

## Relationship of Spiritual Health and Perceived Stress with Breastfeeding Self-efficacy: A Survey on Mothers with Hospitalized Neonates

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### Abstract

#### Background

Positive outcomes of breastfeeding on both mothers and neonates health are inevitable. Mother self-efficacy has a constructive role on initiating and continuing breastfeeding, in turn, it is influenced by several factors. The present study aimed to determine some risk factors associated with breastfeeding self-efficacy of mothers with hospitalized newborns.

#### Materials and Methods

This descriptive-correlational study was carried out on 150 eligible mothers who were selected from Motahari Hospital of Urmia in 2016, using consecutive sampling. Data was collected using questionnaires such as Demographics, Paloutzian and Ellison the Spiritual Health Scale (PESHS), Cohen's Perceived Stress (PSS), and Dennis Breastfeeding Self-Efficacy Scale (BSEF). Descriptive (Mean and standard deviation) and inferential statistics (ANOVA, Independent t-test, Pearson's correlation coefficient and multiple regressions) were used to analyze the data in SPSS software under windows with version 16.

**Results:** The results showed that the mean and standard deviation of breastfeeding self-efficacy score were  $128.95 \pm 17.84$ , respectively. The final multivariate regression model showed that the variables of spiritual health ( $p=0.01$ ,  $\beta = 0.208$ ,  $t=2.54$ ), perceived stress ( $p=0.03$ ,  $\beta = -0.173$ ,  $t=-2.18$ ), and monthly income ( $p=0.01$ ,  $\beta=0.214$ ,  $t=2.55$ ), had statistically significant relationships with breastfeeding self-efficacy. No significant relationships were observed between self-efficacy and other demographic variables ( $p>0.05$ ).

#### Conclusion

The study suggests that breastfeeding self-efficacy of mothers was influenced by spiritual health, perceived stress, and economic status. Hence, it is recommended and emphasized that health care providers consider these factors in designing their health interventions regarding breastfeeding.

**Key Words:** Breastfeeding, Self-efficacy, Mothers, Neonates.

\*Please cite this article as: Didarloo A, Rahmatnezhad L, Sheikhi S, Khodai F. Relationship of Spiritual Health and Perceived Stress with Breastfeeding Self-Efficacy: A Survey on Mothers with Hospitalized Neonates. *Int J Pediatr* 2017; 5(12): 6179-88. DOI: [10.22038/ijp.2017.25961.2210](https://doi.org/10.22038/ijp.2017.25961.2210)

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Received date: Aug.10, 2017; Accepted date: Aug. 22, 2017

## 1- INTRODUCTION

Children are considered as valuable assets of each country. If children are properly trained, educated and managed, they can play the major role in the development of countries. Protecting children against a variety of diseases and health problems must be a national priority. Therefore the health of children must be guaranteed in all stages of life, especially in the first two years of life (1). Feeding children, especially in the first two years of life, is one component that affects their physical, mental and social health. Breastfeeding is one of the highest impact interventions providing benefits for children, women and society (2-4).

On the other words, breastfeeding plays an important role in maintaining the life of infants, and is considered as one of the effective strategies for reducing infant mortality and morbidity (5, 6). The World Health Organization (WHO) recommends women around the world to exclusively breastfeeding of infants up to the first six months of a child and to continue for up to one year to achieve infants' optimal growth, development, and well-being (7, 8). Exclusive breastfeeding not only improves the health of the baby, but also reduces diabetes and ovarian cancer in mothers (9).

It has been found that successful breastfeeding and its continuation to be associated with breastfeeding self-efficacy which is modifiable by healthcare providers (10, 11). Self-efficacy, as a construct of the social cognitive theory of Bandura, is the individual's belief and confidence in his or her ability to complete tasks and reach goals. This concept can affect one's extent of effort and level of performance (12). Dennis (1999) has proposed the concept of breastfeeding self-efficacy. It refers to mothers' perceived ability or confidence to breastfeed their new infant (13). Evidence has demonstrated that mothers with higher

level of breastfeeding self-efficacy were generally more successful in initiating and continuing breastfeeding (14, 15). Mother's breastfeeding self-efficacy depends on physiological, psychological, and social factors. Mother's perceived stress may have a main role on breastfeeding self-efficacy and exclusive breastfeeding (16). Stress is defined by the American Psychological Association as a state of physiological or psychological response to internal or external stressors. Several studies have shown a relationship between psychological factors including mothers' perceived stress and their breastfeeding self-efficacy (5, 6). Perceived stress, a prevalent affective or emotional state, is more common in women than men and generally is more common in younger women (17).

