

# Effect of Single-session Solution-focused Brief Therapy on the Anxiety of Labor Pain: A Randomized Clinical Trial

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## Abstract

**Background:** Anxiety of labor pain can affect new mothers' mental health and lead to labor dystocia. Emotional support during pregnancy and childbirth has been reported to be effective in the reduction of labor anxiety. It seems that Solution-Focused Brief Therapy (SFBT) would be the practical method for minimizing the anxiety and pain during labor.

**Aim:** This study aimed to investigate the effect of SFBT on anxiety and labor pain in nulliparous women.

**Method:** This randomized clinical trial was implemented on 110 nulliparous pregnant women, who could not attend childbirth preparation classes due to the COVID-19 pandemic at Hakim Hospital, Neyshabur, Iran, from September to December 2020. The sampling was conducted using the Convenience method, and block randomization was employed for the random allocation of two intervention and control groups. The intervention group received single-session SFBT in a personal counseling session, and the control group received routine care, including heat water bags and aromatherapy. The data were collected using a demographic characteristics questionnaire, Spielberger anxiety inventory, and visual analog scale. A P-value less than 0.05 was considered statistically significant.

**Results:** There were significant differences between stages regarding the mean scores of labor pain and anxiety ( $P < 0.001$ ,  $P < 0.001$ ). The interaction of group and stages ( $P = 0.002$ ,  $P = 0.003$ ) and the independent effect of the group were also significant ( $P < 0.001$ ,  $P < 0.001$ ).

**Implications for Practice:** The SFBT approach could reduce anxiety and labor pain in nulliparous women who do not participate in childbirth preparation classes.

**Keywords:** Anxiety, COVID-19, Labor Pain, Mental Health, Solution-Focused Brief Therapy

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## Introduction

Although pregnancy is a joyful period for most women, it is often a stressful and anxious period associated with physiological and psychological changes (1). Anxiety disorders are of particular importance in pregnancy so that more than 50% of pregnant women experience anxiety to some extent (2). The prevalence of anxiety during pregnancy is reported to be 64% in Iran (3). During the coronavirus disease 2019 (COVID-19) pandemic, maternal anxiety was reported to be more prevalent worldwide than the pre-pandemic rate (4).

