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ORIGINAL PAPER

Relationship of Breastfeeding Self-Efficacy with Self-Esteem and General Health in Breastfeeding Mothers Referred to Health Centers of Falavarjan City-Iran, 2015

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Abstract

This study aimed to examine the relationship of breastfeeding self-efficacy with self-esteem and general health. This cross-sectional study was conducted on 547 breastfeeding mothers in Falavarjan-Iran. Participants were selected randomly, and questionnaires of socio-demographic characteristics, breastfeeding self-efficacy, self esteem, and the GHQ-28 were completed through interview. The mean score (SD) of breastfeeding self-efficacy was 134.5 (13.3) from the score range of 33–165. The mean score of self-esteem was 5.89 (4.0) from − 10 to + 10 score range, and the mean score of general health was 19.7 (9.13) from the 0–84 score range. Self-esteem, general health and its dimensions showed a significant relationship with breastfeeding self-efficacy. According to the multivariate linear regression, physical symptoms, social dysfunction, age, education, spouse's job, economic status, duration of previous breastfeeding, and receiving breastfeeding education were related to breastfeeding self-efficacy. The results indicated that with an improvement in self-esteem and general health, breastfeeding self-efficacy escalates significantly.

Keywords Breastfeeding self-efficacy · Breastfeeding · Self-esteem · General health

Introduction

In general, breastfeeding is considered the best method for nourishing neonates younger than 6 months old all over the globe, and breastfeeding should continue along with complementary nourishment by the age of two (WHO 2014a, b). Mother's milk reduces the need for hospitalization to treat respiratory diseases and protects the neonate from diarrhea, middle ear infections, allergy, and type II diabetes. Neonate's deprivation of mother's milk reduces neonatal self-esteem, depression, early death, and disability in adulthood (Quigley et al. 2016). According to the report by the World Health Organization (WHO), lives of 800,000 neonates can be saved each year by breastfeeding until the age of two (WHO 2014a, b). In addition, breastfeeding reduces the risk of breast cancer, osteoporosis, and pregnancy, inhibits its progress of endometriosis, facilitates postpartum weight loss, and increases uterus contractions to control postpartum bleeding. It also improves motherhood ability (Sikorski et al. 2002). In addition to the mentioned advantages of mother's milk for the child and mother, it positively influences family and society's economies due to the lack of use of infant formula (Saha and Gerdtham 2013).

Numerous factors are involved in the beginning and continuation of breastfeeding, and one of these factors is breastfeeding self-efficacy (Pollard et al. 2009). The theoretical framework for this study is Bandura's (1997) self-efficacy theory. Self-efficacy as defined by Bandura (1995), refers to "the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations". Dennis (1999) applied Bandura's self-efficacy theory

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to breastfeeding (Dennis 1999). Breastfeeding self-efficacy refers to the mother's trust in her ability to breastfeed her baby, which is a prominent variable in the course of breastfeeding (Blyth et al. 2004).Also, Self-esteem is defined as a person's opinion about himself/herself or a person's approval or rejection of himself/herself. Self-esteem facilitates and inhibits the person's tendency for adopting certain strategies and influences the person's ability to adapt to new situations (Guillon et al. 2003; Susan Sells 1984).

Bandura (1997) reported that self-esteem and self-efficacy have different concepts but they are sometimes used interchangeably. Bandura stated that perceived self-efficacy deals with the judgments of one's personal capabilities, whereas self-esteem deals with the judgments of one's self-worth (Bandura 1997). Although self-esteem and self-efficacy are not the same concept, an association exists between them (Sharp 2001). Tracy (1995) supported the idea that there is a relationship between self-esteem and self-efficacy. He explained that self-esteem consists of two factors: self-efficacy and self-worth. Tracy mentioned that self-esteem and self-efficacy reinforce each other. When one feels good about oneself, one performs better, and when one performs well, one feels good about oneself (Tracy 1995). A strong sense of personal self-efficacy is associated with better health (Bandura 1997; Schwarzer 1992). Bandura also showed that self-efficacy predicts better health and well-being (Bandura 1997). WHO defines health as complete physical, mental, and social welfare and not solely lack of disease. This definition points to the natural functional of body's structures and organs as well as compliance with the physical -psychological environment and attitudes (Mirghafourvand et al. 2016).

