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DOI: 10.4103/jehp.jehp_10_19

# Investigating the relationship between cognitive emotion regulation and the health of pregnant women

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## Abstract:

**INTRODUCTION:** Mental health is one of the focuses of the health assessment of different communities and plays an important role in ensuring the dynamism and efficiency of each community. Pregnancy is one of the most sensitive periods, in which mental health is effective. The mental health of individuals is the result of the interaction of cognitive-emotional ordering strategies and proper evaluation of stressful situations. The aim of this study was to determine the relationship between cognitive emotion regulation and the health of pregnant women.

**MATERIALS AND METHODS:** This is a descriptive and cross-sectional study that was carried out on 200 pregnant women who were covered by Navab, Amir Hamzeh and Motahari centers in Isfahan in 2017 by available sampling method. The instrument was the Beck Depression Inventory, Goldenberg Health, and Emotional Cognitive Order. Finally, the data were analyzed using the SPSS software.

**RESULTS:** The mean age of pregnant mothers participating in the study was  $26.66 \pm 6.09$  years. The results of data analysis showed a significant positive correlation in relation to blaming others and disaster with physical health, blaming others and rumination and catastrophes with anxiety, disaster with social health, blaming others and rumination and catastrophes with depression, and also blaming others and rumination, catastrophizing, and positive re-focusing have a significant positive correlation with total health score.

**CONCLUSION:** Regarding the relationship between mental health and cognitive dysmenorrhea during pregnancy, pregnant women carers can help with pregnant women by conducting educational programs on health promotion and strive to maintain mental health and improve their quality of life. Consequently, they will ensure the mental health of their future children.

## Keywords:

Cognitive emotion regulation, pregnancy, pregnancy health

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Received: 13-01-2019

Accepted: 10-07-2019

## Introduction

Health is one of the concepts that is of particular importance today. Discontinuity and the existence of behavioral disorders in human societies are very evident and abundant in every class and group, and in each group and group, unbalanced individuals. Having psychological balance depends on several factors, most important of which are feeling safe, efficient and valuable, lack of anxiety and depression, high social performance, and physical

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and mental health and well-being. People who have problems with nervous and psychological problems are distressed, depressed, uncertain, inert, and inordinate in themselves. Continuity of these disorders may interfere with personality and problems such as confusion and disturbance of thought and lack of concentration of sensation and decrease the learning ability and disturbance in the performance of the individual.<sup>[1]</sup> Mental health is one of the pillars of the health assessment of various communities and plays an important role in ensuring the dynamism and efficiency of each community.<sup>[2]</sup> One of the most

**How to cite this article:** Ghorbani-Marghmaleki F, Mohebbi-Dehnavi Z, Beigi M. Investigating the relationship between cognitive emotion regulation and the health of pregnant women. *J Edu Health Promot* 2019;8:175.

sensitive groups in society is pregnant women. In the course of pregnancy, biological-chemical changes have a high physiological effect on the body of women. These changes are beyond their control and are the first changes that make them both physically and mentally vulnerable. Pregnancy is associated with significant changes in the mental health and physical health of women, and social performance in pregnant women is lower than the rest of the population.<sup>[3]</sup> Researchers believe that pregnancy, along with a mental health disorder, will increase the risk of developing a child to schizophrenia and emotional disturbances in future and increase the risk of behavioral problems in early childhood.<sup>[4]</sup> On the other hand, the mental health of the pregnant mother has a great influence on the health of the fetus, and the lack of attention to the mother's mental status with the caregiver can be accompanied by stillbirth, a decision to suicide, and the probability of a low birth weight baby.<sup>[2,5]</sup> The effects of these disorders can last for a long time. Hyperactivity and lack of attention in children who have been born with mothers with mental disorders and also decreased intelligence in their children.<sup>[5]</sup> Several physical hazards are always associated with problems with mental health for mothers. Women with low mental health have a high tendency to use alcoholic beverages, drugs during pregnancy, and less willingness to have adequate care during pregnancy.<sup>[1]</sup> Pregnancy, although enjoyable for women, is a period of pride and accompanied by physiological and psychological changes.<sup>[2]</sup> Stressful situations in life, in addition to creating various emotional reactions such as anger, anxiety, and depression, can lead to high-risk behaviors such as alcohol, smoking, and substance abuse. Using an appropriate strategy to deal with the consequences of stress can reduce its effects on mental health and thus lead to better individual adaptation.<sup>[6]</sup> How to evaluate an individual's cognitive system in the face of negative events is very important, and the mental health of individuals is the result of interacting cognitive-emotional ordering strategies and proper assessment of stressful situations.<sup>[7]</sup>