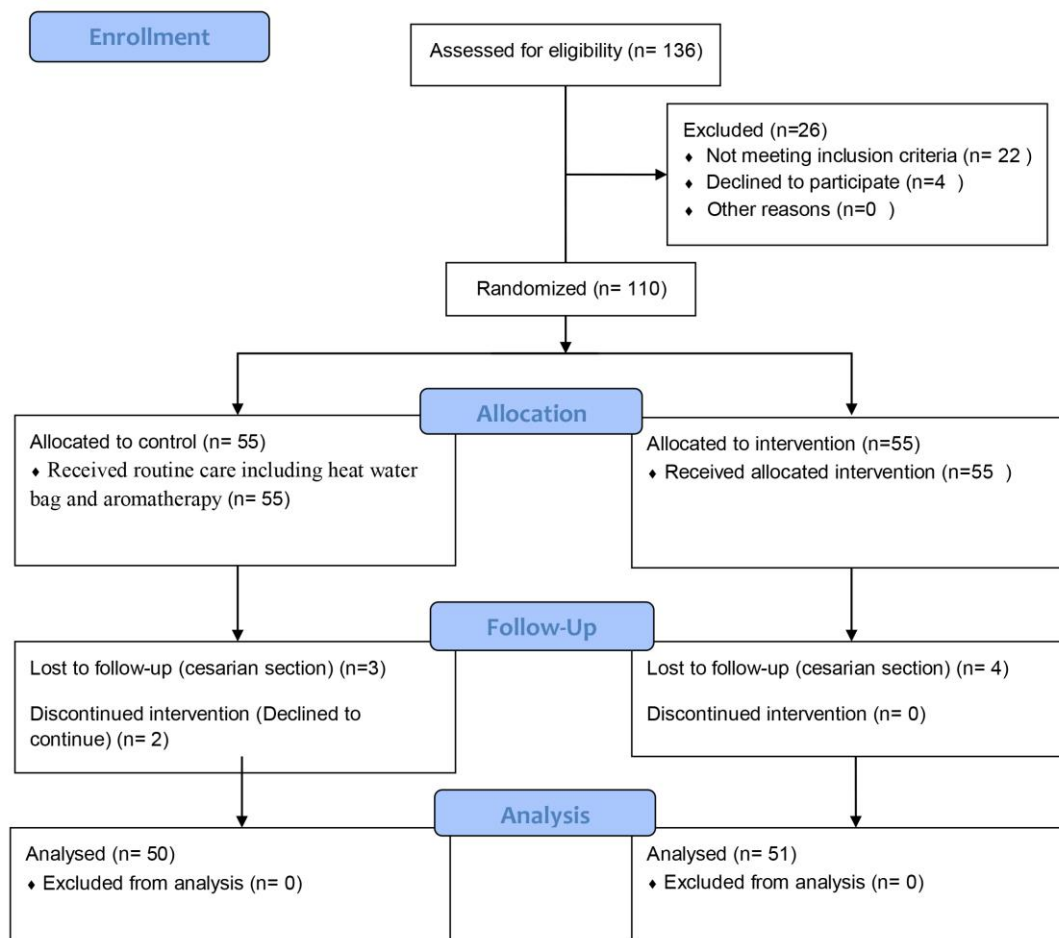
Anxiety during pregnancy and childbirth plays a role in the future development of schizophrenia and emotional disorders in the newborn and dyspnea in the neonatal period (5-8). There is a direct relationship between maternal anxiety and abnormalities in fetal brain development and fetal distress (9, 10). Pain and anxiety have a close relationship, and pain is an inevitable part of labor (11). The most common fear of childbirth is fear of pain (12). Fear and anxiety of pain increase the secretion of stress hormones leading to a lack of progress in labor (13, 14). Despite new advances in medicine, pain control is still a problem in women (15). About 77% of nulliparous women describe labor pain as severe and unbearable (16). Midwives should be familiar with the multiple needs of mothers, such as physical, emotional, and information needs, in the course of labor (17) since a good interpersonal relationship can reduce maternal fear of childbirth and provide them with a satisfying experience of childbirth (18, 19). Emotional support during pregnancy and childbirth can affect the complications of childbirth and maternal experience, thereby reducing the need for medical intervention and improving maternal and neonatal outcomes (20). Unfortunately, many Iranian mothers could not attend childbirth preparation classes during the COVID-19 pandemic. On the other hand, these mothers experienced stress and anxiety caused by the COVID-19 outbreak, which in turn can lead to maternal and neonatal complications. Emotional and social support can reduce adverse effects of stress and anxiety during the COVID-19 pandemic (21, 22).

There are pharmacological and non-pharmacological methods to control labor pain; however, analgesics are not without adverse effects on maternal labor and the fetus. On the other hand, non-pharmacological methods are easy and inexpensive and can effectively reduce labor pain and anxiety as alternative or adjunctive therapies by increasing mothers' self-confidence and engagement (15, 23). Furthermore, pregnancy and childbirth are two completely natural phenomena that need maternal support and engagement rather than the need for medical intervention.

A safe and non-pharmacological method to support mothers in labor is the Solution-Focused Brief Therapy (SFBT), which is now one of the most common therapeutic approaches due to its non-pathological standpoint, short duration, practical nature, and simple teachable techniques (24). Gingerich et al. (2013) conducted a systematic qualitative review on the effectiveness of SFBT to evaluate the evidence of the effectiveness of SFBT by reviewing all available controlled outcomes of SFBT in 43 studies, 74% of which showed significant positive benefits of SFBT with strong evidence of its effectiveness in the treatment of adult depression. Four separate studies effectively used fewer treatment sessions than the usual SFBT treatments (25). The SFBT can reduce internalizing behavioral problems, such as depression, anxiety, and self-esteem (26). The SFBT approach has also been of interest to clients due to the limited number of treatment sessions; nonetheless, little research has been conducted on this therapeutic approach despite its acceptability (27). Given that the course of labor is inherently painful and time-limited, it seems to require short-term psychological interventions. The literature review of this study indicates evidence that the SFBT has not been examined on anxiety in pregnant women during childbirth in Iran. Therefore, this study aimed to investigate the effect of SFBT on anxiety and pain intensity in nulliparous women admitted for natural childbirth who could not attend childbirth preparation classes due to the COVID-19 pandemic.

