. In the case that postpartum depression is not decreased, it may lead to divorce or separation (Aysmin and Sadok, 2005, quoted by Bakhtiari and Abedi, 2012). According to research, it is clear that the partner has a central role in the study on postpartum depression in mothers (Keliman, 2009). Cognitive-behavioral approach focuses on Family interaction modes in the field of family therapy and considers the family relationships, cognitions, emotions, and behaviors in a way that have mutual influence on each other (Kouri, 2011). Consequently, a family member behavior causes cognitive behavior and emotions of other family members which this in turn leads to emotional and cognitive reactive behavior of that individual person (Nicole and Schwartz, 2012). According the importance of postpartum depression treatment in women and the effectiveness evaluation of psychological therapy in

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the treatment of mentioned disorder, the prepared research aims to study the cognitive behavioral therapy effects of family in the treatment of postpartum depression.

MATERIALS AND METHODS

The prepared research methodology is a description of single-subject design and to be more precise, it is described in A-B type. In this regard, a person who suffers from postpartum depression was chosen as a case study and treated through cognitive-behavior therapy method. The subject participated in 11 family therapy sessions for 1 hour once a week based on cognitive-behavior methods. Training problem-solving skills, positive thinking, cognitive restructuring, relaxation and communication were discussed in the sessions. In order to assess the intervention effects on subject, two kinds of tests were applied.

Research Tools

Minnesota Multifaceted Personality Inventory (MMPI): this test is the most popular personality questionnaire which has been developed as an objective tool for diagnosing mental disorders. This test includes three validity scales (F, L and K scale) and ten clinical scales which have been developed to detect mental disorders (Sharifi, 2011). MMPI test has both short and long form which the short form has been applied in the prepared research including 71 questions in a form of “True” or “False”. After answering all the questions, the psychological profile of the subject is drawn and interpreted (Gras, 1997). Ekhnat and Daneshmand (1996) evaluated the reliability of 71 questions in MMPI short form by using the Alpha Cronbach Coefficient calculation, reporting Alpha coefficient equal to 87% for the whole test. Shepard *et al.*, (1998) considered MMPI test validity, reporting it as a desirable one (quoted by Khodayarifard *et al.*, 2006).

SCL_90_R Test: 0 questions of this test covers 9 different aspects of somatization, obsession and compulsion, sensitivity in reciprocal relations, depression, anxiety, aggression, phobic anxiety, paranoid ideation, and psychoticism. Scoring and interpreting are done in accordance with three indicators of illness signs (GSI), discomfort index criteria (PSDI) and total illness signs (PST). At the 0/4 cutting point, the reliability coefficient is 0/97 and the sensitivity, specificity and efficacy are respectively as 0/94, 0/98 and 0/96 (Bagheri *et al.*, 1994).

Edinburgh Postnatal Depression Scale (EPDS): this is a self-test with 10 questions for considered for mothers suffering from postpartum depression which has been developed and validated by Cox *et al.*, in 1987. Questions measure the severity of depression during pregnancy and after childbirth in 4 degrees Likert scales (from zero to 3). The minimum and maximum scores will be considered respectively zero and 30 for the participant. Reliability and validity of this scale was evaluated by five health centers in Kerman through an study including 600 mothers after their childbirth, reporting 83% Alpha Cronbach Coefficient and 95/3 % specificity for it (Mazhari, and Nakhaee, 2004).

RESULTS AND DISCUSSION

Research Findings

Subject Characteristics

The subject is a 38 years old woman who is housewife, last child and the only daughter for his parents. Both the man and woman have bachelor's degrees. They have two daughters; the older one is aged 11 years old and the other is aged 1 year and two months. The subject has talked about the problems in the first session; his husband apathy to her and sense of distrust to him, interest in activities outside the home, unwillingness to stay at home, lack of her husband understanding of her, believing in secrecy of her husband. The subject has also suffered from postpartum depression after her first childbirth.

Diagrams 1 and 2 show the psychological profiles of participant subject in accordance with MMPI and SCL-90-R tests before and after consultation process. The psychological profile in diagram 1 shows K, L and f scales with high scores, indicating that the subject was eager to show her condition worse than the reality. Furthermore, high scores in D and Pt scales respectively show the subject depression and mental weakness. Dotted lines in diagram 1 also show that the mental state of the subject is close to the normal condition.

