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Effect of spiritual care education on the spiritual health of preeclamptic women with postpartum stress disorder

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Abstract:

BACKGROUND: Spiritual health in the field of health has a great importance in mental disorders and posttraumatic stress disorders, in treatment process. The present study was done aiming "determine the effect of spiritual care education on the spiritual health of preeclamptic women with postpartum stress disorder."

MATERIALS AND METHODS: This randomized clinical trial was done in 2017 on 260 women with preeclampsia in Mashhad. Data collection was done with questionnaires Perinatal Posttraumatic Stress Questionnaire (PPQ), the posttraumatic disorder checklist, Duke University Religion Index, and the Spiritual Well-Being Scale (SWBS). In the intervention group, first, women were educated on spiritual care each day based on Richards and Bergin's pattern, in three sessions, which lasted 45–60 min. The control group also received routine cares. All units completed the questionnaire SWBS at the 8^{th} postpartum period. P < 0.05 was meaningful.

RESULTS: After the intervention, this score of spiritual health in the intervention and control groups had a significant difference with independent test (P = 0.004). Spiritual health significantly increased in the interventional group.

CONCLUSIONS: Providing spiritual care to pregnant mothers with preeclampsia, increase their spiritual health.

Keywords:

Education, health, preeclampsia

Introduction

A ppear and progress symptoms of a common mental illness in pregnancy are problematic and can disrupt the ability of women to accept changes after child birth. Posttraumatic Stress Disorder (PTSD) is a type of anxiety disorders, PTSD after childbirth (postpartum stress disorder), which was first described by Bidlowski and Raoul-Duval. PTSD is an anxiety disorder that occurs after an event that causes injury or threat. This disorder is characterized by various psychological symptoms such as aggression, nightmares, accident reminders, anxiety symptoms, and decreased trigger

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levels; we can use the term "posttraumatic stress disorder," if these symptoms last longer than 4 weeks.^[4] The prevalence of postpartum stress disorder was 1.5%–6% after delivery^[5] and the prevalence of postpartum stress disorder was 26% after preeclampsia.^[6] Preeclampsia also affects physical and mental health.^[7]

In recent years, to increase coping power and promote mental health, spiritual care has entered into theoretical and research literature as important components.^[8] Spiritual care is an integral part of care and includes actions such as helping to carry out religious practices and activities that provide support and comfort to the patient.^[9] Spiritual care can be considered

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as a key element, which can affect the health spiritual of individuals. [10] When spiritual health is seriously compromised, a person may experience mental disorders such as loneliness, anxiety, stress, and loss of meaning in life. On the other hand, patients whose spiritual health is strengthened can effectively adapt to their illness. [11]

In a clinical trials study Zafarian Moghaddam *et al.*, care education was done according to the Richards and Bergin model on 60 parents of children with leukemia, which showed that in the intervention group after the spiritual-religious training, the spiritual health score after training was significantly higher than spiritual health before education. ^[12] The results of some demographic studies show that religious beliefs may negatively affect the health of the individual by encouraging the person to avoid or discontinue treatment, not seeking timely medical care, and avoiding preventive measures. ^[13]

According to the above, the greatest stress in every woman's life is pregnancy, which makes these stressful conditions prone to diseases such as preeclampsia. Despite the scientific advances in the treatment of pregnancy problems, mental problems remain an important issue, in woman's health.[14] On the other hand, the high and dignified status of spirituality and spiritual health in the field of health, the age and depth of spirituality in Iran and the penetration of spiritual beliefs in one body of the Iranian community, the importance and undeniableness of psychological disturbances such as stress disorder after the blow during treatment, the presence of contradictory findings in studies abroad and the absence of a similar study sample in internal studies prompted the researcher to conduct a study with the aim of "spiritual care education on the spiritual health of preeclamptic women with postpartum stress disorder."