The importance of emotional regulation for maintaining mental health has been confirmed in many studies.<sup>[8]</sup> Emotional regulation involves the use of behavioral and cognitive strategies to change the duration or intensity of an emotional experience, and it has been shown that individuals when confronted with stressful events, use different emotion regulation strategies to modify or modify their emotional experience.<sup>[9,10]</sup> One of the most commonly used strategies is emotional regulation using cognitive strategies. Cognitive or cognitive processes help people adjust their emotions and feelings and not be overwhelmed by the intensity of their emotions. Different strategies for cognitive emotion regulation include self-blame (thinking with the content of blaming and

blaming oneself), acceptance (thinking with the content of acceptance and submission), mental rumination (mental work on emotions and thoughts related to negative events), re-focus positive (thinking about pleasure and joy instead of thinking about a real incident), re-focusing on planning (thinking about steps to overcome or changing a negative event), positive reappraisal (thinking about the aspect positive events or personal promotion), the adoption of views (thoughts about the low importance of the event or the emphasis on its relativity in comparison with other events), catastrophic conception (thinking with the content of horror from the incident), and blaming others (thinking with the content of blaming and blaming others for what happened). Among these nine strategies, maladaptive strategies for cognitive emotion regulation include self-blame, blame for others, mental and catastrophic ruminants, and adaptive strategies for emotion regulation including acceptance, re-focusing on planning, re-focusing, positive reappraisal, and adoption. Some strategies for cognitive emotion regulation play an important role in the mental health of individuals.<sup>[11-14]</sup>

One of the most important health-care behaviors is pregnancy that changes health and lifestyle behaviors. Since all of these changes affect people's perceptions of their health status and their health behaviors, there is also no research on health behaviors and perceived health status in pregnant women in Iran, and given that many women, they will have the experience of pregnancy in their life, it is necessary to identify the various aspects of the life of pregnant women, the state of their health behaviors and their health, and hence that they can make recommendations and interventions on time. The aim of this study was to determine the relationship between cognitive emotion regulation and the health of pregnant mothers.

## Materials and Methods

This is a descriptive and cross-sectional study that was carried out on pregnant women who were referred to Isfahan University of Medical Sciences in 2012. The research population of all pregnant women was covered by Nawab, Amir Hamzeh and Motahari centers. A sample of 200 patients was selected through the available sampling method. Sample size due to the lack of the same study, using G\*Power (G power version 3.1.4, Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009)) software, and according to studies with a confidence level of 95% and a test power of 80%, 187 were calculated. Considering 7% probability of loss of sample, 200 people were calculated. At first, after confirmation of the project, the Research Committee of Isfahan University of Medical Sciences and obtaining necessary permissions to the relevant centers were referred, and after explaining the

method of work and research goals for pregnant women, they were invited to participate in the research. Then, the attendees completed written consent when they had the criteria for entering the study. The criteria for entering the study included: Iranian and Muslim, resident of Isfahan, having physical and mental desire and ability to complete the questionnaires, gestational age >28 weeks, lack of the use of drugs that affect mental health, nonoccurrence of adverse, distressed and or stressful during pregnancy, lack of medical illness (thyroid, diabetes, blood pressure, cardiovascular, kidney, nervous and...), score <40 from the Beck Depression Inventory and the absence of high risk pregnancy (blood pressure during pregnancy, preterm delivery, tear rupture, chronic maternal diseases, placenta previa, etc.). The research tool was a Goldberg Health Questionnaire and an Exercise Cognitive Order that was given to the participants to complete the presence of the researcher. Participants were assured that their information would remain confidential. In a study by Abdi *et al* mentioned that the Goldberg Questionnaire (1972) was designed to screen for nonpsychiatric disorders. This questionnaire has four subscales of physical symptoms, anxiety, social function disorder, and depression. In various studies, its validity indices have been evaluated, with a sensitivity of 84–88 and a characteristic of 79–82.<sup>[15]</sup> The cutoff point for this questionnaire is 22. Therefore, those who scored <22 were considered to be healthy controls, and those who scored >22 were considered ill. The questionnaire of Cognitive Cognitive Thrill (CERQ-P) has 36 questions. It aims to measure the cognitive-emotional ordering subscales (self-denial, acceptance, rumination, positive re-focus, re-focus on planning, positive re-evaluation, vision-taking, disaster, blame for others). This questionnaire was developed by Garnovsky *et al.* (2001) to evaluate cognitive strategies (which each person uses after experiencing threatening events or life stresses). In examining the psychometric properties of Garnowski *et al.*, 2001, the reliability of the test was obtained using Cronbach's alpha coefficient of 0.91, 0.87, and 0.93, respectively.<sup>[7,11]</sup> In Iran, the validity of the test was also tested through the correlation of the total score with the scores of the subscales of the test, which range from 0/40 to 0/68 with an average of 0.56, all of which were significant.<sup>[12]</sup> The Beck Depression Inventory contains 21 sentences. Some phrases include four and some five sections, which are scored as zero, one, two, three, and four. The total score obtained is interpreted as follows: 9-0 without depression, 14-10 borderline depression, 20-15 mild depression, 30-21 moderate depression, 40-30 severe depression, and 63-41 severe depression. Individuals with a depression score of under 40 were enrolled and people with a score of 40 or older were not included in the study.<sup>[7]</sup> This instrumental questionnaire has validity and reliability. In 1996, Beck *et al.* obtained the test validity of a test within a week's