The relationship between self-efficacy and general health has been showed in a study in the south of Brazil on 88 breastfeeding mothers (Zubaran and Foresti 2013). Also, the results of Solhi et al., on 130 people showed that there is a direct relationship between self-efficacy score and general health (Solhi et al. 2013). According to a study by Barez et al., there is a relationship between self-efficacy and self-esteem (Barez and Maleki 2016). The above mentioned studies recommended conducting of studies with a larger sample size.

Because of the importance of breastfeeding, we searched credible scientific databases and given the limitation of studies about relationship between breastfeeding self-efficacy with self-esteem and general health, we decided to conduct this study. Therefore, the aim of this study was to assess the relationship between breastfeeding self-efficacy and general health and self-esteem. We hope this research opens a window to improvement of society's health.

Materials and Methods

Study Design and Participants

This cross-sectional study was conducted from June to November 2015 on 547 breastfeeding mothers. The mothers had health records in the health centers of Falavarjan city in Isfahan province-Iran.

The inclusion criteria included the following: mothers with 2- to 6-month-old babies; mothers with infants that was term in gestational age; lack of any disorder in the infant's mouth or tongue, which could influence his/her feeding from mother's breast (such as glossitis; short frenulum and cleft palate); lack of neonatal hospitalization during infancy; lack of distance between the mother and neonate in the early days of birth; lack of self-reported maternal mental disorders requiring treatment; Iranian nationality; and having a phone number. The exclusion criteria also included the following: having breastfeeding contraindications such as drug abuse and alcohol abuse, having galactosemic infants, women with HIV, women with active untreated tuberculosis, women receiving breast cancer treatment, women with hepatitis B and non-vaccinated infants, and women with breast herpes. In addition, women who were not willing to continue participating in this research were excluded.

The sample size was determined based on three variables namely breastfeeding self-efficacy (Varaei et al. 2009), self-esteem (Akhlaghy et al. 2012), and general health (Vashani et al. 2014). The sample size calculated based on the general health variable was higher. Hence, based on the findings by Vashani et al. (2014) as well as $m = 35.4$, $SD = 13.0$, $\alpha = 0.05$, statistical power = 90%, and research precision $(d) = 0.05$, the mean sample size was 420. Finally, considering the possible sample loss in this research a sample size of 547 was obtained (Vashani et al. 2014).

Sampling

Falavarjan city embraces 12 urban health centers, and samples were collected from these health centers. To carry out the sampling, first a list of breastfeeding women with two to six-month-old babies, who met the inclusion criteria, was extracted from the records in health centers. The women were listed by numbers and samples were selected randomly by Randomizer software. The samples were invited to the briefing session through phone calls. In the attending session hold in the health centers, explanations about the research objectives and methods were given to participants and the written consent was obtained from them, who were willing to take part in this research. The questionnaires used in the study were completed by interview method.

Data Collection Scales

The following four questionnaires were used to collect the data, and they were completed through interview: socio-demographic characteristics questionnaire; Rosenberg Self-Esteem Scale (RSES); General Health Questionnaire (GHQ-28); and Breastfeeding Self-Efficacy Scale (BSES).

The socio-demographic characteristics questionnaire consisted of 22 questions about age, profession, education, and childbirth and breastfeeding information. The validity of this questionnaire was confirmed by face and content validity.

Dennis' breastfeeding self-efficacy scale (BSES) is a 33-item self-report scale, which is scored based on the Likert scale. Score 1 belongs to the "fully disagreed" option, while score 5 belongs to the "fully agreed" option. The scores range from 33 to 165. Scores from 33 to 76, 77 to 120, and 121 to 165 show low self-efficacy, moderate self-efficacy, and high self-efficacy, respectively. A validity assessment of this scale was carried out in Shahr-e Kurd (Iran) by Karbandi et al., and reliability of this scale was confirmed using the test–retest method (r = %85) (Karbandi et al. 2014).

