

Access this article online
Quick Response Code:

Website: www.jehp.net
DOI: 10.4103/jehp.jehp_60_17

The effect of religious-spiritual support on childbirth self-efficacy

Shahla Mohamadirizi, Marjan Mohamadirizi¹, Soheila Mohamadirizi², Fatemeh Mahmoodi³

Abstract:

BACKGROUND: Childbirth self-efficacy is one of the most important factors causing a shift in mothers do vaginal delivery. If the mother feels that she can cope well with stress, will be protected from the harmful effects of stress on your health. Self-efficacy contained individual's assessment of her ability to deal with stressful situations. Strengthen the spiritual beliefs of the patient causes her to be a good result every situation even incurable condition. This study aimed to determine the effect of religious-spiritual support on childbirth self-efficacy in primiparous women.

METHODS: This is a quasi-experimental study carried on seventy primiparous women; participants were randomly divided into two intervention and control groups. The intervention group received the e-learning package based on religious-spiritual content. Self-efficacy questionnaire by both groups before and 4 weeks after it was completed. Collected data were entered into SPSS version 11 descriptive statistics, independent *t*-test, and paired *t*-test which were used for analysis of data. The significant level was considered <0.05.

RESULTS: The results showed that the mean self-efficacy score before and after intervention in case group was 105.2 (27.01) and 110.12 (21.2), respectively, and in control group; 111.2 (23.12) and 116.9 (24.43). Paired *t*-test in two groups was significant ($P = 0.042$, $P = 0.045$) but independent *t*-test showed no significant difference in scores of childbirth self-efficacy before and after intervention in two groups ($P = 0.061$).

CONCLUSION: In prenatal periods, religious-spiritual support through electronic package method can increase childbirth self-efficacy, so the planning and establishment of this training are recommended as an effective training.

Keywords:

E-learning, prenatal, religious, spiritual, support

Introduction

Pregnancy is a physiologic phenomenon and the end of it, i.e. delivery is an event associated with fear and anxiety.^[1] The reviews show that women are afraid of pregnancy because they think the pain is overwhelming and are concerned of their own health.^[2] The fear of childbirth is one of the most important factors that forces mothers to undergo caesarean section while the World Health Organization has stated that the maximum amount of caesarean section should not be more than 15%. The

cesarean section rate in Iran (2009) was 46%, and the rate of elective cesarean section in Ardabil in the year 2010 was 58.6% that is a high figure compared to global statistics.^[3] If the mother feels that she can deal with stress, she will be immune to the bad impact of stress on her health. The benefits of behaviors that control stress are verified by most people. In fact, self-efficacy is an important prerequisite of behaving in stressful situations. Self-efficacy includes the individual's assessment of her/his ability to deal with stressful situations. Studies indicate a connection between the fear of childbirth and self-efficacy.^[4-7]

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: Mohamadirizi S, Mohamadirizi M, Mohamadirizi S, Mahmoodi F. The effect of religious-spiritual support on childbirth self-efficacy. *J Edu Health Promot* 2018;7:14.

Nursing and Midwifery Care Research Center, Faculty of Nursing and Midwifery, Isfahan University of Medical Sciences, ²Nursing and Midwifery Care Research Center, Faculty of Nursing and Midwifery, Isfahan University of Medical Sciences, ¹Department of Management, Dehaghan Branch, Islamic Azad University, Dehaghan, ³Master Student of Midwifery, Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran

Address for correspondence:

Ms. Soheila Mohamadirizi, Nursing and Midwifery Care Research Center, Faculty of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran
E-mail: smohamadirizi@nm.mui.ac.ir

Received: 31-05-2017
Accepted: 25-06-2017

The use of appropriate strategies to enhance the perception of pregnant women about e-ability to perform normal childbirth and coping with the pain of childbirth should be considered in prenatal education. Furthermore, effective interventions such as targeted and appropriate educational interventions to increase self-efficacy as well as attention to spirituality are useful and effective to reduce the fear of childbirth.^[4] The psychologists argue that religious ritual and spirituality help humans to understand the meaning of life events, especially painful events and may create support and joyfulness in people's spirits.^[7]