Mothers with newborn babies hospitalized in neonatal intensive care unit (NICU) show a high level of unpleasant emotional state such as clinical signs of depression and anxiety (5,18). These symptoms can affect self-efficacy and the quality of life of mothers as well as the development of the child (6, 7). Studies have shown that infant appearance, neonatal behaviors, change in parental role, and long-term care in NICU are the sources of stress for parents (9). The care of the neonatal intensive care unit implies more on infant's needs, and if the mother is not considered as part of the care, the feeling of deprivation of the mother's duty arises (19). In hospitalized period, maternal-infant separation, even for a short time, may decline the neonate's ability to start breastfeeding and lead to a reduction in maternal self-efficacy (20, 21). Studies conducted by Dennis in 2003 and 2006, have documented significant negative correlations between perceived stress and breastfeeding self-efficacy at one week postpartum (22, 23). In addition, other important factor may be effective on women's breastfeeding self-efficacy is

their spiritual health. Spiritual health as one of the aspects of health is presented in definition of health based on The World Health Organization (WHO). The WHO implies the health's physical, psychological, social dimensions in defining aspects of human existence. It also considers spirituality as the fourth dimension for health, and this dimension is effective in human growth and development. The spiritual dimension plays a great role in motivating people's achievement in all aspects of life (24).

Spiritual health involves self-realized perceptions and a combination of personality factors and fundamental beliefs about being and having meaning in life that these beliefs are related to social, physical and psychological aspects of life (7). Spiritual health includes two existential and religious dimensions. Religious health refers to the satisfaction of communication with a superior power and existential health to attempt to understand meaning and purpose in life (25). It is believed that improved spiritual health may influence both mothers' perceived stress and their breastfeeding self-efficacy. In addition to psychological elements, demographic and maternal factors such as maternal race/ethnicity, education level, job, delivery mode, age of pregnancy, and family income may influence breastfeeding self-efficacy. For instance, in study of Hasanpoor et al., maternal age at pregnancy and educational level had a significant association with breastfeeding self-efficacy (26).

We think that the present study is the first research in Iran to investigate the relationship between spiritual well-being and perceived stress with self-efficacy of breastfeeding in a sample of mothers with hospitalized neonates. The study findings will add new information to the existing knowledge regarding predictors of breastfeeding self-efficacy.

## 2- MATERIALS AND METHODS

This cross-sectional study was conducted to investigate the relationship between spiritual well-being and perceived stress with self-efficacy of breastfeeding in mothers with hospitalized infants in NICU of Shahid Motahhari Hospital of Urmia, West Azerbaijan Province, Northwest of Iran, between April and September 2016. The research population included all mothers with hospitalized neonates who had inclusion criteria.

Inclusion criteria in the study were: 1) Mothers with a live and non-abnormal child. 2) Mothers who breastfeed their baby. 3) Mothers who were literate to read and write. 4) Mothers who had no history of any physical, psychological diseases and addiction to cigarettes, alcohol and drugs. 5) Mothers with neonates have been hospitalized for more than 3 days and less than one week. 6) Mothers who were willing to participate in the research.

In this study, the samples were selected using available sampling method. After explaining the study goals to samples and obtaining their written consent, every day researcher referred to NICU of Urmia Motahhari educational Hospital and selected the sample size. According to the results of the previous study (27), with a confidence level of 95%, the test power of 80% and the correlation coefficient of 0.24, the sample size was estimated 150 subjects. A total of 150 eligible mothers with hospitalized neonates in NICU using convenient sampling selected and recruited to the study. Then the researcher completed the study questionnaires through interviewing with the mothers. In this research, the following questionnaires were used to collect data:

1. Social-demographic information questionnaire included closed questions and short answers regarding age, education, mothers' occupation, family income, delivery mode, and gestation age.