Materials and Methods

Study design and setting

The present study is a randomized clinical trial with a control group. At first, 260 women, with nonsevere preeclampsia, which admitted to Imam Reza and Ghaem hospitals in Mashhad, Iran, were selected as available in the year 2017. The sample size was according to the study by Soltani *et al.*, In study Soltani *et al.*, the prevalence of postpartum stress disorder in women with preeclampsia was 26%. [6]

$$n = \frac{(p1[1-p1]) + p2[1-p2](z1-\infty 12 + z1-B)^2}{d^2}$$

Inclusion criteria included women with nonsevere preeclampsia and singleton pregnancy, live births, gestational age of weeks 36–40, and having a call number. Exclusion criteria included women were

having medical conditions; having midwifery problems except preeclampsia; having any stress disorder (get a score higher than 50 from the questionnaire PCL); history of infertility; history of two abortions and more; absenteeism in one session; unwillingness to cooperate; and not participated in the post test.

Study participants and sampling

At first, all of these women completed the posttraumatic disorder checklist (PCL) and if they scored <50, they would enter the study (260 women), also were taken the contact numbers of these women.

Then, 4 weeks after delivery, the researcher contacted them and filled out the Prenatal Posttraumatic Stress Questionnaire (PPQ). Those who scored a higher and equal score of 6 in the questionnaire were identified as having a postpartum stress disorder. After examining the questionnaires, 84 patients with stress disorder were identified. And with the loss of 4 people, the study was conducted on 80 people. By random allocation, 40 patients were in the control group and 40 patients in the intervention group [Figure 1].

Data collection tool and technique

The data gathering tools including

Data gathering tools included demographic questionnaire, maternal and neonatal information in the first 4 weeks of postpartum, Spiritual Well-Being Scale (SWBS), questionnaire PPQ (prenatal posttraumatic

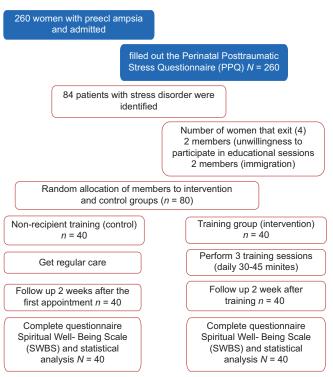


Figure 1: CONSORT flow diagram

stress question Prenatal), PCL, Duke University Religion Index Questionnaire, and spiritual care checklist.

Spiritual Well-Being Scale

Spiritual health questionnaire contains 20 questions, 10 questions, 10 questions of existential health, and other health measures of a person's religion. The spiritual health score is the sum of these two subgroups. The scoring range is 20–120. Questions on the Likert scale were completely disagreeable (1) to the extent that I fully agree (6). Its reliability was confirmed by Fatemi *et al.* (2006) in Tehran with an alpha-Cronbach coefficient (0.82). The reliability of the questionnaire in this study was determined using the internal consistency method. The Cronbach's alpha coefficient in the religious health dimension was 0/86, in the existential health domain was 0/80, and in the total scale was $\alpha = 0/87$.

Prenatal posttraumatic stress questionnaire

This questionnaire includes 14 questions that measure the magnitude of stress disorder during and after birth. Questions are answered yes and no. The scoring range is 0–14. The cutoff point for PTSD detection is \geq 6. In the study of Feeley (2011) in Canada, its validity has been confirmed and its reliability was confirmed by a reexamination method (r = 0.92). In the study of Soltani et al., its reliability was 0.82 by Cronbach's alpha on ten people. In the present study, the reliability was α = 0.85, with Cronbach's alpha.

The posttraumatic disorder checklist

This questionnaire includes 17 questions that are scored based on a 5-point Likert scale as follows: very low (1), low (2), medium (3), high (4), and very high (5). The total score of the questionnaire is between 17 and 85. The cutoff point for PTSD detection is 50 points. For use in Iran by Goodarzi, its validity has been confirmed. [17] Moreover, its reliability has already been confirmed in the study by Weathers with Cronbach's alpha 0.97. [18] In the present study, Cronbach's alpha has achieved $\alpha = 0.95$.