Questions in the Rosenberg Self-Esteem Scale were answered with "agreed" and "disagreed". Positive responses to each of the statements no. 1–5 are scored +1. Negative responses to each of the statements no. 1–5 are given − 1. Positive responses to each of the statements no. 6–10 are scored − 1 and negative responses to each of the statements 6–10 are given + 1. The algebraic sum of all scores is calculated. A score higher than zero shows high self-esteem levels, whereas a score lower than zero shows low self-esteem. Psychometric analysis of RSES in Iran was carried out by Rajabi, who reported a reliability of 84% based on Cronbach's alpha coefficient. Validity of the scale was also reported to be satisfactory using the content validity assessment method (Rajabi 2007).

The general health questionnaire (GHQ-28) contains 28 questions, and each question is scored from 0 to 3, and the final score of each participant ranges from 0 to 84. A higher score shows a lower general health level. Participants with no symptom, mild symptoms, moderate symptoms, and severe (medical) symptoms are scored 0–22, 23–40, 41–60, and 61–84, respectively. With a Cronbach's alpha coefficient of 0.77, the questionnaire's reliability was satisfactory. In the study by Palahang et al., reliability of the questionnaire was reported to be r = 91% using the test–retest method, while its validity was approved using the content validity assessment method (Palahang et al. 1996).

Data Analysis

Following data collection, the data was analyzed statistically in SPSS version 21. Descriptive statistics including absolute and relative frequency distribution, and measures of central tendency and scattering (e.g. mean and standard deviation) were used to describe the socio-demographic characteristics. The normality of data was determined by kurtosis and skewness tests.

First, bivariate statistical tests (such as Pearson's test, independent *t* test, and one-way analysis of variance) were used to analyze the relationship of self-esteem and general health with breastfeeding self-efficacy and socio-demographic characteristics. Afterwards, to control the confounding factors, estimate the effect of each independent variable (self-esteem, general health, and socio-demographic characteristics) on the dependent variable (breastfeeding self-efficacy), and explain the variance, that group of independent variables with p-values smaller than 0.2 were entered to the multivariate linear regression model with the backward strategy. Prior to the multivariate analysis, regression pre-assumptions such as normality of residues, homogeneity of residues variance, collinearity of outliers, and independence of resides, were examined.

Findings

Table 1 presents results of socio-demographic characteristics. The mean score (standard deviation) of breastfeeding self-efficacy was 134.5 (13.3) from the attainable score range of 33–165. The mean score of self-esteem was 5.89 (4.0) from the − 10 to + 10 score range, and the mean score of general health was 19.7 (9.13) from the 0–84 score range. Breastfeeding self-efficacy showed a significant direct relationship with self-esteem ($r = 0.31$, $p < 0.001$) and general health ($r = -0.37$, $p < 0.001$), and this direct significant relationship was observed in all dimensions of general health (Table 2).

Based on the bivariate tests results, from the socio-demographic characteristics, education, spouse's age, spouse's job, economic status, pregnancy age, tendency for pregnancy, receiving breastfeeding education, and breastfeeding tutor had a statistically significant relationship with breastfeeding self-efficacy ($p < 0.05$). These variables in addition to age, neonate's age, duration of previous breastfeeding, and consumption of nutrients (which had $p < 0.2$) as well as self-esteem, general health and its dimensions were entered to the multivariate linear regression model with the backward strategy. From these variables, physical symptoms, social dysfunction, age, education, spouse's job, economic status, duration of previous breastfeeding, and receiving breastfeeding education remained in the model and explained 14.5% of variance of the total breastfeeding self-efficacy score (Table 3).