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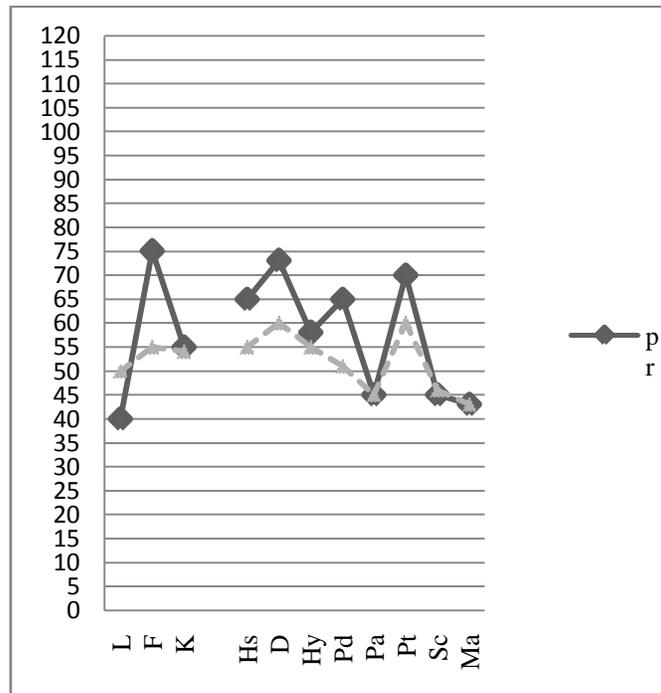


Diagram 1: Psychological profile of participant subject in MMPI test before and after intervention methods (A and B levels)

Based on what can be seen in diagram 2, the scores in sensitivity of mutual relationships, depression and anxiety are respectively as 16, 24 and 17, indicating that the subject suffers from depression, feeling inferiority and inadequacy followed by anxiety while the rate of scores are significantly decreased after participating in counseling sessions.

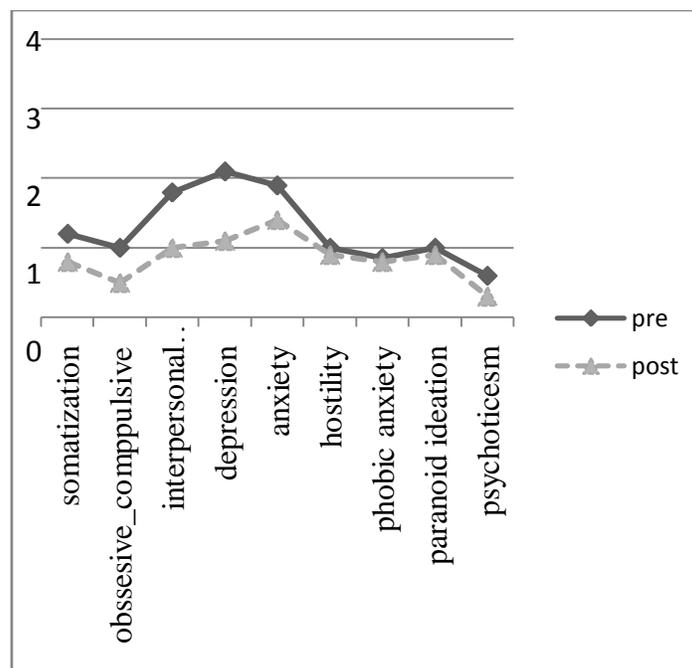


Diagram 2: Psychological profile of participant subject in SCL_90-R test before and after intervention methods (A and B levels)

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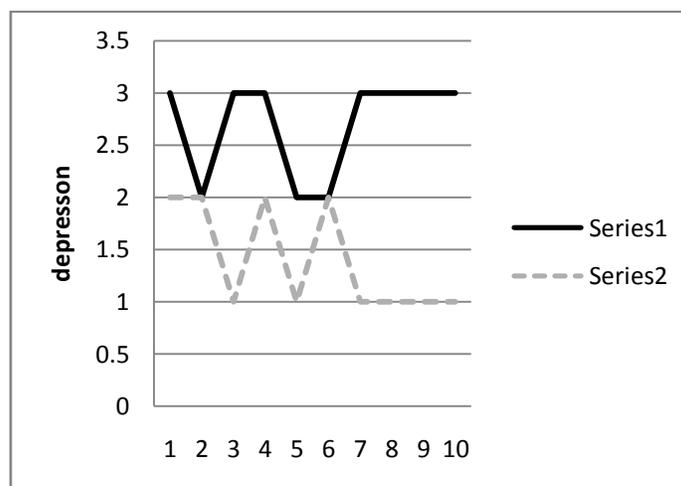


Diagram 3: Psychological profile of participant subject in EPDS test before and after intervention methods (A and B levels)

Psychological profiles of participant subject in SCL-90-R, MMPI and postpartum depression tests before and after counseling sessions show that family members are effective in cognitive-behavioral therapy for postpartum depression and mental disorders treatment.

Discussion and Conclusion

The prepared research aimed to study cognitive-behavioral therapy effects of family in treatment of postpartum depression on a participant subject who was suffering from postpartum depression. The research findings represent the positive effects of family therapy in treatment of postpartum depression on the basis of cognitive-behavioral therapy.