interval of 0/93. On the reliability and validity of the Beck Depression Inventory, various studies have also been carried out in Iran.<sup>[16]</sup> At the end, supplementary questionnaires were collected and coded. Data were analyzed using the SPSS (IBM, SPSS Inc, Chicago, Illinois, USA) version 22 software. After reviewing the data normalization, the data were analyzed using descriptive and Pearson statistical tests.

## Results

The results of data analysis showed that the mean age of pregnant mothers in the study was  $26.66 \pm 6.09$  years and the average age of their spouses was  $32.33 \pm 6.50$  years. Most of the participants had diploma and postdiploma education (263 = 54.9%). The income level of most participants was a low average (834 = 86.6%). The gender of the majority of participants was female (253 people = 51.1%).

The mean scores of cognitive emotion regulation and health in pregnant women participating in the study are listed in Table 1.

The results of data analysis with Pearson statistical test showed that between health and its dimensions, with a number of dimensions of cognitive emotion management, including blaming others and disasters with physical health, blame for you and blame others and rumination and catastrophe with anxiety, disaster with social health, blame for others and rumination and catastrophes with depression, blame for others and rumination and catastrophes and positive re-focusing with overall health score have a significant positive relationship, re-focusing on planning with physical

**Table 1: Average general scores and dimensions of health and emotional adjustment during pregnancy**

Variables	Average±SD
Health	27/62±10/16
Health dimensions	
Physical	6/31±2/31
Anxiety	7/50±3/00
Social	8/00±2/15
Depression	5/81±2/70
Dimensions of cognitive regulation of excitement	
Negative strategies	
Blame for you	17/72±2/75
Blame others	8/12±2/22
Rumination	11/61±2/7
Catastrophe	9/99±2/30
Positive strategies	
Viewpoint	11/63±3/10
Positive rebound	11/5±2/40
Positive reassessment	11/90±6/63
The reception	9/4±2/66
Focus on planning	13/60±2/31

SD=Standard deviation

health, positive reassessment and re-focusing on planning with anxiety, retrospective vision and positive re-focus, and re-evaluation and re-adoption and re-focus on social health planning, positive reassessment, and re-focus on planning with anxiety, positive feedback and reassessment, and reassessment and re-focus on planning with depression, re-focusing on planning with anxiety, positive re-focusing and re-focus, and re-evaluation and re-focus on planning with overall health score have a significant negative relationship [Table 2].