Table 1 Socio-demographic characteristics of participants (n = 547)

Characteristics	Number (%)	Characteristics	Number (%)
Age		Number of labors	
15	219 (40)	1	298 (54.5)
25–35	196 (35.8)	2	169 (30.9)
> 35	132 (24.7)	3	55 (10.1)
Job		> 3	25 (4.6)
Housewife	489 (89.4)	Infants age difference with previous child	5.30 (3.08)[a]
Employed	58 (10.6)	Pregnancy age at the time of labor	13 (2.4)
Education		< 34	495 (91.5)
Illiterate and primary education	54 (9.9)	34–40	
Secondary school	63 (11.5)	> 40	33 (6.1)
High school	26 (4.8)	Tendency for pregnancy	
Diploma	249 (45.5)	Wanted	435 (79.5)
University	155 (28.3)	Unwanted	112 (20.5)
Husband's age		Method of pregnancy	
20–55	54 (9.9)	Natural	513 (93.8)
25–30	202 (36.9)	Infertility treatment	34 (6.2)
30–35	152 (29.1)	Interest in infant's gender	
> 35	132 (24.1)	Wanted	354 (64.7)
Husband's job		Unwanted	193 (35.3)
Unemployed	27 (4.9)	Infant's gender	
Worker	170 (31.3)	Male	278 (51)
Employee	98 (17.9)	Female	267 (49)
Shop keeper	25 (4.6)	Infant's age	3.98 (1.51)[a]
Freelancer	187 (34.2)	History of breastfeeding	
Others	40 (7.3)	Yes	244 (44.6)
Husband's education		No	303 (55.4)
Illiterate and primary education	47 (8.6)	Average duration of previous breastfeeding period	20.79 (5.05)[a]
Secondary school	83 (15.2)	Use of lactation enhancement medicine	
High school	44(8)	Yes	110 (20.1)
Diploma	239 (43.7)	No	437 (79.9)
University	134 (24.5)	Use of nutrients	
Economic condition		Yes	138 (25.2)
Satisfactory	192 (35.1)	No	409 (74.8)
Almost satisfactory	309 (56.5)	Receiving breastfeeding education	
Non satisfactory	46 (8.4)	Yes	471 (86.3)
Number of pregnancy		No	75 (13.7)
1	283 (51.7)	Breastfeeding trainer	
2	158 (28.9)	Physician	29 (6)
3	66 (12.1)	Midwife or nurse	452 (94)
> 3	40 (7.3)		

[a]Numbers indicated by mean (standard deviation) values

Discussion

Results of the present study revealed that scores of breastfeeding self-efficacy, self-esteem, and general health of breastfeeding mothers visited health centers of Falavarjan city were higher than average. In addition, breastfeeding self-efficacy demonstrated a direct significant relationship with self-esteem and a reverse significant relationship with general health, and all of its dimensions. Physical symptoms, social dysfunction, age, education, spouse's job, economic status, duration of previous breastfeeding, and receiving breastfeeding education were the predictors of breastfeeding self-efficacy.

Table 2 Relationship of breastfeeding self-efficacy with self-esteem, general health and its dimensions in breastfeeding mothers visiting health centers of Falavarjan City (n = 547)

Variable	Mean (SD)[a]	Median (percentile 25–75)	Obtained scores range	Observed scores range	Relationship with breastfeeding self-efficacy r (p)
Self-esteem	5.8 (4.0)	8 (4–10)	(−10) to (10)	(−8) to (10)	0.31 (<0.001)
Total general health score	19.7 (9.1)	18(13–24)	0–84	0–50	−0.37 (<0.001)
Physical symptoms	5.5 (3.2)	5 (3–7)	0–21	0–20	−0.19 (<0.001)
Anxiety and insomnia	5.5 (3.1)	6 (3–7)	0–21	0–18	−0.31 (<0.001)
Social dysfunction	6.4 (2.2)	7 (5–7)	0–21	0–16	−0.28 (<0.001)
Depression	3.5 (2.1)	0 (0–4)	0–21	0–21	−0.24 (<0.001)
Breastfeeding self-efficacy	134.5 (13.3)	134 (127–144)	33–165	60–165	

[a]Standard deviation

Table 3 Predictors of breastfeeding self-efficacy in breastfeeding mothers visiting health centers of Falavarjan City (n = 547)

