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Effectiveness of solution-focused counseling therapy on pregnancy anxiety and fear of childbirth: A randomized clinical trial

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ABSTRACT

Background & Aim: Fear of childbirth and pregnancy anxiety may affect the desire for normal delivery. No study has investigated the effectiveness of solution-focused counseling on either pregnancy anxiety or all factors comprising fear of childbirth. We aimed to investigate the effects of solution-focused counseling in reducing pregnancy anxiety and fear of childbirth.
Methods & Materials: This randomized clinical trial study was conducted on 132 nulliparous women in 2019. Participants with moderate to a severe fear of childbirth were randomly divided into the intervention and control groups. The intervention group participated in five solution-focused counseling sessions. Before and after the intervention, women filled the anxiety scale for pregnancy and the Wijma Delivery Expectancy Questionnaire (W-DEQ). Data were analyzed using t-test, paired t-test, and analysis of covariance (ANCOVA).
Results: The two groups did not differ in terms of demographic and obstetric variables and pregnancy anxiety pre-test scores ($P>0.05$). The means of the post-test total scores and the means of scores for all five factors of the ASP were significantly lower in the intervention group than in the control group ($p<0.001$). The adjusted means of total scores and the adjusted means of scores for all six factors of the WDE-Q were significantly lower in the intervention group than the control group ($p<0.001$).
Conclusion: The solution-focused counseling reduced pregnancy anxiety and fear of childbirth in women participating in counseling sessions compared to the controls. Solution-focused counseling therapy sessions should be held for women with pregnancy anxiety and fear of childbirth.

Introduction

Pregnancy and childbirth are important events for a woman and her family, which are physiological and natural phenomena. These are experiences that are joyful but can also be fraught with stress and difficulties. The significant changes in anatomy, physiology, and the levels of circulating hormones may concern some women and predispose them to anxiety during pregnancy (1). In addition, many pregnancies occur in certain conditions, such as chronic maternal illness or poor obstetric history (e.g., miscarriage and infertility), which intensify pregnancy anxiety (2). Furthermore, labor pain often causes fear and anxiety in pregnant women. Fear of childbirth and pregnancy anxiety may prevent women from understanding and focusing on the joys of pregnancy so that it affects the desire for normal birth and the next pregnancy. Recent studies show that 19.6% of pregnant women have a fear of childbirth, and the prevalence of severe fear of childbirth is about 6% (3).

Studies indicate that maternal mental health affected the results of normal pregnancy (4). In Nasreen's and colleagues' study in India, pregnancy anxiety influenced the rates of preterm delivery, prolonged labor, low birth weight, and cesarean (5). Pregnant women with anxiety may experience

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symptoms such as muscle aches, palpitations, fatigue, headaches, stomachaches, sleep disturbances, nightmares, and insomnia (6). Fear of childbirth is also associated with increased labor pain, prolonged labor, postpartum depression, and increased demand for cesarean (7). Several factors contribute to pregnancy anxiety and fear of childbirth, such as having less positive attitudes toward pregnancy (8), nulliparity and young age (9), gestational age, having a history of abortion (10), low maternal education, low household monthly income, and unwanted pregnancy (11).

Various subjects in pregnancy may be the source of pregnancy anxiety, such as concerns about childbirth, fetal health, the quality of care received during childbirth from health professionals, the level of husband involvement in caring for the woman during pregnancy and childbirth, and the support received from other family members (12). Pregnancy anxiety and fear of childbirth are provoked exclusively by specific fears and worries of pregnancy. They can occur even in a healthy pregnant woman without any history of depression or anxiety (12).

Counseling is an appropriate intervention for critical situations. Delaram and Soltanpour indicated a positive effect of counseling with pregnant women at the time of admission to the maternity ward on their levels of anxiety in labor (13). One of the effective counseling models is solution-focused counseling. De Shazer and Bargh (1997) first introduced solution-based therapy in psychotherapy and counseling, and the method quickly became popular. The philosophy of this postmodern approach is that changes are inevitable and possible (14). This approach, known as hope counseling, is based on the belief that patients themselves have the necessary competence and creativity to make changes (15). This approach emphasizes the present time, not the past, and encourages people to focus on their abilities (14). In this approach, clients are helped to find solutions for their current problems, clients' abilities are highlighted, and the focus is put on changeable issues. They are encouraged to think when there is no current problem or they faced the problem in an acceptable way and use adaptation strategies and think about the different activities they can do (15). Due to the short time needed, practicality, and using simple and effective techniques, this method is useful for pregnant women who are always looking for quick changes during pregnancy (16). The effectiveness of this approach has been proved to reduce postpartum depression (17) and women's common worries during pregnancy (18).