The research findings are corresponded to Pedram *et al.*, (2010), Habibi *et al.*, (2013) studies. Asarno *et al.*, (2001) also have reported the family therapy effects, putting emphasis on cognitive-behavioral therapy effects on postpartum depression treatment. The prepared study puts emphasis on training the problem solving skills and its effect on the improvement of family member relationships (quoted by Parand and Khodayarifard, 2005). Ranjbar *et al.*, (2009) studied the effect of cognitive-behavioral therapy on postpartum depression treatment in a grouping method, reporting that cognitive-behavioral therapy in group form is effective in decreasing depression in patients with mild depression. Dehghani *et al.*, (2009) studied the cognitive-behavioral therapy of stress management on anxiety and depression in women with alopecia areata disorder. The research findings showed that cognitive-behavioral therapy of stress management is effective in decreasing anxiety and depression in them. The studies also show that recurrence of disease is low in participants who are under cognitive-behavioral therapy compared with patients who have received antidepressant medication. They show fewer symptoms of depression and anxiety as well as more cognitive therapy lasting effect (De Rubis *et al.*, 2005; Halen *et al.*, 2005; Halen, and Astrng, 2006; quoted by Shaw, the translation professor of Firoozbakht, 2011).

Sanders and Mcfarland (2000) studied the effects of cognitive and behavioral interventions of family on depressed mothers which the results indicated the improvement in both approaches, showing more effects of cognitive behavior therapy compared with family therapy within Six-month follow-up. Probably, one of the reasons for the success of family therapy based on cognitive-behavioral techniques in the treatment of mental disorders is mainly because of the interpersonal problems of the participant subject including problems with spouse, parents, siblings, etc. Thus, family therapy helps people by solving interpersonal conflicts through techniques such as problem-solving skills, effective communication skills, assertiveness, effective coping skills, positive thinking, and cognitive reconstruction not only to deal with problems in an efficient and appropriate manner, but also prevent any other social problem (Khodayari *et al.*, 2006).

Thus, the obtained results increase our understanding of the cognitive-behavioral therapy effects of family on postpartum depression treatment. However, it should be noted that although the research represent a

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more a more comprehensive understanding of the mentioned disorder treatment, it is necessary to have further research to compare the effectiveness of other therapies in Iranian women postpartum depression treatments, suggesting to be considered through future studies. It is also suggested to study the familial, physiological, cultural and interpersonal factors examined the incidence of postpartum depression which affect the incidence of postpartum depression

REFERENCES

- American Psychiatric Association (2004).** *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (Washington, DC: Author).
- Appleby L, Warner R, Whitton A and Faragher B (1997).** A controlled study of fluoxetine and cognitive-behavioral counseling in the treatment of postnatal depression. *British Medical Journal* **314** 932–936.
- Bagheri Yazdi A, Bolhari J and Shah Mohammad D (1994).** Epidemiology of Rural Mental Disorders in Meibod village of Yazd city. *Iranian Journal of Psychiatry and Clinical Psychology* **1**(10) 32-42.
- Bakhtiari A and Abedi A (2012).** The effectiveness of group treatment based on metacognitive model of mind and awareness dismissal on postpartum depression. *Journal of Applied Psychology* **6**(2) 24-9.
- Beck AT, Rush AJ, Shaw BF and Emery G (1979).** *Cognitive Therapy of Depression* (New York: Guilford).
- Campagne DM (2004).** The obstetrician and depression during pregnancy. *European Journal of Obstetrics, Gynecology and Reproductive Biology* **116** 125–130.
- Corey Gerald (2011).** *Theory of Therapy Period*, Seyyed Yahya Mohammadi (Tehran: Arasbaran).
- Dehghani F, Neshat Doust H, Maulvi T Hussain, Nil Forosh Zadeh H and Muhammad A (2009).** The effectiveness of stress management in cognitive-behavioral therapy on anxiety and depression of women suffering from Alopecia areata. *Journal of Clinical Psychology* **2** 1-9.
- Epperson CN (1999).** Postpartum major depression: Detection and treatment. *American Family Physician* **59**(8) 2247–2259.
- Gulzar C, Ahmadi A, Asgharnejad S and Gholi Zadeh Z (2013).** The effectiveness of cognitive-behavioral therapy on three dynamic factors of dependency, anger and motherhood conflicts in mothers suffering from postpartum depression. *Journal of Applied Psychology* **7**(2) 41-60.
- Habibi M, Ghanbari Nikzad Khodayi and Ibrahim Ghanbari P (2013).** The effectiveness of stress management in cognitive-behavioral therapy on decreasing anxiety, stress and depression among women supervising households. *Journal of Behavioral Sciences* **11**(3) 166, 175.
- Jamshidi Manesh M, Golian Tehrani S, Hosseini Aghafatemeh, Shams Alizadeh N and Volhani Forouzan (2013).** The effectiveness of training program on prevention of depression after childbirth; A quasi-experimental exam. *Payesh Journal* **12**(6) 619-627.
- Kennedy H, Beck C and Driscoll J (2002).** A light in the fog: Caring for women with postpartum depression. *Journal of Midwifery and Women's Health* **47**(5) 318–330.
- Khodayarifard M and Parand A (2005).** Family therapy based on cognitive-behavioral approach in adolescence depression: Case study. *Psychological Research Journal* **8**(16) 62-83.
- Khodayarifard M, Sadeghi KH and Abedini Y (2006).** Cognitive-behavioral therapy effects of family followed by chiropractic treatment of psychosomatic disorders. *Research on Psychological Health* **1**(1) 5-15.
- Kleiman K (2009).** *Therapy and the Postpartum Woman* (New York: Taylor and Francis).
- Marnat Gary Gras (2005).** *Handbook of Psychological Assessment*, Hasan Pasha Sharifi and Mohammad Nikkhoo (Tehran, Sokhan) **I** 419 and 420 (The original language date, 1997).
- Mazhari S and Nakhaee N (2004).** Validation of the Edinburgh Postnatal Depression Scale in an Iranian mindfulness-based cognitive therapy for patients with active depression and anxiety in primary care. *Journal of BMC Psychiatry* **11**(42) 346-350.
- Milgrom J, Martin P and Negri L (1999).** *Treating Postnatal Depression* (New York: John Wiley and Sons).