Variable	B (95% confidence interval)	p
Physical symptoms	−4.0 (−0.9 to 0.0)	0.084
Social dysfunction	−0.5 (−1.3 to 0.1)	0.114
Age		
15–25 (reference)	0	0
25–35	−0.7 (−5.0 to 3.4)	0.712
> 35	−3.3 (−7.5 to 0.8)	0.116
Education		
Diploma (reference)	0	0
Illiterate and primaryeducation	4.2 (−0.5 to 8.9)	0.081
Secondary school	−4.5 (−8.6 to −0.4)	0.029
High school	−3.0 (−10.6 to 4.4)	0.419
University	−2.4 (−6.7 to 1.7)	0.251
Husband's job		
Freelancer (reference)	0	0
Unemployed	−6.2 (−14.5 to 1.9)	0.135
Worker	−0.7 (−4.3 to 2.9)	0.703
Employee	−1.6 (−5.9 to 2.5)	0.436
Shop keeper	8.1 (0.5 to 15.7)	0.036
Others	0.1 (−5.3 to 5.7)	0.949
Economic condition		
Almost satisfactory (reference)	0	0
Satisfactory	0.8 (−2.5 to 4.2)	0.625
Non satisfactory	−6.3 (−12.3 to −0.4)	0.036
Average duration of previous breastfeeding period	0.275 (−0.0 to 0.5)	0.062
Receiving breastfeeding education		
Yes (reference)	0	0
No	−7.4 (−12.1 to −2.6)	0.002

Adjusted $R^2 = 14.5\%$

In this study, breastfeeding self-efficacy was higher than the average level and complied the research by Varaee et al. in Tehran-capital of Iran. The compliance could be attributed to the similarity of sample sizes in the two studies and similarities between some of the socio-demographic factors such as age range, profession, and education in the two study group (Varaei et al. 2009).

In the present study, breastfeeding self-efficacy displayed a significant relationship with self-esteem and general health. According to a study by Barez et al. on 300 primiparous mothers, there is a relationship between self-efficacy and self-esteem (Barez and Maleki 2016). The study of Solhi et al., on 130 people showed that there is a direct relationship between self-efficacy score and general health, and recommended a study with a larger sample size (Solhi et al. 2013). Zubaran and Foresti (2013) carried out a descriptive study in the south of Brazil on 88 breastfeeding mothers. The study, which was titled "relationship of general health with breastfeeding", revealed that general health positively affects breastfeeding self-efficacy. In addition, the researchers recommended another study with a larger sample (Zubaran and Foresti 2013). The findings of this study are consistent with the results of all above mentioned studies. However, the sample size in the present study was more than double the sample size the in the two aforementioned studies, and thus demonstrates the relationship of breastfeeding self-efficacy with self-esteem and general health more powerfully. Since successful breastfeeding and breastfeeding self-efficacy depend on maternal physiological and psychological factors, and since dimensions of general health include physical symptoms, anxiety, insomnia, social dysfunction, and depression, the result can explain the relationship of breastfeeding self-efficacy with dimensions of general health.

In the present study, mothers with unemployed spouses demonstrated lower breastfeeding self-efficacy. It seems, fathers' unemployment leads to undesirable economic conditions and reduces possibility of provision of health care services. As a result, general health declines and breastfeeding self-efficacy subsides, which complied with the research by Mirghafourvand et al., which reported an increase in

breastfeeding self-efficacy with increasing of social support (Mirghafourvand et al. 2018).

Duration of previous breastfeeding period was another predictor of breastfeeding self-efficacy in the present study, which complied with the researches by Hatamleh (2006) on pregnant women in the United States (Hatamleh 2006) Increased previous breastfeeding duration and breastfeeding training improve the breastfeeding experience and increase breastfeeding self-efficacy.

In this study, breastfeeding self-efficacy of illiterate mothers or mothers with basic education was higher. This study does not comply with the study by Hassanpour et al. and Varaee et al., which reported an increase in breastfeeding self-efficacy with improved education (Hasanpoor et al. 2010; Varaei et al. 2009). This lack of compliance could be perhaps attributed to the fact that a few percentage of the samples of these two studies had degrees higher than high school diploma, while more than two-third of our participants had degrees higher than high school diploma.