Beginning a decade ago, the Iranian Ministry of Health initiated a number of policies with the aim of reducing cesarean rates. One component of these policies was to encourage medical schools to hold childbirth preparatory classes for pregnant women (19). In such classes, midwives aim to bring about positive attitudes towards normal delivery in pregnant women through lectures about physiologic childbirth, conducting hospital tours, and showing videos about cesarean and normal delivery procedures.

A previous study in Iran indicated that the level of fear of childbirth in participants of these classes significantly increased in comparison with those who received routine care (20), and a meta-analysis on six preventive interventions showed that educational interventions had no effect on reducing maternal anxiety and fear of childbirth (21). In Larson's study in Sweden, routine counseling with women could not reduce their fear of childbirth in comparison with those who did not receive counseling (22). It seems that women need to find practical solutions to overcome their fears and anxieties. Therefore, methods which empower them to control their fear and anxiety are helpful. The advantage of the solution-focused counseling approach is that people are encouraged to adopt their own adaptation strategies. To our best knowledge, no study has been conducted to investigate the effectiveness of solution-focused counseling therapy on pregnancy anxiety. In addition, no other study has investigated the effectiveness of solution-focused counseling

therapy on all factors comprising fear of childbirth. Therefore, we aimed to investigate the effectiveness of group counseling with a solution-focused approach on pregnancy anxiety and fear of childbirth in nulliparous women participating in childbirth preparatory classes.

Methods

Study design and setting

This randomized clinical trial was conducted on 132 nulliparous pregnant women who participated in childbirth preparatory classes affiliated with Sabzevar University of Medical Sciences from May 2019 to Feb 2020. Inclusion criteria were as follows: consenting to participate in the study, having the ability to read, being at first, wanted, single pregnancy, having a gestational age of 28-32 weeks, the age range of 18-45, and having no chronic illness or mental illness during the last year. Exclusion criteria were the occurrence of pregnancy complications such as preeclampsia, bleeding, intrauterine death, preterm delivery during the study, and participating in less than 3 sessions of counseling therapy for the intervention group. The first session was held after the end of the childbirth preparatory classes.

Sampling and randomization

Sampling was performed by the convenient sampling method. One of the researchers attended the last session of childbirth preparatory classes and invited pregnant women to participate in the project. Women were informed that they had the right not to participate in the study, and after participating, they would have the right to leave the study. They were also informed that they might be included in the control or intervention group. Participants were asked to rate their fear of childbirth on a scale of one to ten. Then, women with a score of more than five were selected and questionnaires were distributed among them. A list of random sequences of A (intervention) and B (control) was prepared using permuted block randomization with a block size of four to assign them to the intervention and control groups randomly. Each choice was put in an envelope. Envelopes were allocated to participants from the right to the left side of the class. Participants, the midwife who conducted the sessions, and the midwife who distributed the questionnaires were not blind, but the statistician was blind.

Participants in both groups filled out a questionnaire containing demographic and obstetric information, including maternal age, education, occupation, family income, and the sex of the infant based on ultrasound scan reports. As the study's primary outcomes, we measured pregnancy anxiety and fear of childbirth using the Persian Anxiety Scale for Pregnancy (ASP) and the Persian Wijma Delivery Expectancy Questionnaire (W-DEQ), respectively. As a secondary outcome of the study, we measured pregnancy and childbirth experience with an item which is rated on a 5-point Likert scale [very bad (1) to very good (5)] before the intervention and after the delivery, respectively. The tendency to normal delivery was also measured as a secondary outcome of the study with a 10-point Likert scale [Not at all (1) to Very much (10)] before and after the intervention and after delivery.