## Discussion

The aim of this study was to determine the relationship between cognitive emotion regulation and the health of pregnant mothers. The results of the data analysis showed that the overall health score in pregnant women was  $27.62 \pm 10.16$ , which was the highest social health scores with an average of  $8.00 \pm 2.15$  and the lowest score for health depression dimension with an average of  $5.81 \pm 2.70$ . The study of Golshani *et al.* (2014) aimed at determining the effectiveness of life skills education during pregnancy on the mental health of pregnant mothers reported a general health score of  $33.91 \pm 5.69$ . Furthermore, the lowest score was related to the health anxiety dimension with an average of  $8.36 \pm 2.13$  and the highest score was related to health depression dimension with an average of  $9.08 \pm 2.42$ .<sup>[17]</sup> which contrasted with the results of the present study. The study by Mollazadeh Esfanjani *et al.* (2012) aimed at determining the relationship between mental health and eating disorders in female students of Guilan University. In subjects without eating disorder, the overall health score was  $23.31 \pm 12.01$ . The highest score was for the social dimension of health with an average of  $7.39 \pm 3.10$  and the lowest score for the dimension of health depression with an average of  $3.67 \pm 4.32$ <sup>[18]</sup> which was consistent with the present study. The study of Issazadegan *et al.* aimed to determine the relationship between cognitive-emotional ordering strategies and emotional creativity with general health on 323 male and female students showed a general health score of

$57.65 \pm 15.06$ .<sup>[11]</sup> In the study of Issazadegan, the health score was very different from the present study, which could be due to the use of the questionnaire with 25 symbols. This study was conducted on 200 people, but in the study of Golshani *et al.*, was 60 persons, and in the study of Molazadeh Esfanjani *et al.*, was 240 persons were studied. The reason for the difference in scores with the study of Golshani and the similarity of scores with the study of Mellazadeh Esfanjani can be related to the number of sample volumes.

In the present study, in analyzing the dimensions of cognitive emotion regulation, negative strategies with an average of  $47.44 \pm 9.97$  and positive strategies with an average of  $58.03 \pm 13.1$ . The lowest score was related to the dimension of blame others with an average of  $8.12 \pm 2.22$  and the highest score related to the dimension of blame for you with an average of  $17.72 \pm 2.75$ . The study of Nasiri *et al.*, with the aim of determining the role of cognitive-emotional regulation, psychological hardiness, and optimism in predicting the death anxiety on 220 women in the third trimester of pregnancy, cognitive emotion response score was  $54.95 \pm 7.6$ .<sup>[19]</sup> The study of Issazadegan *et al.* had the lowest score for the blame others of  $6.71 \pm 2.62$  and the highest score for the disastrous dimension was  $7.11 \pm 10.7$ .<sup>[11]</sup> The study of Sharifibastan *et al.* (2016) aimed at determining the role of emotional and emotional adjustment strategies of positive and negative emotions in predicting the resilience of women with breast cancer showed that the average score of positive strategies was  $19.42 \pm 71.20$  and the mean score of negative strategies was  $42.87 \pm 11.81$ . In the positive strategies, the lowest score in the acceptance area was  $13.00 \pm 3.35$  and the highest score in the re-attention area was  $33.64 \pm 15.32$  and in the negative strategies, the lowest score in the blame area of others was  $7.87 \pm 3.90$  and the highest score in the rumination domain was  $13.99 \pm 3.77$ .<sup>[20]</sup>

The results showed that there is a positive and significant relationship between the dimensions of others' criticism, rumination, catastrophizing and positive re-focusing on health, while there is a negative and significant correlation

**Table 2: Relationship between dimensions of cognitive emotion regulation with health and its dimensions during pregnancy**

Variables	Health and its dimensions (r)				
	Physical	Anxiety	Social	Depression	Health
Dimensions of cognitive regulation of excitement					
Blame for you	0/03	0/16*	0/08	0/11	0/13
Blame others	0/22*	0/28*	0/13	0/88*	0/26*
Rumination	0/11	0/2*	0/09	0/16*	0/19*
Catastrophe	0/26*	0/39*	0/27*	0/32*	0/41*
Viewpoint	-0/05	-0/04	-0/17*	-0/17*	0/14
Positive rebound	-0/11	-0/71	-0/21*	-0/19*	0/20*
Positive reassessment	-0/100	-0/21*	-0/26*	-0/27*	-0/28*
The reception	-0/04	-0/05	-0/14*	0/02	0/07
Focus on planning	-0/17*	-0/16*	-0/18*	-0/21*	-0/23*