The present research also revealed that receiving breastfeeding education is directly and significantly related to breastfeeding self-efficacy, which complies with the research by Aqababayi et al. on nulliparous women in Hamedan (Iran) (Aghababayi et al. 2008). The compliance could be explained by stating that breastfeeding training introduces proper breastfeeding methods and improves peoples' breastfeeding ability.

In view of results of this research, the breastfeeding self-efficacy was higher than the average and statistically significant relationship was found with self-esteem and general health. It could be stated that it is possible to improve breastfeeding self-efficacy by holding training courses on methods of enhancing self-esteem and general health. One of the limitations of this study was caused by its cross-sectional nature. Hence, the relationship of self-esteem, general health, and socio-demographic characteristics with breastfeeding self-efficacy does not exactly represent a causal relationship. Moreover, since the participants of this study were different in terms of number of pregnancies, and since history of breastfeeding positively affects breastfeeding self-efficacy (Chen et al. 2007), a similar study on nulliparous women is recommended.

Due to the cross-sectional of this study, the relationships shown between breastfeeding self-efficacy with self-esteem and general health do not necessarily indicate a causal relationship. Another limitation is due to the research setting; this study was conducted in urban health centers of a small city of Isfahan province-Iran, therefore, the results cannot be generalized to the rural population and the population of the rest of the Iranian cities. Random sampling of breastfeeding mothers is a strong point of this study. Using of standard scales for measuring breastfeeding self-efficacy, self-esteem and general health is another strengths of this study. The researcher hopes that the findings of this study can be useful for increasing breastfeeding. Improving breastfeeding self-efficacy, self-esteem as well as general health in mothers can be done by holding the training classes through using of different educational methods.

Conclusion

Study findings revealed the significant and direct relationship of breastfeeding self-efficacy with self-esteem and general health. Because breastfeeding self-efficacy plays a significant role in selection and continuation of breastfeeding. Therefore, it is seemingly possible to improve mothers' breastfeeding self-efficacy by holding training courses on methods of improving maternal self-esteem and general health as two important variables.

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Compliance with Ethical Standards

Conflict of interest No Authors have conflict of interest.

References

Aghababayi, S., Bakht, R., Bahmanzadeh, M., & Aghamohammadi, L. (2008). The effect of education breastfeeding in nulliparous patients Fatemieh. *Journal of Faculty of Nursing & Midwifery, Hamedan, 17*(1–2), 41–45.

Akhlaghy, F., Mokhber, N., Shakeri, M., & Shamsa, F. (2012). The relationship between depression, anxiety, self-esteem, marital satisfaction and demographic factors With fear of childbirth in nulliparous women. *Journal of Fundamentals of Mental Health, 14*(2), 122–131.

Bandura, A. (1995). *Exercise of personal and collective efficacy in changing societies*. New York: Cambridge University Press.

Bandura, A. (1997). *Self-efficacy: The exercise of control* (1st ed.). New York: W. H. Freeman.

Barez, M. A., & Maleki, N. (2016). Self esteem and its associated factors in primiparous mothers during breast feeding period. *Journal of Clinical Nursing and Midwifery, 5*(2), 19–28.

Blyth, R. J., Creedy, D. K., Dennis, C. L., Moyle, W., Pratt, J., De Vries, S. M., et al. (2004). Breastfeeding duration in an Australian population: The influence of modifiable antenatal factors. *Journal of Human Lactation, 20*(1), 30–38.

Chen, Y. C., Chie, W. C., Kuo, S. C., Lin, Y. H., Lin, S. J., & Chen, P. C. (2007). The association between infant feeding pattern and mother's quality of life in Taiwan. *Quality of Life Research, 16*(8), 1281–1288.

Dennis, C. L. (1999). *The importance of breastfeeding self-efficacy on duration and exclusivity*. Toronto: University of Toronto.

Guillon, M. S., Crocq, M. A., & Bailey, P. E. (2003). The relationship between self-esteem and psychiatric disorders in adolescents. *European Psychiatry, 18*(2), 59–62.