2. Paloutzian and Ellison the Spiritual Health Questionnaire that its psychometric properties have been studied and confirmed by Soleimani et al. (2016) in Iran (28). Cronbach's alpha value for religious health, existential health, and the total spiritual health were 0.91, 0.84, and 0.88, respectively. This instrument was a 20-item questionnaire, which measured mothers' religious health with 10 questions and their existential health by 10 other questions. The score of religious health and existential health ranges from 10 to 60. The higher the score is, the higher the religious and existential health. The spiritual health score is the sum of these two subgroups, and its range is 20-120. Items were rated on a 6-point Likert scale ranging from 1 "strongly disagree" to 6 "strongly agree". In negative questions, the score has been reversed. The score of 1 (strongly disagree) for items of 3, 4, 7, 8, 10, 11, 14, 15, 17, 19, and 20, and the score of 6 (strongly disagree) for items of 1, 2, 5, 6, 9, 12, 13, 16, and 18 were considered.

3. Cohen's Perceived Stress Questionnaire (PSS) that its validity and reliability were confirmed by Maroufizadeh et al. (2014) in Iran (29), and its Cronbach's alpha value was 0.90. It included 14 questions, with this questionnaire; one can determine the individual's assessment of stressful situations of life. On this scale, people's answers are categorized from 0 (never) to 4 (most often) and its total score ranges from 0 to 56.

4. The breastfeeding self-efficacy scale (BSES) is a standard questionnaire, designed by Bandura in 1997 and used by Fax and Dennis (2003) for the first time. In addition, reliability and validity of this scale has been assessed for Iranian population (2010) (30), and its Cronbach's alpha value was 0.82. This questionnaire included 33 items; all questions were presented positively and started with the phrase "I can always". Items were rated on

a 5-point Likert scale and their score range from 1 "never or at all unsafe" to 5 "always or absolutely certain", and the range of lactation self-efficacy score was from 33 to 165. The highest score represents the highest self-efficacy to engage in breastfeeding and vice versa.

In this research, descriptive statistics techniques including means, and standard deviations were used to analyze the maternal and demographic data. Student's t-test, ANOVA and Pearson correlation coefficient, and regression model were used to study the research hypotheses. In regression analysis, two models were utilized to determine independent variables related to dependent variable. In first model, only maternal and demographic factors were entered into the model equation and their effect was evaluated on the dependent variable. But in the second model, in addition to demographic and maternal variables, the independent main variables of the study were also entered into the model equation and their combined effect was examined on the dependent variable. In this study,  $p < 0.05$  was considered significant in all statistical analyses.

### 3- RESULTS

#### 3-1. Characteristics of sample

A total of 159 eligible women with hospitalized neonate in the Hospital were investigated during the recruitment period. Six mothers (3.8%) refused to participate, and three participants (1.9%) excluded from the study due to defect response to the instrument items. Finally a total of 150 mothers completed this study with the response rate of 94.3%. **Table.1** presents the study original variables and the socio-demographic characteristics of the participants. The mean scores of mothers' spiritual health, perceived stress and breastfeeding self-efficacy were  $102.91 \pm 10.38$ ;  $37.06 \pm 5.69$ ;  $128.95 \pm 17.84$ ; respectively. The mean score of subjects'

age was  $25.23 \pm 4.80$  years old. One-hundred and eleven ( $n=111$ , 74%) mothers had education level of under diploma. Majority of mothers ( $n=140$ , 93.3%) were housewives, and more than half of the mothers ( $n=91$ , 60.7%) had gestational age more than 37 weeks. More than half of mothers ( $n=79$ , 52.7%) had moderate income. Among participants, 87 mothers (58%) had given birth by vaginal/forceps/vacuum whereas 63 mothers (42%) gave birth through cesarean section.

### 3-2. Bivariate and multivariate analysis

The most important point in this study is that a factor is considered as an effective variable when it is significant both in bivariate analyses and in the final model of regression analysis. The ANOVA, and Pearson correlation coefficient revealed that women's spiritual health, perceived stress, and family income are correlated with their breastfeeding self-efficacy and these relationships statistically were significant ( $p < 0.05$ ) (**Table.2**).

In order to confirm the significance of the results of the bivariate analyses and explore real predictors, two models of regression analysis also were carried out on women's breastfeeding self-efficacy. In the first model, demographic variables studied in the bivariate analyses were entered into a multiple linear regression equation and their effect, as independent variables, on breastfeeding self-efficacy was evaluated.

In the second model, spiritual health, perceived stress along with demographic variables was entered into the regression model and their effect was examined on the dependent variable. In the final model, spiritual health ( $P=0.01$ ,  $r = 0.208$ ), perceived stress ( $P=0.03$ ,  $r = -0.173$ ) and family income ( $P=0.01$ ,  $r=0.214$ ) remained in the regression equation and their impact was confirmed and maintained for breastfeeding self-efficacy (**Table.3**).