## Methods

The present randomized clinical trial was performed on 110 nulliparous pregnant women at 37-41 weeks of gestation who were admitted for a normal delivery at Hakim Hospital, Neyshabur, Iran, in 2020. The participants were randomly assigned to two intervention and control groups each with 55 subjects (Fig 1). Based on a study conducted by Azgoli et al. (15), the sample size required to compare the mean score of anxiety in the intervention and control groups was calculated at 48, and



**Figure 1. CONSORT flow diagram**

this figure for pain intensity was estimated at 10. Finally, the total sample size was calculated at 110 participants considering 10% sample attrition (55 cases per group, type 1 error, 0.05 test power equal to 85%).

The sampling was conducted using the convenience method, and block randomization was employed for random allocation and assigning the groups into intervention and control using blocks of four subjects. The allocation sequence was produced using the related website with the help of a methodology consultant. Since all participants were enrolled in a single hospital, white envelopes were used to conceal the sequence. To this end, each sequence was placed in a white envelope, the envelopes were numbered, and placed next to each other. An envelope was opened for each person in the order of their entry into the study, and they were assigned to the intended group.

Inclusion criteria were consent for participation, first pregnancy, singleton pregnancy, gestational age of 37-41 weeks, an age of 18-35 years, non-participation in childbirth preparation classes due to the COVID-19 pandemic, minimum literacy, a healthy and normal fetus in the first trimester in ultrasound examinations, lack of special medical or obstetric problems in the parturient, hospitalization of the parturient to terminate gestation for obstetric reasons (e.g., chorionic rapture [but a hospitalization time before beginning labor pain or before beginning the active phase of labor to provide counseling conditions]), desired pregnancy, and an overt anxiety score of  $\geq 25$  according to the Spielberger anxiety inventory (SAI).

Exclusion criteria included obvious and recognizable barriers to normal delivery at the time of sampling (e.g., fetal macrosomia, vaginal bleeding [placental abruption], and pelvic stenosis); a history of psychotherapy or mental illness; smoking, drug, and alcohol addiction; recurrent miscarriages; a history of infertility; having a companion or private midwife; taking anti-anxiety and anti-depressant medications; and the onset of labor pain.

Exclusion criteria in the course of labor included any indication of cesarean delivery during labor; non-cooperation of the mother in the course of counseling in labor for any reason; and prescription of sedatives (e.g., promethazine) or opioids (e.g., pethidine) during labor for the mother.

The required data were collected using a 16-item demographic characteristics questionnaire covering such information as demographic and midwifery information of the patient and her spouse; information on delivery progress, as well as mother and fetus status with 16 items; inclusion and exclusion criteria with nine items; SAI; and visual analog scale (VAS).

SAI consists of 40 questions, 1-20 of which measures the state (overt) anxiety with four choices of "not at all", "sometimes", "generally", and "very much". Moreover, questions 21-40 assess trait (covert) anxiety with four options of "almost never", "sometimes", "most of the time", and "almost always". In the state anxiety scale, subjects are asked to express their feelings at the present (i.e., exactly at the time of the test) and rate their severity on a scale of 1-4. To answer to the trait anxiety, subjects were requested to identify their general and usual emotions most of the time and rate the severity on a scale of 1-4. The scores of the two overt and covert anxiety scales can range from 20 to 80. The reliability of the SAI was obtained at 94% in Mashhad, Iran (28).