The Duke Religious Index

The questionnaire has 5 items. The first two items are questions about the religious practices of individuals and are ranked on a 6point grading scale; the sum of its points varies from 2 to 12. Moreover, the next three items are questions about the religious beliefs of individuals classified as 5-point Likert grades, and the sum of the points in these three items varies from 15 to 45. This questionnaire has been validated in the study by Hafizi *et al.*^[19] Its reliability was also confirmed in the study by Baljani *et al.*, with the reliability of its Persian version and with the Cronbach's alpha value of 0.93.^[20] Furthermore, a study by Koenig and Büssing confirmed its reliability.^[21] In this study, its reliability was achieved with Cronbach' $\alpha = 0.91$.

The spiritual care checklist

It was made by the researcher. Its validity was confirmed through content validity and its reliability was assessed by agreement of evaluators.

Intervention

During the referral, the informed consent form was completed in both intervention and control groups. Then demographic characteristics questionnaires and SWBS questionnaires were completed. In the intervention group, in the hospital congress hall, a spiritual care education was conducted based on Richards–Bergen's model, [22] and after the approval of the educational package by the religious expert, meetings were done for 3 sessions of 60–45 min.

Session contents

- At the first session
 - Meeting people and assessing the knowledge, attitudes, and beliefs of patients and listening to patients' views on spiritual issues, religion, and existential issues (separately)
 - b. The role of reading a holy book in feeling calm
 - c. Positive statements based on the holy book.
- At the second session
 - a. Repent and seek forgiveness
 - b. Story of religious people
 - c. Participating in religious and recreational programs
 - d. Addressing God and accept the current situation
 - e. Trust, resort, patience, charity (kindness and forgiveness), and focus on the blessings of God.
- At the third session
 - a. Explaining the experience of spiritual care and its effects
 - b. Using the consequences of this care and summarizing the past sessions.

During the sessions, the following spiritual care was also provided:

- 1. Trust, empathy, and honesty between the nurse and mothers to establish a proper communication during the sessions
- 2. Listening carefully to the physical and mental problems and worries and fears of patients
- 3. Providing psychological support from patients
- 4. Strengthening individuals' inner hope and powers
- 5. Using positive energy sentences and strengthening healthy and constructive thoughts
- 6. Helping the patient find the meaning of life and understanding that none of the life events is beyond the destiny; who believes in God over the whole world could be saved from the feelings of pessimism, emptiness, and frustrated
- 7. Providing the necessary facilities for religious practices

- 8. Encouraging the patient to read holy books
- 9. Touching the hands of patients in order to provide them with mental support
- 10. Encouraging the patient to express their religious beliefs
- 11. Encouraging patients to visit religious clerics
- 12. Encouraging patients to refer to people who feel comfortable with them
- Encouraging patients to enjoy entertainment and do light sports activities according to their physician's opinion
- 14. Assuring the patient that the nurse is always available to her clients for mental and psychological support
- 15. Seek forgiveness from past sins and forsaking anger against the perpetrator and guilty person
- 16. Encouraging the mothers to enjoy music, singing, theater, cinema, art, etc.
- 17. Encouraging the patients to establish a friendly relationship with others
- 18. Encouraging the patients to laugh and do their favorite hobbies
- 19. Encouraging the patients to participate in religious services and social gatherings.

Then, an intervention pack containing an educational CD and a spiritual care checklist was given to the research units for home care. During the research, the researcher controlled the participants' spiritual care and the completion of the checklist by making a phone call.

Then, 2 weeks after completing the training at 8 weeks postpartum, all of the units in the two groups completed the Prenatal posttraumatic stress question (PPQ) questionnaire, and Ellison's spiritual health. The results were analyzed using SPSS software version 16 (IBM, SPSS Inc, Chicago, Illinois, USA), and t-test independent, T Pair test, Mann–Whitney test, Chi-square test and Spearman test. The significance level was considered P < 0.05.