**Table-1:** Univariate predictors of dependent variable in the current study ( $n=150$ )

Variables	Breastfeeding self-efficacy			
	Mean	$\pm$ SD	Student's t-test/F-test	P-value
Education level			F-test = 0.29	0.74
Under diploma	128.28	17.64		
Diploma	130.93	20.74		
Over diploma	130.79	17.45		
Occupation			t-test = -0.47	0.64
Housewife	128.85	18.32		
Employed	130.40	9.05		
Gestation age			t-test = 0.32	0.74
Preterm	129.54	17.15		
Term	128.57	18.36		
Family income			F-test = 3.68	0.02 <sup>a</sup>
Weak	124.12	19.54		
Moderate	127.12	16.92		
Good	134.48	17.48		
Delivery mode			t-test = -1.60	.11
Normal	126.97	17.87		
Cesarean	131.68	17.58		

SD: standard deviation;  $P < 0.05$  is significant.

**Table-2:** Results of correlation matrix between independent variables and dependent variable (n=150)

Variables	Breastfeeding self-efficacy	Spiritual health	Perceived stress	Age
Breastfeeding self-efficacy	1			
Spiritual health	0.178	1		
Perceived stress	-0.191	-0.093	1	
Age	-0.032	-0.031	0.071	1

P < 0.05 is significant.

**Table-3:** Results of multiple regression analysis on breastfeeding self-efficacy (n=150)

Independent variables	Standardized Coefficients		t-value	P-value
	Beta			
<b>Model 1</b>				
Education level	0.119		-1.24	0.21
Occupation	0.039		.43	0.66
Gestation age	-0.009		-.08	0.93
Family income	0.237		2.73	0.007 <sup>b</sup>
Delivery mode	0.087		.94	0.34
Age	-0.104		-1.18	0.23
<b>Model 2</b>				
Education level	0.143		1.54	0.12
Occupation	0.100		1.14	0.25
Gestation age	-0.020		-.180	0.85
Family income	0.214		2.55	0.01 <sup>a</sup>
Delivery mode	0.135		1.49	0.13
Age	-0.096		-1.12	0.26
Spiritual health	0.208		2.54	0.01 <sup>a</sup>
Perceived stress	-0.173		-2.18	0.03 <sup>a</sup>

<sup>a</sup> P < 0.05; <sup>b</sup> P < 0.01 is significant.

#### 4- DISCUSSION

The purpose of this research was to examine association of breastfeeding self-efficacy with spiritual health, and perceived stress among a sample of women with neonates. Perceived self-efficacy, as a psychological factor, plays the main role in improving health performances; so that some previous studies demonstrated the impact of self-efficacy on some health promoting behaviors (31, 32). The findings of the present study revealed that there exists a positive significant association between spiritual health and breastfeeding self-efficacy. It means that women with high spiritual health had high breastfeeding self-efficacy in comparison with ones with

low spirituality. The results of the study conducted by Adegbola et al. showed that spirituality has a determining role on self-efficacy, and it statistically was significant (33). A study by Reicks et al. highlighted that spiritual practice such as prayer can increase self-esteem, self-efficacy, and set goals (34). Study of Konopack and colleagues also showed that spiritual health, through the effect on self-efficacy, causes changes in health behaviors such as physical activity in the elderly (35). Results of these studies were fully consistent with the present study findings. Baldachino believes that health education will not be comprehensive without spirituality and spiritual care education and health care providers will not be able to play their roles properly without

understanding these concepts (36). The current study also indicated that women with low stress level had high breastfeeding self-efficacy compared to they experienced high stress level. Indeed, it was observed an inverse significant correlation between mothers' perceived stress and their breastfeeding self-efficacy. As previous studies have documented significant negative correlations between these two variables at one week postpartum (22, 23).

Rondó and Souza believed that stress and tension determine health outcomes especially breastfeeding-related behaviors in postpartum periods (37). In addition, Groer and Davis in their study found that women who had high stress levels during their postpartum period tended to stop exclusive breastfeeding and initiate formulas for their children compared to other mothers (38). Kathryn investigated relationship between mother stress and milk production by mother. The findings of Kathryn study indicated that maternal physical and mental stress can disrupt the reflex of milk discharge from her breast through reducing the release of oxytocin hormone during breastfeeding.