VAS is used to measure the pain intensity by a 10-cm ruler with the words painless and most severe pain written on the left and the right ends, respectively. The pain intensity is measured by the researcher using a visual-linear pain measurement scale that is standardized to measure pain. The linear-visual pain scale is divided from 0 to 10 as follows: 0-1 (no pain), 2-3 (low pain), 4-5 (high pain), 6-7 (worst pain), 8-9 (maximum pain), and 10 (intolerable pain).

VAS is a standard tool to measure pain intensity and is widely used in Iran. Farrar et al. performed a retest and obtained a numerical scale of 10 with a correlation coefficient of 0.83 (29). After the administrative processes, the necessary permits were obtained from Shahrood University of Medical Sciences and Neyshabur School of Medical Sciences, and sampling was performed in accordance with COVID-19 health protocols in the maternity ward of Hakim Hospital, Neyshabur, Iran.

Participants consisted of all nulliparous pregnant women admitted to the emergency department of the maternity ward for the termination of pregnancy due to obstetric causes, such as chorionic rupture, non-reactive fetal health test, or reduction of fetal movements, and entered the delivery block having the inclusion criteria. They were explained about the research objectives by the researcher, and if desired, they read and signed the informed consent form. Before determining the intervention and control groups, the demographic and midwifery characteristics questionnaire, SAI, and VAS were completed for all these pregnant women through interviews by the researcher. Subsequently, anxiety scores were calculated, and individuals with an anxiety score of  $>25$  and a pain intensity score of 0 or 1 (painless range) were included in the study. Afterward, each pregnant mother was assigned to one of the intervention or control groups through the quadruple block method. In addition to routine care in the ward, mothers in the intervention group received an SFBT session individually for each parturient by a qualified psychologist-trained researcher in a labor single room for 45-60 min before the onset of labor pain (the active phase of labor).

After greeting, Miracle Questions were asked: "...Assume that you got asleep and after awaking you see that you had a vaginal delivery and all pain is gone. What might be the small change that will make you say to yourself?" The miracle questions help them open up to future possibilities. Following that, Scaling Questions were asked: "...If 10 is the most anxious and 1 is the most relaxed, what number would you put yourself on right now?" Questions like these are followed with questions related to scaling, such as asking the participant to explain why they chose the number they did and why their number is not one lower. Scaling questions help participants to perceive their problems on a continuum. In the following time of the session, the Coping Questions could help them to engender a sense of hopefulness, as well as Control and Exception-Finding Questions that listen for and attend to women's successes through exceptions to the problem were asked.

Mothers in the control group received only routine care, including heat water bag and aromatherapy (with a cotton ball soaked in a few drops of the eucalyptus essential oil by the midwife of the labor ward). After counseling, the overt anxiety test was then completed by the SAI for both intervention and control groups in two stages of 5-cm and 8-cm cervical dilatation. For both groups, the VAS was completed in three stages of 5-, 8-, and 10-cm cervical dilatations. In this study, in order to describe the variables,  $\text{mean} \pm \text{SD}$  and percentage were used for quantitative and frequency, as well as qualitative variables, respectively. Graphic methods and Q-Q diagrams were also utilized to evaluate the normality of the data. An

independent t-test was used to compare the means of quantitative variables in the two groups, and the Chi-square test was employed to compare the differences in the distribution of qualitative variables. Finally, in order to compare the changes in anxiety in the two groups, analysis of variance with repeated measures was used. All analyzes were performed in SPSS software (version 25), and a P-value of less than 0.05 was considered statistically significant.

## Results

This study examined the information about demographic and contextual variables of nulliparous women. The mean±SD ages of the mothers in the intervention and control groups were 23.51±3.80 and 23.32±5.50, respectively, which was not statistically significant between the two groups. Furthermore, the mean duration of marriage in the control group (4.01±1.60) was higher than that in the intervention group (3.60±1.71); however, this difference was not statistically significant. The difference between the two groups in terms of the mean body mass index, the number of weeks of pregnancy, and overt anxiety was very small, and these differences were statistically insignificant. However, there was no significant difference between the two groups regarding income distribution, level of education, and desired pregnancy. Details of the mentioned results can be observed in Table 1.