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Moline M, Kahn D, Ross R, Altshuler L and Cohen L (2001). *Postpartum Depression: A Guide for Patients and Families* (Expert Consensus Guideline Series).

Nichols P Michael and Shwartz Rychardly (2012). *Family Therapy*, translated by Mohsen Dehghani, Anahita Ganjavi, Farzaneh Najarian, Samaneh Rasouli and Tahmasebi (Tehran, Danjeh) (there is no original language publication date).

Nusrat H, Kennedy C, Meher H, Sarah K, Barbara T and Atif R (2012). Social stress and depression during pregnancy and in the postnatal period in British Pakistani mothers: A cohort study. *Journal of Affective Disorders* **140** 208-276.

O'Hara MW (1986). Social support, life events, and depression during pregnancy and the puerperium. *Archives of General Psychiatry* **43** 569–573.

O'Hara MW (1987). Postpartum blues, depression and psychosis: A review. *Journal of Psychosomatic Obstetrics and Gynecology* **73** 205–227.

O'Hara M (1995). *Postpartum Depression; Cases and Consequences* (New York: spring_ velag).

O'Hara MW, Rehm LP and Campbell SB (1982). Predicting depressive symptomatology: Cognitive-behavioral models and postpartum depression. *Journal of Abnormal Psychology* **91** 457-461.

Paykel ES, Emms EM, Fletcher J and Rassaby ES (1980). Life events and social support in puerperal depression. *British Journal of Psychiatry* **136** 339–346.

Pedram Mohammad, Mohammadi Masood, Masud Naziri, Qasim Ayin Parast Neda (2010). The effectiveness of cognitive-behavioral therapy on anxiety, depression and hope of women suffering from breast cancer; women sociology. *Women and Society* **1**(4, 4) 61-75.

Professor Shaw Karol (2011). *Theories of Counseling and Psychotherapy (Theory, Practice and Research)*, translated by Mehrdad Firoz Bakht (Tehran: Virayesh publication).

Prvchska James and Venvrkras John (2012). *Theories of Psychotherapy*, translated by Seyyed Yahya Muhammadi (Tehran, mental) (published on original language in 2007).

Ranjbar Farahdokht, Ashktorab Tahereh Dadgari Ata (2010). The effectiveness of cognitive-behavioral therapy in a grouping form on depression rate. *Journal of Scientific Research Shahid Sadoughi University of Medical Sciences in Yazd* **18**(4) 299-306.

Sanders MR and McFarland (2000). Treatment of depressed mothers with disruptive children: A controlled evaluation of cognitive behavioral family intervention. *Journal of Behavior Therapy* **31**(1) 82-112.

Sarmad Z, Bazargan A and Hijazi E (2013). *Research Methods in the Behavioral Sciences* (Tehran, Agah Publication).

Sharifi Hassan Pasha (2011). *Psychometric Principles and Psychological Assessment* t (Tehran, Roshd) 349.

Zelkowitz P and Milet T (1997). Stress and support as related to postpartum paternal mental health and perceptions of the infant. *Infant Mental Health Journal* **18**(4) 424–435.