\*P<0.05 significant. Pearson correlation test

between re-focusing on planning and re-evaluation of health with health. In examining the dimensions of cognitive emotion regulation with health, the results also showed that some of the dimensions of cognitive regulation are positive and some have a significant negative relationship with health dimensions. The study of Issazadegan *et al.* showed that cognitive-emotional regulation is positively associated with blaming others and disastrous, and with positive thinking and accepting a significant negative relationship.<sup>[11]</sup> The study of Abdi *et al.* (2010) with the aim of determining the relationship between cognitive-emotional regulation styles and general health of students showed that there is a significant correlation between cognitive emotion regulation styles and general health. Among the incompatible emotional cognitive styles of disaster and other blame, they predicted psychological health and were among the adaptive emotional adjustment styles of positive re-focus and re-evaluation of psychological health. The catastrophic cognitive style was the main causative factor in public health.<sup>[15]</sup> The study of Pourmohseni Koluri (2014) aimed at identifying identity styles, cognitive strategies for emotion regulation and mental health of students: structural equation model showed that emotional strategies focus on planning, positive revaluation and positive re-focusing negatively affected depression and anxiety. In addition, rumination and catastrophes positively affect depression and anxiety.<sup>[21]</sup> All of these studies were in fact in the same line of study, but it should be noted that all of these studies were conducted on nonpregnant people.

Blaming for you or blaming others as a cognitive ordering strategy is like documentary style. The attributes are more intrinsic, constant, and general. The documents describe the process by which people decide on the causes of an incident or consequence. For most of the incidents, the most common causative factors are individuals, stimuli, and moments or times. There is also a potential relationship between specific psychology and attributes. Self-blaming and catastrophic thinking are associated with high rates of depression and anxiety. Blaming others is an important psychological variable that predicts depression, anxiety, and lack of mental health.<sup>[11]</sup> Emotional cognitive management strategies help people set up arousal and emotional excitement. The tune-up approach is directly related to the growth or development of mental disorders.<sup>[16]</sup> Therefore, as a result of incorrect assessment of the situation due to lack of information, misperceptions or false beliefs, the individual chooses his or her own strategy to encounter the position of the gardens. Effective countermeasures strategy selection in cognitive, emotional, and behavioral dimensions, in addition to increasing the use of adaptive coping, also affects the promotion of mental health. The ability to successfully manage excitement is also

associated with a number of physical, social, and physiological health outcomes. Moreover, failure to regulate excitement is the underlying mechanism of anxiety and mood disorders.<sup>[11]</sup>

People who use weak cognitive strategies such as rumination, disaster, and blame are more vulnerable to emotional problems. Deficiencies in the emotional regulation of individuals with many variables, such as unhealthy parenting, child abuse, decreased emotional response positively, increased emotional responses to exciting stimuli, anxiety and sadness, and increased experience of more negative emotions by parents.<sup>[22]</sup> An inappropriate excitement regulation strategy plays an important role in the development and maintenance of psychological pathology.<sup>[23]</sup>

Mental health the importance of prenatal psychiatric care along with their physical care for improving their quality of life is established to prevent mothers susceptible to such disorders by preventing them from occurring during different stages of pregnancy. In other words, the occurrence of mental disorders during pregnancy is a good predictor of these disorders in the postpartum stage. Therefore, pregnancy is a good time for screening and diagnosis in this regard. It is imperative for all health-care workers to seek timely interventions and guidance with the help of pregnant women, and to work hard to maintain their mental health and improve their quality of life, and to be more serious in this regard. Because all of these measures ultimately lead to the promotion of community health.

## Conclusion

According to the results of this study, mental health during pregnancy is related to emotional, cognitive strategies. Since carers of pregnant women have close relationships with pregnant women during this period, they can help pregnant women by providing timely education and guidance and increasing the level of health. As a result, they will strive to maintain mental health and improve their quality of life and to ensure the mental health of their future children.

## Acknowledgment

This article is part of a research project approved by the Student Research Committee of the Faculty of Nursing and Midwifery of Isfahan University of Medical Sciences. In this way, the university's research vice-chairman is grateful for the financing of this research.

## Financial support and sponsorship

Nil.

## Conflicts of interest

There are no conflicts of interest.