In line with the specific aim of the study, a comparison of the changes in the mean scores of anxiety in the control and the intervention groups showed the following results.

Repeated measures analysis showed significant differences between the stages (P=0.003) and the interaction, as well as between the group and stages (P<0.001) that showed a constant decrease of anxiety level during 5-, 8-, and 10-cm dilatation. The independent effect of the group was also significant (P<0.001; Table 2).

According to the specific aim of the study, a comparison of the changes in the mean scores of labor pain intensity in the control and the intervention groups showed the following results.

Repeated measures analysis indicated significant differences between the stages (P=0.003) and the

**Table 1. Comparison of demographic characteristics and obstetric data between the control and intervention groups**

Variable	Intervention group	Control group	Test results
	Mean±SD N (%)	Mean±SD N (%)	
Women's age* (year)	23.51±3.80	23.32±5.00	<sup>a</sup> P>0.05
Duration of marriage*(year)	3.60±1.71	4.01±1.60	<sup>a</sup> P>0.05
Body mass index	25.60±3.82	25.60±3.30	<sup>a</sup> P>0.05
Gestational age* (week)	39.40±2.10	40.01±1.80	<sup>a</sup> P>0.05
Women's level of education**			<sup>b</sup> P>0.05
Elementary school	2 (4.0)	3 (6.1)	
Middle school	6 (12.0)	12 (24.5)	
High school	5 (10.0)	5 (10.4)	
Diploma	24 (48.0)	22 (44.9)	
Associate degree and more	13 (26.0)	7 (14.3)	
Income**			<sup>c</sup> P>0.05
Enough	49 (96.1)	44 (91.7)	
Less than enough	2 (3.9)	4 (8.3)	
Desired pregnancy** (from mother's view)			<sup>b</sup> P>0.05
Yes	10 (19.6)	10 (20.4)	
No	21 (80.4)	39(79.6)	
Fear of labor**			<sup>c</sup> P>0.05
Low	4 (7.8)	3 (6.1)	
Moderate	9 (17.6)	12 (24.5)	
High	16 (31.4)	21 (42.9)	
Very high	22 (43.1)	13 (26.5)	
Overt anxiety*	57.51 ± 14.50	56.90 ± 11.11	<sup>a</sup> P>0.05

<sup>a</sup>: independent t-test, <sup>b</sup>: Chi-square test, <sup>c</sup>: Fisher's exact test

\*Data are reported as numbers (%)

\*\*Data are reported as mean±SD



**Table 2. Mean±SD of overt anxiety in nulliparous women before and after the intervention in the intervention and control groups**

Overt anxiety score	Intervention group	Control group	Independent t test
	Mean±SD	Mean±SD	
Baseline	57.51±14.50	56.91±11.10	t=0.22 P>0.05
5-cm cervical dilatation after intervention	38.72±8.81	60.81±12.41	t=-10.31 P<0.001
8-cm cervical dilatation after intervention	39.18±8.11	64.10±12.20	t=-11.82 P<0.001

**Table 3. Mean±SD of labor pain in nulliparous women before and after the intervention in the intervention and control groups**

Labor pain score	Intervention group	Control group	Independent t test
	Mean±SD	Mean±SD	
Baseline	0.50±0.50	0.50±0.50	t=0.53 P>0.05
5-cm cervical dilatation after intervention	4.61±1.40	7.02±1.81	t=-7.51 P<0.001
8-cm cervical dilatation after intervention	7.00±1.00	8.91±1.72	t=-6.82 P<0.001
10-cm cervical dilatation after intervention	8.30±0.81	9.50±1.20	t=-5.84 P<0.001

interaction, as well as between the group and stages ( $P<0.001$ ), and a decrease in labor pain was remarkably low in 5-cm dilatation ( $4.61\pm 1.40$ ), compared to the control group ( $7.02\pm 1.81$ ). The independent effect of the group was also significant ( $P<0.001$ ; Table 3).