Ethical considerations

In this study, all ethical principles related to human research include obtaining a license from the university's research deputy, presenting a letter to the relevant educational and therapeutic centers, providing adequate explanations to the research units and obtaining written consent, assuring the units of research in the field of confidentiality, maintaining the information and providing them in general, and ensuring that research units were excluded from the study at any time.

Athics code number IR.MUMS.REC.1395.618.

Results

In this research, before the intervention, variables such as age of mother (0.591), age of spouse (0.329),

gestational age (0.224), number of deliveries (0.447), body mass index (0.691), religion score (0.942), PTSD score (0.377), also mother's education (0.391), mother's occupation (0.132), husband's education (0.708), spouse's occupation (0.299), family income (0.276), mother's satisfaction from infant's gender (0.113), and father's satisfaction from infant's gender (0.619) were evaluated. All variables were homogeneous in both groups. There was no significant difference between the two groups (P > 0.05) [Table 1].

Also according to the independent t-test, there was no significant difference between the two groups in the mean score of spiritual health before the intervention (P = 0.979). However, according to the independent t-test, there was a significant difference between the two groups in the mean score of spiritual health (P = 0.004) after the intervention. T pair test was significantly different in the intervention group before and after the intervention (P = 0 < 0.001). But in the control group, this difference was not significant (P = 0.189) [Table 2].

Discussion

In the present study, spiritual care education increased the spiritual health of women preeclampsia with postpartum stress disorder. Although research related to the cause and effects of PTSD has generally been done, to a large extent, the spiritual aspect of this disruptive disorder has been ignored. Achieving a better understanding of the multidimensional relationship between spirituality and PTSD may be a key factor in prevention and advanced therapeutic protocols.^[23] According to Richards and Bergen (2007), spiritual healing helps patients not to focus on the lost in illness, mourning, or despair but looks for meaning. As a result, life in terms of spirituality is meaningful in all circumstances. If life is purposeful and meaningful, any incident in this direction becomes meaningful.^[24]

Spiritual care has a significant effect on other aspects of health. [25] Spiritual health is one of the basic concepts about how to deal with the problems and stress associated with the disease. When spiritual health is seriously compromised, a person may experience mental disorders such as loneliness, anxiety, stress, and loss of meaning in life. On the other hand, patients whose spiritual health is strengthened can effectively adapt to their illness. Therefore, support from spiritual or religious sources and having a higher power relationship have been helpful and can be effective in improving the quality of life, reducing and controlling anxiety and stress, and lowering blood pressure. [11]

In a clinical trials study by Zafarian Moghaddam *et al.*, care education was done according to the Richards and