If this happens repeatedly, it can reduce milk production due to incomplete emptying of the breasts at each breastfeeding. It has been also reported that maternal stress is accompanied with the delay onset of lactation during and after childbirth. In such a situation, mothers should receive advice and consultation from health care providers to improve breastfeeding during the first and second weeks after delivery (39). All these studies were in line with this part of our findings. The results of this study showed that no significant relationship was observed between the mean score of breastfeeding self-efficacy and some the demographic variables such as age, educational level, occupational status, gestation age, and delivery mode. The

finding of studies conducted by Hassanpour et al. (2010) (40), Bastani et al. (2009) (41), Katherine (2015) (42), and Charoghchian Khorasani et al. (2017) (9) were consistent with our results. Based on the present survey, subjects' breastfeeding self-efficacy had a positive significant linkage with their income. It seems that when monthly income of groups increases, their self-efficacy of breastfeeding also raises and vice versa. The study of Dennis revealed that there exists a direct, positive and significant between mothers' economic status and their breastfeeding self-efficacy. She confirms that breastfeeding self-efficacy is an important variable to identify for intervention mothers at risk to prematurely discontinue breastfeeding (23). In addition, Blyth et al. (2002) in their research also obtained the same results (43). Yengve and Sjöström believe that the economic and social status is one of the important determinants of lactation that should be addressed (44).

Warr et al. in their findings found that money, income, and occupation are as important indicators to influence health performances of individuals (45). Murganovic et al. in their final qualitative research emphasized the importance of poverty and unemployment in causing ill-health and adverse outcomes among people (46). These findings were consistent with this part of our study findings. There were several limitations to this study that make it necessary to interpret the study findings with caution. Firstly, a correlational design is not a strong method for understanding cause and effect relationships between variables. It is necessary to assess and identify these associations by applying stronger epidemiological methods. Secondly, the data of this study were collected using a self-report questionnaire. Participants may have underestimated or overestimated effective factors on breastfeeding. Thirdly, the sample size of this study was small,

and it is recommended that this research has been conducted on the same populations by other researchers using more sample size in other regions. It seems that doing this study for the first time in Iran can be a strong point and its results can contribute health care providers in caring mothers.

## 5- CONCLUSION

The current study revealed that factors such as spiritual health, perceived stress, and economic status were associated with breastfeeding self-efficacy. Thus, national public health intervention programmers and caregivers should focus on these variables to improve breastfeeding self-efficacy in mothers.

**6- CONFLICT OF INTEREST:** None.

## 7- ACKNOWLEDGMENT

This research work was elicited from a proposal approved by ethics committee of Urmia University of Medical Sciences. Thus, authors would like to thank the mothers and personnel of Motahhari Hospital of Urmia who participated in this study and all the people who kindly helped us in conducting this research.

## 8- REFERENCES

1. UNICEF. Breastfeeding information in Iran 2007. Available at: <http://www.unicef.org/iran/fa/media.html>.
2. Hansen K. Breastfeeding: a smart investment in people and in economies. *Lancet*, 2016; 387,416.
3. Khosravi Anbaran Z, Baghdari N, Sadeghi Sahebzad E, Moradi M, Karimi FZ. Comparing Infant Nutrition in Wanted and Unwanted Pregnancies. *Int J Pediatr* 2016; 4(12): 4043-50.
4. Saeidi M, Vakili R, Khakshour A, Taghizade Moghaddam H, Kiani MA, Zarif B, et al. Iron and multivitamin supplements in children and its association with growth rate.

*International Journal of Pediatrics*. 2013; 1(1):13-17.

5. Mogre V, Dery M, Gaa PK. Knowledge, attitudes and determinants of exclusive breastfeeding practice among Ghanaian rural lactating mothers. *Int Breastfeed J*. 2016; 11(1):12-20.

6. Khadivzadeh T, Karimi FZ, Tara F, Bagheri S. The Effect of Postpartum Mother– Infant Skin-to-Skin Contact on Exclusive Breastfeeding In neonatal period: A Randomized Controlled Trial. *Int J Pediatr* 2016; 4(5): 5409-17.

7. Chowdhury ZT, Henderson MA, Watson RR. Breastfeeding and infant health in the Indian subcontinent: problems and solutions. New York: Nutrition in Infancy, Springer; 2013. Pp. 51-66.