## Discussion

This study aimed to investigate the effect of the single-session SFBT on anxiety and labor pain in nulliparous women. The findings showed that labor pain perceived by mothers in 5-, 8-, and 10-cm dilatation was significantly lower in the intervention group, compared to the control group. Moreover, overt maternal anxiety in 5- and 8-cm dilatation was significantly lower in the intervention group than that in the control group. The result of the current study showed that the SFBT group experienced a significant decrease of severity of pain during labor in 5-, 8- and 10-cm dilatation, while the figure for 5-cm dilatation was noticeably low in the intervention group in comparison with the control group. This result seems natural because after starting the active phase, the frequency, duration, and severity of contractions gradually increase.

Shakeri et al. (2015) studied the effect of group counseling during pregnancy on satisfaction and labor pain and found that labor pain in 3-4- and 7-8-cm dilatation was significantly lower in the intervention group. They concluded that participation in childbirth preparation classes during pregnancy could reduce the severity of pain during labor (13). The participants of our study could not take part in preparation classes due to the COVID-19 pandemic. The results of our study suggest using the SFBT for women who do not receive sufficient childbirth preparation support during their pregnancy.

Regarding anxiety, our result showed a constant decrease in the anxiety levels during 5-, 8- and 10-cm dilatations in the intervention group, compared to the control group, which is in line with the results in the literature. Delaram et al. (2012) investigated the effect of counseling in the third trimester of pregnancy on the level of anxiety in nulliparous women at the beginning of labor. Their study showed that counseling women in the third trimester of pregnancy reduced their anxiety at the beginning of labor and suggested counseling in late pregnancy to reduce anxiety in nulliparous women (30). Given that some mothers may not participate in prenatal training classes, the SFBT approach seems to be a good option to reduce the severity of maternal pain and anxiety.

Krabi et al. (2019) examined the effect of group-based counseling on pregnant women's concerns and reported that their concerns about childbirth and fetal health, maternal health, and family relationships decreased significantly in the intervention group after the intervention and two

months later, compared to the control group; however, it was not significantly effective in economic and social issues (31).

Sharifzadeh et al. (2018) investigated the effectiveness of midwifery counseling with a solution-focused approach in the fear of natural childbirth and claimed that the solution-focused approach during pregnancy was a simple and effective method to reduce the fear of pregnant women and increase the preference for natural childbirth (32). Mortazavi et al. (2020) also reported that solution-focused counseling was effective in reducing labor fears and pregnancy anxiety in women with moderate and higher anxieties. Their intervention also led to a positive pregnancy experience in the mothers of the intervention group (33).

Unawareness, fear, and unknown stages of childbirth can lead to increased anxiety in mothers, which in turn can lead to increased intensity of maternal pain during childbirth and exacerbate her fear of childbirth (34). Based on the results of these studies, receiving counseling during pregnancy could have positive effects on childbirth experiences. As a result, using the SFBT approach during pregnancy is suggested for future studies.

In addition, the SFBT is applicable by health care providers, and the other strength of this approach is that using this effective treatment in a single session made it interesting among therapists. According to the review of this study, the SFBT approach was performed to reduce labor fears and pregnancy anxiety; however, limited studies were found during labor, which seems to be due to challenges in performing the intervention, labor pain, and less cooperation of mothers during labor. This study also tried to increase mothers' cooperation by establishing effective communication.

### **Implications for Practice**

In this study, the single-session SFBT approach was effective in the reduction of anxiety and labor pain in nulliparous women who failed to attend childbirth preparation classes. Therefore, maternal health care providers are recommended to be trained with this practical method during labor to control anxiety and labor pain.

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### **Conflicts of Interest**

The authors have no conflicts of interest to declare.