## References

- Golshani F, Gol Mohammadnejad GH, Aghdasi AN. The effectiveness of life skills training in pregnancy on mental health of pregnant women. *J Train Eval* 2014;7:89-101.
- Karami KH, Mardani A. The relationship between mental health and quality of life in pregnant women. *J Breeze Health Fac Med Sci Islamic Azad Univ* 2013;2:12-17.
- Naseem K, Khurshid S, Khan SF, Moeen A, Farooq MU, Sheikh S, *et al.* Health related quality of life in pregnant women: A comparison between urban and rural populations. *J Pak Med Assoc* 2011;61:308-12.
- Liu L, Setse R, Grogan R, Powe NR, Nicholson WK. The effect of depression symptoms and social support on black-white differences in health-related quality of life in early pregnancy: The health status in pregnancy (HIP) study. *BMC Pregnancy Childbirth* 2013;13:125.
- Zareipour MA, Sadeghi R, Bazvand E. Mental health and its related factors in pregnant women in health centers of Kuhdasht. *Journal of Health And Care*. 2012;13:56-65.
- AZIMI M, NORI R, MOHAMMADKHANI S. Comparison of Cognitive Emotion Regulation, general health, problem-solving styles and academic performance of adolescent girls with addicted and nonaddicted parents. *rph*. 2016;10:38-48.
- Andami Khoshk AR, Golzar M, Esmaili Nasab M. Role of nine strategies of cognitive emotion regulation in the prediction of resilience. *J Thought Behav Clin Psychol* 2013;7:61-70.
- Dillon DG, Deveney CM, Pizzagalli DA. From basic processes to real-world problems: How research on emotion and emotion regulation can inform understanding of psychopathology, and vice versa. *Emot Rev* 2011;3:74-82.
- Troy AS, Mauss IB. Resilience in the face of stress: Emotion regulation as a protective factor. In: Southwick SM, Litz BT, Charney D, Friedman MJ, editors. *Resilience and Mental Health: Challenges Across the Lifespan*. London: Cambridge University Press; 2011. p. 30-44.
- Troy AS. Cognitive Reappraisal Ability as a Protective Factor: Resilience to Stress Across Time and Context. Doctoral Dissertation of Philosophy. University of Denver; 2012.
- Issazadegan A, Sheikhi S, Bashapour S, Sa'adatmand S. The relationship between emotional cognitive order strategies and excitement creativity with general health among students. *Urmia Med J* 2013;24(1):1-10.
- Hasani J, Tajodini E, Ghaedniyaie-Jahromi A, Farmani-Shahreza S. The assessments of cognitive emotion regulation strategies and emotional schemas in spouses of people with substance abuse and spouses of normal people. *J Clin Psychol* 2014;6:91-141.
- Mashhadi A, Mir Doroghi F, Hasani J. The role of cognitive emotion regulation strategies in internalizing disorders of children. *JCP* 2011;8:29-89.
- Hasani J. The psychometric properties of the cognitive emotion regulation questionnaire. *J Clin Psychol* 2011;2:78-38.
- Abdi S, Babapoor J, Fathi H. Relationship between cognitive emotion regulation styles and general health among university students. *JAUMS* 2011;8(4):258-264.
- Qasemzadeh Nassaji S, Peyvastegar M, Hosseiniyan S, Mutabi F, Banihashem S. Effectiveness of cognitive – Behavioral intervention on coping responses and cognitive emotion regulation strategies. *J Behav Sci* 2010;4:35-43.
- Golshani F, Golmohammadnejad GH, Aghdasi AN. The effectiveness of teaching life skills during pregnancy on pregnant mothers' mental health. *J Instr Eval* 2014;7:89-101.
- Mollazadeh Esfanjani R, Kafi SM, Yegane T. Relationship between mental health and eating disorders in female students of Guilan University. *J Qazvin Univ Med Sci* 2012;16:54-60.
- Nasiri S, Askarizadeh GH, FazilatPour M. The role of cognitive regulation strategies of emotion, psychological hardiness and optimism in the prediction of death anxiety of women in their third trimester of pregnancy. *Int J Psychol Neurosci*. 2017;4(6):50-58.
- Sharifibastan F, Yazdi SM, Zahraei SH. The role of cognitive emotion regulation and positive and negative affect in resiliency of women with breast cancer. *Int J Psychol Neurosci*. 2016;4(2):38-49.
- Pourmohseni Koluri F. Identity styles and cognitive emotion regulation strategies and mental health in university students: Structural equation modeling. *Strateg Stud Youth Sports* 2014;13:1-26.
- Hien D, Cohen LR, Caldeira NA, Flom P, Wasserman G. Depression and anger as risk factors underlying the relationship between maternal substance involvement and child abuse potential. *Child Abuse Negl* 2010;34:105-13.
- Schreiber LR, Grant JE, Odlaug BL. Emotion regulation and impulsivity in young adults. *J Psychiatr Res* 2012;46:651-8.

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