Hasanpoor, Sh, Bani, S., Ansari, S., & Ebrahimi, H. (2010). Self-efficacy in pregnant women referred to health centers—In Ahvaz. *Nursing and Midwifery Journal, 5*(19), 47–53.

Hatamleh, W. (2006). The effect of a breastfeeding self-efficacy intervention on breastfeeding self-efficacy and duration. Electronic Thesis or Dissertation. Retrieved from https://etd.ohiolink.edu

Karbandi, S., Hosseini, S. M., Masoudi, R., & Mamuri, G. H. (2014). The effect of relaxation on the efficacy of breastfeeding mothers with babies Prematurity: A randomized clinical trial. *Journal of Clinical Nursing, 3*(2), 37–45.

Mirghafourvand, M., Malakouti, J., Charandabi, S. M.-A., & Faridvand, F. (2018). Predictors of breastfeeding self-efficacy in iranian women: A cross-sectional study. *International Journal of Women's Health and Reproduction Sciences, 6*(3), 380–385.

Mirghafourvand, M., Charandabi, S. M.-A., Sharajabad, F. A., & Sanaati, F. (2016). Spiritual well-being and health-related quality of life in iranian adolescent girls. *Community Mental Health Journal, 52*(4), 484–492.

Palahang, H., Nasr, M., & Shahmohammadi, D. (1996). Epidemiological study of mental disorder in urban and urban areas of Soumaah-Sara city- Gilan. *Andisheh va Raftar Journal, 2*(4), 11.

Pollard, D., Cuill, M., & Wilmigton, N. (2009). The relationship between baseline self-efficacy and breastfeeding duration. *Southern Online Journal of Nursing Reasearch, 9*(4), 1–6.

Quigley, M. A., Carson, C., Sacker, A., & Kelly, Y. (2016). Exclusive breastfeeding duration and infant infection. *European Journal of Clinical Nutrition*, 1–8.

Rajabi, G. H. (2007). Asses the reliability and validity of the rosenberg self-esteem scale an first year of shahid chmran university. *Educational and Pschological Reasearch., 3*(2), 16.

Saha, S., & Gerdtham, U. G. (2013). Cost of illness studies on reproductive, maternal, newborn, and child health: A systematic literature review. *Health Economics Review, 3*(1), 24.

Schwarzer, R. (1992). *Self-efficacy: Thought control of action*. Washington, DC: Hemisphere Publishing Corp.

Sharp, G. (2001). *The relationship among self-esteem, self-efficacy and training performance at a government-funded nuclear operations complex in EastTennessee*. University of Tennessee.

Sikorski, J., Renfrew, M. J., Pindoria, S., & Wade, A. (2002). Support for breastfeeding mothers. *The Cochrane Database of Systematic Reviews* (1), CD001141.

Solhi, N., Kazemi, S., & Haghani, H. (2013). Relationship between general health and self-efficacy in women referred to health center No. 2 in Chaloos (2012). *Razi Journal of Medical Sciences, 20*(109), 72–79.

Susan Sells, M. B. (1984). Developing self-esteem in urban youth. *Community Mental Health Journal, 4*(20), 318–322.

Tracy, B. (1995). *Maximum achievement* (1st ed.). New York: Simon & Schuster.

Varaei, S., Mehdad, M., & Bahrani, N. (2009). The relathionship between self-efficacy and breastfeeding. *Journal of Faculty Nursing and Midwifery, 15*(3), 31–38.

Vashani, H. B., Hoseini, Z. A., Boskabadi, H., & Rezaeian, A. (2014). The effect of family participation on mother's general health and length of hospitalization of premature neonate. *Journal of Evidence-Based Care, 10*(4), 53–60.

Word Health Organization. (2014a). Infant and young child feeding. Retrieved Feb, 2014, from http://www.who.int/mediacentre/factsheets/fs342/en

World Health Organization. (2014b). Exclusive breastfeeding. Retrieved Feb, 2014, from http://www.who.int/nutrition/topics/exclusive_breastfeeding/en/

Zubaran, C., & Foresti, K. (2013). Correlation between breastfeeding and maternal health status. *Einstein (Sao Paulo), 11*(2), 180–185.