### **References**

1. Zamani M, Latifnejad Roudsari R, Moradi M, Esmaily H. Effect of sexual counseling on stress, anxiety, and depression in women during postpartum period. *EvidBased Care J.* 2017;7(2):17-26.
2. Andaroon N, Kordi M, Kimiaei SA, Esmaily H, Shahnazi H. The effect of individual counseling program by a midwife on fear of childbirth in primiparous women. *J Educ Health Promot.* 2017;6(1):1-7.
3. Sabooteh S, SHarifirad G, Hassanzadeh A. The survey of health belief model (HBM) constructs regarding pregnancy anxiety in nuliparous women. *J Health System Research (HSR)* . 2014;9(14):1746-56.
4. Tomfohr-Madsen LM, Racine N, Giesbrecht GF, Lebel C, Madigan S. Depression and anxiety in pregnancy during COVID-19: A rapid review and meta-analysis. *Psychiatry Res.* 2021;300:113912.
5. Van den Bergh BR, Mulder EJ, Mennes M, Glover V. Antenatal maternal anxiety and stress and the neurobehavioural development of the fetus and child: links and possible mechanisms. *A*

- review. *Neurosci Biobehav Rev.* 2005;29(2):237-58.
6. Cookson H, Granell R, Joinson C, Ben-Shlomo Y, Henderson AJ. Mothers' anxiety during pregnancy is associated with asthma in their children. *J Allergy Clin Immunol.* 2009;123(4):847-53.
  7. O'Keane V. Evolving model of depression as an expression of multiple interacting risk factors. *Br J Psychiatry.* 2000;177(6):482-3.
  8. Isohanni M, Jones P, Kempainen L, Croudace T, Isohanni I, Veijola J, et al. Childhood and adolescent predictors of schizophrenia in the Northern Finland 1966 Birth Cohort—a descriptive life-span model. *Eur Arch Psychiatry Clin Neurosci.* 2000;250(6):311-9.
  9. Brouwers EP, van Baar AL, Pop VJ. Maternal anxiety during pregnancy and subsequent infant development. *Infant Behav Dev.* 2001;24(1):95-106.
  10. Christian LM. Psychoneuroimmunology in pregnancy: Immune pathways linking stress with maternal health, adverse birth outcomes, and fetal development. *Neurosci Biobehav Rev.* 2012;36(1):350-61.
  11. Mehrabadi M, Masoudifar M, Parvizi A, Rakhshani MH, Mortazavi F. Effects of childbirth preparation classes program based on national guideline on fear of childbirth in pregnant women: a randomized clinical trial. *Iran J Obstet Gynecol Infertil.* 2020;23(1):58-68.
  12. Andaroon N, Kordi M, Kimiaei SA, Esmaeili H. Relationship between Intensity of fear of Childbirth with choosing mode of delivery in Primiparous Women. *The Iranian Journal of Obstetrics.* *Iran J Obstet Gynecol Infertil.* 2017;20(5):68-75.
  13. Shakeri M, Molaei B. The effect of mothers group education on maternal satisfaction and pain intensity. *Nurs Midwifery J.* 2015; 13(9):808-813.
  14. Aral I, Köken G, Bozkurt M, Şahin FK, Demirel R. Evaluation of the effects of maternal anxiety on the duration of vaginal labour delivery. *ClinExp Obstet Gynecol* 2021;41(1):32-6.
  15. Ozgoli G, Aryamanesh Z, Mojab F, Alavi Majd H. A study of inhalation of peppermint aroma on the pain and anxiety of the first stage of labor in nulliparous women: a randomized clinical trial. *Qom Univ Med Sci.* 2013;7(3):21-7.
  16. Sedigheh F, Robab H, Raziheh M, Minoos R, IrajHashem Z, Yusef S. Evaluation of the auditory effects of the sound of Quran e Karim on labor pain. *Quran Med.* 2011;2011(2):14-8.
  17. Lunda P, Minnie CS, Benadé P. Women's experiences of continuous support during childbirth: a meta-synthesis. *BMC pregnancy childbirth.* 2018;18(1):1-11.
  18. Pozo-Cano MD, Martín-Salvador A, Pérez-Morente MÁ, Martínez-García E, Luna del Castillo JdD, Gázquez-López M, et al. Validation of the Women's Views of Birth Labor Satisfaction Questionnaire (WOMBLSQ4) in the Spanish Population. *Int J Environ Res Public Health.* 2020;17(15):5582.
  19. Kordi M, Bakhshi M, Masoudi S, Esmaily H. Effect of a childbirth psychoeducation program on the level of fear of childbirth in primigravid women. *Evid Based Care J.* 2017;7(3):26-34.
  20. Hodnett E, Gates S, Hofmeyr G, Sakala C. Continuous support for women during childbirth. *Cochrane Database Syst Rev.* 2003;3: CD003766.
  21. Moyer CA, Compton SD, Kaselitz E, Muzik M. Pregnancy-related anxiety during COVID-19: a nationwide survey of 2740 pregnant women. *Arch Womens Ment Health.* 2020;23(6):757-65.
  22. Lebel C, MacKinnon A, Bagshawe M, Tomfohr-Madsen L, Giesbrecht G. Elevated depression and anxiety symptoms among pregnant individuals during the COVID-19 pandemic. *J Affect Disord.* 2020;277:5-13.
  23. Field T. Pregnancy and labor alternative therapy research. *Altern Ther Health Med.* 2008;14(5):28-34.
  24. Creswell C, Violato M, Fairbanks H, White E, Parkinson M, Abitabile G, et al. Clinical outcomes and cost-effectiveness of brief guided parent-delivered cognitive behavioural therapy and solution-focused brief therapy for treatment of childhood anxiety disorders: a randomised controlled trial. *Lancet Psychiatry.* 2017;4(7):529-39.
  25. Gingerich WJ, Eisengart S. Solution-focused brief therapy: A review of the outcome research. *Fam process.* 2000;39(4):477-98.
  26. Schmit EL, Schmit MK, Lenz AS. Meta-analysis of solution-focused brief therapy for treating symptoms of internalizing disorders. *Couns Outcome Res Eval.* 2016;7(1):21-39.
  27. Nazari A, Goli M. The effects of solution-focused psychotherapy on the marital satisfaction of dual career couples. *Knowledge and Health.* 2008;2(4):33-37.