Table 1: Comparison of the mean of demographic variables in the two groups

Variable	Group		P
	Intervention, n (%)	Control, n (%)	
Age of the woman (years), mean±SD	35.55±5.47	31.88±4.88	Df=66, t=0.541, P=0.591*
Age of the spouse (years), mean±SD	36.29±6.46	34.82±6.40	U=498.0, Z=-0.977, P=0.329**
Gestational age (week), mean±SD	36.64±1.09	36.85±1.32	U=487.5, Z=-0.760, P=0.244**
Number of deliveries, mean±SD	1.38±1.15	1.58±1.31	U=518.0, Z=-0.760, P=0.447**
Body mass index (kg/m²), mean±SD	26.02±2.88	25.55±2.36	U=546.0, Z=-0.397, P=0.691**
Religion score (duck), mean±SD	48.97±6.69	49.08±6.51	Df=66, t=-0.073, P=0.942*
PCL, mean±SD	30.08±8.55	31.88±0.92	Df=66, t=0.889, P=0.377*
Mother's education			
Elementary	4 (10.0)	0	U=719.00, Z=0.858, P=0.391**
Junior high school	2 (5.0)	4 (10.0)	
High school diploma	18 (45.0)	21 (52.5)	
College education	16 (40.0)	15 (37.5)	
Mother's job			
Housewife	25 (62.5)	23 (57.5)	χ^2 =7.083, df=4, <i>P</i> =0.132***
Employed	7 (17.5)	10 (25.0)	
Student	8 (20.0)	7 (17.5)	
Husband's education			
Elementary	5 (12.5)	3 (7.5)	U=814.00, Z=0.765, P=0.299**
Junior high school	15 (37.5)	17 (42.5)	
High school diploma	15 (37.5)	14 (35.0)	
College education	5 (12.5)	6 (15.0)	
Husband's job			
Manual worker	10 (25.0)	10 (25.0)	χ^2 =1.390, Df=3, P =0.708***
Employee	5 (12.5)	7 (17.5)	
Self-employed	25 (62.5)	23 (57.5)	
Family income			
Less than enough	7 (17.5)	4 (10.0)	U=717.00, Z=-1.089, P=0.276**
Enough	29 (72.5)	33 (82.5)	
Above sufficient	4 (10.0)	3 (7.5)	
Mother's satisfaction from infant's gender			
Low	0	2 (5.0)	<i>Z</i> =-1.586, <i>P</i> =0.113**
Medium	8 (5.0)	12 (30.0)	
Much	32 (80.0)	26 (65.0)	
Father's satisfaction from infant's gender			
Low	0	0	<i>Z</i> =-0.498, <i>P</i> =0.619**
Medium	10 (25.0)	12 (30.0)	
Much	30 (75.0)	28 (70.0)	

^{*}P=Independent t-test, **P=Mann-Whitney test, ***P=Chi-square test. SD=Standard deviation, PCL=Posttraumatic stress disorder score

Table 2: Mean and standard deviation of the spiritual health score of the units before and after the intervention in both groups

Variable	Intervention	Control	Inter-group test result (P)
Mean spiritual health score before intervention, mean±SD	78.64±18.08	78.52±17.52	<i>t</i> =0.026, df=66, <i>P</i> =0.979*
Mean spiritual health score after intervention, mean±SD	90.88±15.27	79.64±15.87	<i>t</i> =2.974, df=66, <i>P</i> =0.004*
In-group test result	<i>t</i> =-6.086, df=33, <i>P</i> =0<0.001****	<i>t</i> =-1.343, df=33, <i>P</i> =0.189****	

^{*}P=Independent t-test, ****P=t pair test. SD=Standard deviation

Bergin model on 60 parents of children with leukemia, which showed that in the intervention group after the spiritual–religious training, the spiritual health score after training was significantly higher than spiritual health before education. ^[12] In the study of Bamdad *et al.*, spiritual care education, which was performed on 81 patients admitted and amphetamine-dependent,

showed that spiritual care had an impact on improving spiritual health, this means that mental health was improved by spiritual care implementation, while there was no significant difference in the control group before and after the intervention. [25] Fouladvandi *et al.*, a study done on 50 hemodialysis patients admitted to the hospital, reported that there is a significant relationship between

spiritual care with spiritual health. [26] Rahimi *et al.*, a study conducted on 222 nursing and midwifery students of Kerman University of Medical Sciences, showed that there is a significant relationship between the two variables of spiritual health and spiritual care These two studies are also of correlational type in line with the present study. [27]

Nonaligned with this study: The results of some demographic studies show that religious beliefs may negatively affect the health of the individual by encouraging the person to avoid or discontinue treatment, not seeking timely medical care, and avoiding preventive measures.^[28] A review article by Thuné-Boyle et al. showed that there was no significant relationship between spiritual health and belief in postmortem life with depression, anxiety, and stress levels.^[29] A study by Beery et al., conducted in England on 250 patients with heart failure, showed that patients who had a higher and stronger status in terms of spiritual beliefs, during the 9 months of continuous follow-up, prognosis, and the situation were much worse than other patients.^[30] Perhaps, the reason for this lack of consistency with the present research is the difference in the research community and the difference in the cultural and religious beliefs of the two communities.