Enhancing the patient's spiritual beliefs lead the patient to achieve good results in any situation even die-hard diseases.^[7] The results of the study by Zighami Mohammadi showed that an increase in spiritual health in adolescents diagnosed with thalassemia reduces the hopelessness and increases their social skills.^[6] French study also indicated that spirituality improves social behaviors and relationships.^[5] The findings of a study in Italy (write the author's name) indicated that providing spiritual care promotes the spiritual health of cancer patients and strengthens their religious faith and also improves their quality of life.^[8]

So far, several training methods were used in the field of childbirth. However, numerous problems related to the presence of experienced and specialist training providers, new educational facilities in the region, and access to modern training technologies as well as the problem of presence of learners in the in-person classes have caused the development of teaching methods – remote learning by taking advantage of educational software and technology.^[9,10] Meanwhile, increasing access to e-learning hardware and software has opened a new horizon for the educational institutions.^[11] The use of these facilities for training helps the realization of the pivotal comprehensive training, lifetime learning, active learning, and interaction in e-learning. Furthermore, these factors are recognized as the criteria of training quality.^[12]

The Mohamadirizi study showed that the amount of learning in pregnant women about neonatal care in the e-learning group was more compared to the control group, which was under the usual training.^[12,13] The Campbell results about the impact of a computer training program on improving women's nutrition indicated that Compact disc (CD)-based training increases self-efficacy and awareness about low-fat diet but not on following through with the low-fat diet.^[14]

In a study by Azhari *et al.*, breastfeeding training using images without direct involvement of trainer increased breastfeeding self-efficacy more effectively.^[15]

With respect to the above-mentioned issues and self-efficacy issues can be influenced by the level of spiritual and religious, this study aimed to investigate the effect of spiritual-religious support on childbirth self-efficacy in nulliparous women in Isfahan. Furthermore, according to the importance of self-efficacy to control fear and to deal with the labor pain and choosing the appropriate delivery method, targeted interventions to improve the rate of self-efficacy in pregnant mothers are essential.

Methods

This was a quasi-experimental two-group study conducted on 70 primiparous women (35 in spiritual-religious support based on multimedia and mobile educational group and 35 in routine group) in Isfahan in 2016. The inclusion criteria were being primigravida, having Iranian nationality and residing in Isfahan, having at least the literacy to read and write Persian, having a mobile with android software and being able to use them, being able to speak, hear, and see, and lack of a high-risk pregnancy. Sample size was calculated by the use of mean comparison formula (with confidence interval = 95% and power = 90%). The researcher referred to Health Care Center in Isfahan after obtaining approval for the study from the Ethics Committee of Isfahan University of Medical Sciences. Sampling was by convenient sampling method, in which among the women daily referring to the center; one was randomly assigned to the spiritual-religious support based on multimedia and mobile group and one to the routine group. At first, the researcher selected the qualified subjects based on the subjects' selection checklist and inclusion criteria, gave them an informed consent form to sign, and explained the goal of research to them. Then, before any education was given, a questionnaire of demographic and prenatal characteristics and a childbirth self-efficacy questionnaire (efficacy in active phase) were filled by the patients in both groups. Childbirth self-efficacy questionnaire in active phase had 16 questions that sort by 10 Likert scale from 1 (complete well) to 10 (complete not well) with a score range of 16–160. This questionnaire is valid and reliable tools which have been adopted in various studies such as Khorsandi and confirmed with Cronbach's α values of 91%.^[16]

The data were analyzed by independent *t*-test, paired *t*-test, and Chi-square test through SPSS version 14 (IBM Company, Chicago, IL, USA). Significance level was considered as 0.05.

Results

The results showed that the mean age of the patients was 27.27 (4.5) years, mean body mass index (BMI)

23.8 (1.5) kg/m², 94.3% were homemakers, 51.4% had universal education, and 81% were interested in another pregnancy. Mean age of their spouses was 30.6 (2.01) years, 71.4% of them had education ≤ high school diploma.

There was no significant difference between two groups concerning age, BMI, pregnancy age, education, and women's and their spouses' occupation ($P < 0.05$).

Paired *t*-test and independent *t*-test showed no significant difference in scores of childbirth self-efficacy before and after intervention in two groups [Table 1].

Discussion

Based on the results of the present study, the mean childbirth self-efficacy score after training was higher in the experimental group compared to the control group, and this difference was statistically significant which indicates the effectiveness of spiritual and religious support through electronic methods regarding self-efficacy.