28. Amiri N, Salmalian H, Hajiahmadi M, Ahmadi AM. Association between prenatal anxiety and spontaneous preterm birth. *J Babol Univ Medical Sci.* 2009;11(4):42-8.
29. Farrar JT, Troxel AB, Stott C, Duncombe P, Jensen MP. Validity, reliability, and clinical importance of change in a 0—10 numeric rating scale measure of spasticity: a post hoc analysis of a randomized, double-blind, placebo-controlled trial. *Clin Ther.* 2008;30(5):974-85.
30. Delaram M, Soltanpour F. The effect of counseling in third trimester on anxiety of nulliparous women at the time of admission for labor. *Zahedan J Res Med Sci.* 2012;14(2):61-65.
31. Karrabi R, Farjamfar M, Mortazavi F, Nazari AM, Goli S. The effect of solution-focused group counseling on pregnant women's worries: A randomized clinical trial. *Hayat.* 2019;25(1):81-94.
32. Sharifzadeh M, Bolbol Haghighi N, Keramat A, Goli M, Motaghi Z. Effectiveness of midwifery counseling based on solution-focused approaches on fear of childbirth. *Koomesh.* 2018;20(2):375-83.
33. Mortazavi F, Mehrabadi M. Effectiveness of solution-focused counseling therapy on pregnancy anxiety and fear of childbirth: A randomized clinical trial. *Nurding Practice Today(NPT).* 2021;8(3):244-254.
34. Goodman P, Mackey MC, Tavakoli AS. Factors related to childbirth satisfaction. *Journal of advanced nursing.* 2004;46(2):212-9.