In the present study, spiritual health had a significant relationship with stress disorder, as mental health increased, postpartum stress disorder also decreased. Reducing spirituality with its effects on the individual and his worldview can be considered as one of the main causes of anxiety, stress, and blood pressure. [31,32]

According to the above, the greatest stress in every woman's life is pregnancy, which makes these stressful conditions prone to diseases such as preeclampsia. Despite the scientific advances in the treatment of pregnancy problems, mental problems remain an important issue, in woman's health.^[14]

On the other hand, making important anatomical, physiological, and psychological changes in the pregnant mother increases the possibility of mental illnesses such as anxiety, morbid fear, obsessivecompulsive disorder, and mood disorders.[33] About 28% of women with preeclampsia suffer from a type of anxiety disorder called postpartum stress disorder.[34] Furthermore, considering the role of spiritual health in reducing PTSD, the nurse can play an important role in providing spiritual support to the patient. [35] Careful attention to the dimensions of the patient's life can help the nurse to communicate safely and appropriately and that the nurse can rely on the patient's religious beliefs to strengthen him in the remembrance of God, trust in him and prayer, encourage him and his spirit, and make him more

hopeful in the treatment of the disease. Believing that there is a God who controls situations greatly reduces the psychological symptoms associated with the situation. [36-38]

Limitation and recommendation

In spite of the researcher's emphasis, telephone follow-up, awards, and travel costs, due to the air and bustle of the hospital's obstetric clinic, the patient did not refer to the deadline for completion of the questionnaires. Therefore, the researcher, in order to reduce the drop in the research samples, the researcher referred to the place of life of the research units. This made the sampling time longer.

Conclusions

Despite extensive medical advances in treating patients with preeclampsia, treatment has always been considered to improve the physical aspect of these patients. While patients with preeclampsia suffer from psychiatric disorders such as postpartum stress disorder. On the other hand, about two-third of people with PTSD experience at least two other disorders. It also has a negligible effect on the relationship between mother and baby, which should seek interventions to reduce the psychological effects of the disease. The results of this study showed that spiritual care education increased the spiritual health of women with preeclampsia and postpartum stress disorder. Therefore, considering the positive effect of spiritual care education on increasing the spiritual health, educational interventions are suggested due to low cost and more effectiveness in women with preeclampsia.

Ethics approval and consent to participate

This article is part of the approved thesis of Vice-Chancellor Mashhad University of Medical Sciences, Iran, with tracking code 951126 and code of ethics in the number IR.MUMS.REC.1395.618 and clinical practice code IRCT2017042728911N2.

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Conflicts of interest

There are no conflicts of interest.