8. U. DHHS, Healthy People 2020, Office of Disease Prevention and Health Promotion, 2010.

9. Charoghchian Khorasani E, Peyman N, Esmaily H. Relations between Breast feeding Self-efficacy and Maternal Health Literacy among Pregnant Women. *Evidence Based Care Journal*, 2017; 6 (4): 18-25.

10. Meedya S, Fahy K, Kable A. Factors that positively influence breastfeeding Duration to 6months: a literature review. *Women and Birth*, 2010; 23,135–45.

11. de Jager E, Skouteris H, Broadbent J, Amir L, Mellor K. Psychosocial correlates of exclusive breastfeeding: systematic review. *Midwifery*, 2013; 29, 506–18.

12. Khorshidifard M, Amini M, Dehghani MR, Zaree N, Pishva N, Zarifsanaiy N. Assessment of Breastfeeding Education by Face to Face and Small-Group Education Methods in Mothers' Self-Efficacy in Kazeroun Health Centers in 2015. *Women's Health Bull*. 2017; 4(3):e41919.

13. Dennis CL. Theoretical underpinnings of breastfeeding confidence: a self-efficacy framework. *J Hum Lact*. 1999; 15(3):195-201.

14. Ip WY, Yeung LS, Choi KC, Chair SY, Dennis CL. Translation and validation of the Hong Kong Chinese version of the Breast feeding Self-efficacy Scale-short Form. *Research in Nursing Health*. 2012; 35,450–59.



15. de Jager E, Broadbent J, Fuller-Tyszkiewicz M, Skouteris H. The role of psychosocial factors in exclusive breastfeeding to six months postpartum. *Midwifery*. 2014; 30,657–66.
16. Dozier A, Nelson A et al. The Relationship between Life Stress and Breastfeeding Outcomes among Low-Income Mothers Hindawi Publishing Corporation *Advances in Preventive Medicine* Volume 2012, Article ID 902487, 10 pages doi:10.1155/2012/902487.
17. Cohen S, Janicki-Deverts D. Who's stressed? Distributions of psychological stress in the United States in probability samples from 1983, 2006, and 2009. *Journal of Applied Social Psychology*. 2012; 42(6), 1320–1334. Doi: 10.1111/j.1559-1816.2012.00900.x
18. Karimi FZ, Khadivzadeh T, Saeidi M, Bagheri S. The Effect of Kangaroo Mother Care Immediately after Delivery on Mother-infant Attachment and on Maternal Anxiety about the Baby 3- Months after Delivery: a Randomized Controlled Trial. *Int J Pediatr* 2016; 4(9): 3561-70.
19. O'Hara MW, McCabe JE. Postpartum depression: Current status and future directions. *Annual Review of Clinical Psychology*. 2013; 9:379–407.
20. Genna CW. *Supporting Sucking Skills in Breastfeeding Infants*. Ones and Bartlett Learning, Burlington. 2013
21. Karimi A, Bagheri S, Khadivzadeh T, Mirzaii Najmabadi Kh. The Effect of an Interventional Program, Based on the Theory of Ethology, on Breastfeeding Competence of Infants. *Iranian Journal of Neonatology* 2014; 5(3): 10-12.
22. Dennis CL. The breastfeeding self-efficacy scale: psychometric assessment of the short form. *Journal of Obstetric, Gynecological, and Neonatal Nursing*. 2003; 32 (6), 734-744. Doi: 10.1177/0884217503258459
23. Dennis CL. Identifying predictors of breastfeeding self-efficacy in the immediate postpartum period. *Research in Nursing and Health*. 2006; 29(4), 256-268.
24. World Health Organization Publication: Year 1991. Issue 9290211407. Chapter 4: The Spiritual Dimension.
25. Sara N, Gian S, Jhangri. Existential and Religious Dimensions of Spirituality and Their Relationship with Health-Related Quality of Life in Chronic Kidney Disease. *Clin J Am Soc Nephrol*. 2010; 5(11): 1969–1976. doi: 10.2215/CJN.01890310
26. Hasanpoor S, Bani S, Ansari S, Ebrahimi H. Measuring breastfeeding self-efficacy among pregnant women referred to health centers of Ahvaz. *Nurs Midwifery J*. 2010; 5(19):47-53. (Persian).
27. MomeniGhaleghasemi T, Musarezaie A, Moeini M. Survey of Relationship between spiritual wellbeing with Anxiety and Some Demographic Variables in Patients with Coronary Artery Disease. *Research Journal of Health System*. 2013; 9(7): 702-11.
28. Soleimani MA, Pahlevan Sharif S, Kelly A, Yaghoobzadeh A, Sharif Nia H, Gorgulu O. Psychometric Properties of the Persian Version of Spiritual Well-Being Scale in Patients with Acute Myocardial Infarction. *Journal of Religion and Health*. 2016; Pp. 1–17.
29. Maroufizadeh S, Zareyan A, Sigari N. Psychometric Properties of the 14, 10 and 4-items: Perceived Stress Scale among Asthmatic patients in Iran. *PAYESH*. 2014; 13(4), p: 457 - 65. (In Persian)
30. Hasanpoor S, Bani S, Ansari S, Ebrahimi H. Measuring breastfeeding self-efficacy among pregnant women referred to health centers of Ahvaz. *Nurs Midwifery J*. 2010; 5(19):47-53. (In Persian).
31. Didarloo A, Shojaeizadeh D, Gharaaghaji Asl R, Niknami S, Khorami A. Psychosocial correlates of dietary behaviour in type 2 diabetic women, using a behaviour changetheory. *J Health Popul Nutr*. 2014; 32(2):335-41.
32. Didarloo A, Shojaeizadeh D, Alizadeh M. Impact of educational intervention based on Interactive approaches on beliefs, behavior, and hemoglobin A1C, and quality of life in diabetic women. *Int J Prev Med* 2016; 7:38-44.
33. Adegbola M. Spirituality, self-efficacy and quality of life among adults with sickle cell disease. *Southern online journal of nursing research*. 2011; 11(1):5-11.