The e-learning program in addition to the increased level of knowledge and satisfaction of mothers saves time and the potential costs. In this respect, the results of Kuo study showed that the level of learning in pregnant women about taking care of the baby in the group that was trained through e-learning was higher compared to the control group (usual training).^[13] The Huang study in Taipei was an experimental double-group study and aimed to determine the effect of network-based educational program on the knowledge and attitude of pregnant women.^[17] The results showed that the score of awareness in the experimental group was increased after the intervention. The score of attitude toward breastfeeding was also higher. In addition to this, there was a significant difference in attitudes and awareness toward breastfeeding between two groups.^[17] In Casazza and Ciccazzo study, the computer education compared to lecture style highly decreased consumption of nonbeneficial food in teenagers. In fact, active methods and conversation had more impact on the audience.^[18] The results of the Gustafson study in the United States of America using computer-based training showed that the two groups of people (computer-based

training and brochures) in terms of improving breast cancers awareness score had no significant statistical difference.^[19] The Campbell study about the effect of educational program through computer on women's nutritional improvement showed that CD-based education led to increase self-efficacy and increase in the level of knowledge and awareness about the consumption of low-fat diet but had no effect on low-fat diet adherence.^[14] In addition, the results multimedia-based learning showed no significant statistical differences between two groups (computer-based training and brochures) in terms of adherence to the drug use and treatment acceptance.^[20]

However, the results of our study showed the effectiveness of e-learning method. The study by Rastegari *et al.* on investigating the impact of childbirth preparation classes on childbirth' perceived self-efficacy in women who had given birth showed that people who participated in the classes of preparation for childbirth had a higher self-efficacy score than before the start of classes.^[21]

Khorsandi *et al.* showed that people who participated in the classes of preparation for childbirth had a higher self-efficacy and less fear of childbirth compared to the control group.^[16] Bastani and Heidarnya studied the impact of stress relieving training on the basis of self-efficacy theory on pregnant women's mental health. He taught to the mothers the deep breathing practices and muscle relaxation and mental imagination in two sessions. The results showed an increase in the amount of self-efficacy, reduced anxiety, and reduced severity of labor pains in trained mothers.^[22]

Fahami and Mohamadirizi showed that e-learning is associated with increased awareness of breastfeeding in the 3rd month after childbirth and in prenatal period.^[23,24] In the e-learning method, people learn how to learn.

This method does not have any time and place restriction, and people can use it at home and in other places and arrange the contents based on their learning schedule.^[12] However, the findings of this study should be mentioned along with its limitations including the following items.

Conclusion

Our study showed a higher level of self-efficacy in the control group and lower level of fear of childbirth that showed the greater religious-spiritual support influence on self-efficacy and fear of childbirth. Therefore, this method can reduce the fear of childbirth and raise the level of self-efficacy, especially in nulliparous mothers.

Acknowledgment

This study is the implementation of a thesis research, approved and sponsored with research deputy in

Table 1: Differences between childbirth efficacy in two groups

Childbirth efficacy score	Spiritual-religious support group		Routine group	
	Mean (SD)	P	Mean (SD)	P
Pretest	105.2 (27.01)	P=0.042	111.2 (23.12)	P=0.045
Posttest	110.12 (21.2)	df=34, t=-1.24	116.9 (24.43)	df=34, t=-3.14

SD=Standard deviation

Isfahan University of Medical Sciences, Iran in 2015 (code: 295026). We greatly appreciate the support and collaboration of University Research Deputy and also the sincere cooperation of mothers in clinics and hospitals.

Financial support and sponsorship

This study was financially supported by Isfahan University of Medical Sciences, Isfahan, Iran.

Conflicts of interest

There are no conflicts of interest.