References

- Akhondzadeh SH, Kashani L. Psychiatric disorders and pregnancy. Tehran Univ Med J 2006;64:5-14.
- Adewuya A, Ologun Y, Ibigbami O. Post-traumatic stress disorder after childbirth in Nigerian women: Prevalence and risk factors. BJOG 2006;113:284-8.
- Lotfi Kashani F, Mahmodian T. Psychological symptoms in patients PTSD with and without comorbidity with substance abuse. Thoughts and Behavior in Clinical Psychology. 2008;2:7.
- Mohaghegh-Motlagh SJ, Momtazi S, Musavi-Nasab SN, Arab A, Saburi E. Post-traumatic stress disorder in male chemical injured war veterans compared to non-chemical war veterans. Med J Mashhad Univ Med Sci 2014;56:361-8.
- Beck CT, Driscoll JW. Postpartum Mood and Anxiety Disorders: A Clinician's Guide. USA: Jones & Bartlett Learning; 2006.
- Soltani N, Abedian Z, Mokhber N, Esmaily H. The association of family support after childbirth with posttraumatic stress disorder in women with preeclampsia. Iran Red Crescent Med J 2015;17:e17865.
- Abedian, Z., Soltani, N., Mokhber, N., Esmaeily, H. The Prevalence of Post Traumatic Stress Disorder after Childbirth Pre-Eclampsia and Related Factors. The Iranian Journal of Obstetrics, Gynecology and Infertility, 2013; 16(78): 16-24. doi: 10.22038/ijogi.2013.2162.
- Kalhornia-Golkar M, Banijamali S, Bahrami H, Hatami H, Ahadi H. Effectiveness of mixed therapy of stress management training and spiritual therapy on level of blood pressure, anxiety and quality of life of high blood pressure patients. J Clin Psychol 2014;3:1-11.
- 9. Karimollah M, Abedi H, Yousefi R. Spiritual care in nursing. Res J Biol Sci 2009;3:491-9.
- Fallahikhoshknab M, Mazaheri M. Spiritual Care and Spiritual Therapy. 1st ed. Tehran: University of Social Welfare and Rehabilitation Scineces; 2008. p. 69-91.
- 11. Bodaghi, E., Alipour, F., Bodaghi, M., Nori, R., Peiman, N., Saeidpour, S. The Role of Spirituality and Social Support in Pregnant Women's Anxiety, Depression and Stress Symptoms. Community Health Journal, 2017; 10(2): 72-82.
- 12. Zafarian Moghaddam E, Behnam Vashani H R, Reihani T, Namazi Zadegan S. The Effect of Spiritual education on depression, anxiety and stress of caregivers of children with leukemia. jms. 2016; 4(1):1-7.
- Mihaljević S, Aukst-Margetić B, Vuksan-Ćusa B, Koić E, Milošević M. Hopelessness, suicidality and religious coping in Croatian war veterans with PTSD. Psychiatr Danub 2012;24:292-7.
- 14. Salari, P., Alavian, F., Habibi Rad, A., Tara, F. The Relationship between Stress, Anxiety and Pain with Salivary Cortisol Levels in First Stage of Labor in Primiparous Women. The Iranian Journal of Obstetrics, Gynecology and Infertility, 2013; 16(55): 14-21. doi: 10.22038/ijogi.2013.1174.
- Fatemi M, Nazari R, Safavi M, Naeini M, Svadpvr M. Relationship between spirituality and nurses on patient satisfaction with nursing care. J Med Ethics 2011;5:140-59.
- Feeley N, Zelkowitz P, Cormier C, Charbonneau L, Lacroix A, Papageorgiou A. Posttraumatic stress among mothers of very low birthweight infants at 6 months after discharge from the neonatal intensive care unit. Appl Nurs Res 2011;24:114-7.
- 17. Goodarzi A. Validity and reliability of post crash impact scale (ESSL). J Psychol 2003;7:153-78.
- Weathers FW, Litz BT, Herman DS, Huska JA, Keane TM. The PTSD Checklist (PCL): Reliability, validity, and diagnostic utility. San Antonio, Texas: Paper Presented at the 9th Annual Meeting of the International Society for Traumatic Stress Studies. 1993.
- Hafizi S, Memari AH, Pakrah M, Mohebi F, Saghazadeh A, Koenig HG. The Duke University Religion Index (DUREL): Validation and reliability of the Farsi version. Psychol Rep