34. Reicks M, Mills J, Henry H. Qualitative study of spirituality in a weight loss program: Contribution to self-efficacy and locus of control. *Journal of nutrition education and behavior*. 2004; 36(1):13-9.
35. Konopack JF, McAuley E. Efficacy-mediated effects of spirituality and physical activity on quality of life: A path analysis. *Health and quality of life outcomes*. 2012; 10(1):1-6
36. Baldachino DR. Teaching on the spiritual dimension in care to undergraduate nursing students: The content and teaching methods. *Nurse Education Today*. 2007; 28 (4): 501-12.
37. Rondó PH, Souza MR. Maternal distress and intended breastfeeding duration. *J Psychos Obstet Gynaecol*. 2007; 28(1):55-60.
38. Groer MW, Davis MW. Cytokines, infections, stress, and dysphoric moods in breastfeeders and formula feeders. *J Obstet Gynecol Neonatal Nurs*. 2006; 35(5):599-607.
39. Kathryn GD. Maternal and fetal stress are associated with impaired lactogenesis in humans. *J Nutr*. 2001; 131: 30125-155.
40. Hasanpoor S, Bani S, Ansari S, Ebrahimi H. Measuring breastfeeding self-efficacy among pregnant women referred to health centers of Ahvaz. *Nurs Midwifery J*. 2010; 5(19):47-53. (In Persian)
41. Bastani F, Rahmatnejad L, Jahdi F, Haghani H. Breastfeeding self-efficacy and perceived stress in primiparous mothers. *Iran J Nurs*. 2008; 21(54):9-24. (In Persian).
42. Katherine H. The Relationships among Perceived Stress, Birth Satisfaction, and Breastfeeding Self-efficacy in Early Postpartum Women. *Dissertations and theses, Seton Hall University*, spring 5-16-2015.
43. Blyth R, Creedy DK, Dennis CL, Moyle W, Pratt J, De Vries SM. Effect of maternal confidence on breastfeeding duration: An application of breastfeeding self-efficacy theory. *Birth*. 2002; 29: 278–84.
44. Yngve A, Sjöström M. Breastfeeding determinants and a suggested framework for action in Europe. *Pub Health Nut*. 2001; 4(2B):729-39.
45. Warr DJ, Tacticos T, Kelaher M, Klein H. Money, stress, jobs: Residents' perceptions of health impairing factors in 'poor' neighborhoods. *Health Place*. 2007; 13(3):743-56.
46. Marjanovic Z, Greenglass ER, Coffey S. The relevance of psychosocial variables and working conditions in predicting nurses' coping strategies during the SARS crisis: An online questionnaire survey. *Int J Nur Stud*. 2007; 44(6): 991-98.