References

1. Mohamadirizi S, Mohamadirizi S, Khani B. Prenatal optimism and its relationship with fetal and maternal characteristics in primiparous women. *Int J Pediatr* 2015;3:897-901.
2. Ghooshchian S, Dehghani M, Khorsandi M, Farzad V. The role of fear of pain and related psychological variables in prediction of cesarean labor. *Arak Med Univ J* 2011;14:45-54.
3. Kanani S, Allahverdipour H. Self-efficacy of choosing delivery method and labor among pregnant women in Pars-Abad city. *J Educ Community Health* 2014; 1:39-47.
4. Amidimazaheri M, Taheri Z, Khorsandi M, Hasanzadeh A, Amiri M. The relationship between self-efficacy and outcome expectations with delivery type selection among pregnant women in Shahrekord. *Daneshvarmed* 2014; 21:55-62.
5. French DC, Eisenberg N, Vaughan J, Purwono U, Suryanti TA. Religious involvement and the social competence and adjustment of Indonesian Muslim adolescents. *Dev Psychol* 2008;44:597-611.
6. Zeighami Mohammadi SH, Tajvidi M. Relationship between spiritual well-being with hopelessness and social skills in Beta-thalassemia major adolescents. *Modern Care Journal* 2011;8:116-24.
7. Baljani E, Khashabi J, Amanpour E, Azimi N. Relationship between spiritual well-being, religion, and hope among patients with cancer. *J Hayat* 2011;17:27-37.
8. Mazzotti E, Mazzuca F, Sebastiani C, Scoppola A, Marchetti P. Predictors of existential and religious well-being among cancer patients. *Support Care Cancer* 2011;19:1931-7.
9. Arzan A, Kermanshahi S, Zahedpasha Y. The effect of educational intervention on continuous breast feeding in low birth weight infants. *J Qazvin Univ Med Sci* 2008;12:69-75.
10. Gharebaghi SH, Soltan Mohammadi Z. Discussion learning activity a novel approach to virtual education. *Educ Strategy Med Sci* 2010;3:13-4.
11. Zandi S, Abedi D, Changiz T, Yousefi A, Yamani N, Kabiri P. Electronic learning as a new educational technology and its integration in medical education curricula. *Iran J Med Educ* 2004;4:61-70.
12. Mohamadirizi SH, Bahrami M, Moradi F. Comparison of the effect of electronic education and pamphlet on the knowledge of women about their postpartum hygiene. *J Nurs Educ* 2015;3:3812-2322.
13. Mohamadirizi S, Fahami F, Bahadoran P. The effect of E-Learning education on primiparous women's knowledge about neonatal care. *Iran J Neonatol* 2013;4:24-7.
14. Campbell MK, Carbone E, Honess-Morreale L, Heisler-Mackinnon J, Demissie S, Farrell D. Randomized trial of a tailored nutrition education CD-ROM program for women receiving food assistance. *J Nutr Educ Behav* 2004;36:58-66.
15. Azhari S, Baghani R, Akhlaghi F, Ebrahimzadeh S, Salehi J. Comparing the effects of hands-on and hands-off breastfeeding methods on self-efficacy in primiparous mothers. *J Sabzevar Univ Med Sci* 2011;17:248-55.
16. Khorsandi M, Ghofranipour F, Faghihzadeh S, Hidarnia A, Bagheban AA, Aguilar-Vafaie ME. Iranian version of childbirth self-efficacy inventory. *J Clin Nurs* 2008;17:2846-55.
17. Huang MZ, Kuo SC, Avery MD, Chen W, Lin KC, Gau ML. Evaluating effects of a prenatal web-based breastfeeding education programme in Taiwan. *J Clin Nurs* 2007;16:1571-9.
18. Casazza K, Ciccazzo M. The method of delivery of nutrition and physical activity information may play a role in eliciting behavior changes in adolescents. *Eat Behav* 2007;8:73-82.
19. Gustafson DH, Hawkins R, Pingree S, McTavish F, Arora NK, Mendenhall J, *et al.* Effect of computer support on younger women with breast cancer. *J Gen Intern Med* 2001;16:435-45.
20. Unk JA, Brasington R. Efficacy study of multimedia rheumatoid arthritis patient education program. *J Am Assoc Nurse Pract* 2014;26:370-7.
21. Rastegari L, Mohebbi P, Mazlomzadeh S. The effect of childbirth preparation training classes on perceived self-efficacy in delivery of pregnant women. *J Zanzan Univ Med Sci Health Serv* 2013;21:105-15.
22. Bastani F, Heidarnya A. The effect of self-efficacy theoretical base stress reduction education on mental health of pregnant women. *J Think Behav* 2006;12:109-16.
23. Fahami F, Mohamadirizi S, Bahadoran P. Effect of electronic education on the awareness of women about postpartum breast feeding. *Int J Pediatr* 2014;2:57-63.
24. Mohamadirizi S, Fahami F, Bahadoran P. Comparison of the effect of multimedia and illustrated booklet educational methods on women's knowledge of prenatal care. *Iran J Nurs Midwifery Res* 2014;19:127.