- 2013;112:151-9.
- Baljani E, Kazemi M, Amanpour E, Tizfahm T. A survey on relationship between religion, spiritual wellbeing, hope and quality of life in patients with cancer. Evid Based Care 2011;1:51-62.
- Koenig HG, Büssing A. The Duke University Religion Index (DUREL): A five-item measure for use in epidemological studies. Religions 2010;1:78-85.
- Richards PS, Bergin AE. A Spiritual Strategy for Counseling and Psychotherapy. Washington, DC: American Psychological Association; 2005. p. 422.
- Siedlecki V. Trauma and Spirituality: Healing the Wounded Soul. 2013
- Richards PS, Hardman RK, Berrett ME. Spiritual Approaches in the Treatment of Women with Eating Disorders. American Psychological Association; 2007.
- Bamdad M, Fallahi Khoshknab M, Dalvandi A, Khodayi Ardakani MR. Impact of Spiritual Care on Spiritual Health of hospitalized Amphetamin Dependents. IJPN. 2013; 1(3):10-18.
- Fouladvandi M, Azizzade Foroozi M, Fouladvandi G, Sadeghi H, Malekian L. Relationship of spiritual health with attitude to spirituality and spiritual care in hemodialysis patients the city of Bam. Complement Med J Fac Nurs Midwifery 2015;5:1133-45.
- Rahimi N, Nouhi E, Nakhaee N. Spiritual well-being and attitude toward spirituality and spiritual care in nursing and midwifery students. Iran J Nurs 2013;26:55-65.
- 28. Koenig HG. Spirituality, wellness, and quality of life. Sex Reprod Menopause 2004;2:76-82.
- 29. Thuné-Boyle IC, Stygall JA, Keshtgar MR, Newman SP. Do religious/spiritual coping strategies affect illness adjustment in patients with cancer? A systematic review of the literature. Soc Sci Med 2006;63:151-64.
- Beery TA, Baas LS, Fowler C, Allen G. Spirituality in persons with heart failure. J Holist Nurs 2002;20:5-25.
- 31. Song Y, Lindquist R, Windenburg D, Cairns B, Thakur A. Review of outcomes of cardiac support groups after cardiac events. West J Nurs Res 2011;33:224-46.
- 32. Hayase M, Shimada M, Seki H. Sleep quality and stress in women with pregnancy-induced hypertension and gestational diabetes mellitus. Women Birth 2014;27:190-5.
- Aziz-Zadeh FM, Mohammad Alizadeh S, Sultan Ahmedi Z, Ghazanfari Z. Stressor factors of the mothers after delivery. J Obstet Gynecol Infertil 2009;12:39-45.
- 34. van Steijn ME, Scheepstra KWF, Zaat TR, van der Post JAM, Olff M, van Pampus MG. Posttraumatic stress disorder in partners following severe postpartum haemorrhage: A prospective cohort study. Women Birth. 2020 Jul; 33(4):360-366. doi: 10.1016/j. wombi.2019.06.016. Epub 2019 Jul 13. PMID: 31307939; 2009. p. 117-26.
- 35. Doğan H, Değer M. Nursing care of elderly people at home and ethical implications: An experience from Istanbul. Nurs Ethics 2004;11:553-67.
- Aghamohammadi-Kalkhoran M, Karimollahi M. Religiousness and preoperative anxiety: A correlational study. Ann Gen Psychiatry 2007;6:1-5.
- 37. Ebrahimzadeh Zgemi S, Golmakani N, Asili M, Naseri A, Mohebbi Dehnavi Z, Kamali Z et al. A Comparative Study on the Effect of Artemisia and Clotrimazole Vaginal Cream on Vaginal Candida Infection on Non-Pregnant Women in Fertile Age in Mashhad in 2016-2017: A Triple Blind Clinical Trial. J. Med. Plants. 2019; 18(72):170-182.
- Valiani M, Allameh Z, Bahadoran P, Mohebbi-Dehnavi Z, Amani E. Comparison of the Effect of Vaginal Misoprostol and Intravenous Oxytocin on Fetal-Neonatal Complications in Primigravid as Who Referred to Shahid Sadoughi Hospital, Isfahan, Iran in 2017. Iranian Journal of Neonatology IJN, 2020; 11(4): 81-86. doi: 10.22038/ijn.2020.43142.1717.