The experimental group then participated in five solution-focused counseling sessions; each took about 60 minutes with an interval of one week. Table 1 shows topics covered in each session. The instructor was a graduate in midwifery counseling with a dissertation on solution-focused group counseling on pregnant women’s worries (18). The counseling sessions' content was organized according to a relevant resource (16) (table 1). Sessions were held at urban health centers. After the last session, the participants filled out the Persian ASP and the Persian W-DEQ. The control group participated in childbirth preparatory classes, received routine prenatal care, and filled out the questionnaires in 36-37 weeks of pregnancy.

Table 3. Scores of the anxiety scale for pregnancy (ASP) before and after the intervention

		Intervention group N=62	Control group N=59	T-test	
		Mean ± SD	**Mean ± SD**	**t**	**P**
Total score	Pretest	30.0 ± 8.5	31.5±8.3	0.9	0.328
	Posttest	20.3 ± 5.8	31.6 ± 8.0	8.9	<0.001
Paired t-test	P	<0.001	0.805		
Baby	Pretest	7.9 ±2.5	8.0 ± 2.6	0.3	0.784
	Posttest	5.2 ± 1.9	8.0 ± 2.3	7.3	<0.001
Paired t-test	P	<0.001	0.831		
Labor	Pretest	7.7 ± 2.5	8.4 ± 2.4	1.5	0.125
	Posttest	5.1 ± 2.2	8.5 ± 2.1	5.8	<0.001
Paired t-test	P	<0.001	0.830		
Marital	Pretest	4.8 ± 2.0	4.9 ± 2.2	0.2	0.848
	Posttest	3.5 ± 1.2	5.0 ± 2.3	4.4	<0.001
Paired t-test	P	<0.001	0.417		
Attractive	Pretest	4.0 ± 1.6	4.5 ± 1.8	1.7	0.083
	Posttest	2.9 ± 1.3	4.6 ±1.8	5.9	<0.001
Paired t-test	P	<0.001	0.424		
Support	Pretest	5.6 ± 2.0	5.7 ± 2.0	0.2	0.824
	Posttest	3.6 ± 1.0	5.6 ± 2.0	6.7	<0.001
Paired t-test	P	<0.001	0.645		

Table 4. Scores of Wijma Delivery- Expectancy Questionnaire (W-DEQ) before and after the intervention‡.

		Pre-test	Post-test		
Factor	**Group**	**M±SD**	**M±SE****	**F**	**P**
Lack of self-efficacy	Intervention	21.6 ± 10.8	12.5 ± 0.9	130.05	<0.001*
	Control	24.3 ± 10.2	27.1 ± 0.9		
Lack of positive expectations	Intervention	3.4 ± 2.9	1.9 ± 0.3	73.39	<0.001*
	Control	4.3 ± 3.1	5.7 ± 0.3		
Fear of harm to the fetus	Intervention	2.5 ± 2.9	1.3 ± 0.2	22.37	<0.001*
	Control	2.7 ± 2.9	2.9 ± 0.2		
Fear of losing control	Intervention	5.3 ± 3.8	2.8 ± 0.3	120.37	<0.001*
	Control	6.4 ± 2.8	7.2 ± 0.3		
Feeling lonely	Intervention	11.5 ± 7.8	5.5 ± 0.6	135.16	<0.001*
	Control	14.4 ± 7.5	15.7 ± 0.6		
Fear	Intervention	13.1 ± 5.3	7.3 ± 0.5	128.05	<0.001*
	Control	15.2 ± 4.8	15.2 ± 0.5		
Overall score of childbirth fear	Intervention	59.7 ± 26.7	40. 4 ± 1.7	170.51	<0.001*
	Control	70. 0 ± 24.9	73.2 ± 1.8		

*ANCOVA analysis, ** Adjusted mean score

Discussion

The results of this study show that solution-focused counseling therapy reduces pregnancy anxiety with regard to all components of the scale in the intervention group compared to the control group. Positive results have also been reported in previous studies on the effectiveness of solution-focused counseling therapy on pregnancy worries (18). Although our results indicate the effectiveness of solution-focused counseling therapy on all pregnancy anxiety domains, Karrabi and colleagues reported that this method was not effective in reducing socio-economic concerns of pregnant women (18). The results of this study show that solution-focused counseling therapy reduces fear of childbirth with regard to all components of the scale, in the intervention group compared to the control group. The present study results are in line with the results of Sharifzadeh's study, which found a reduction in the total score of the WDE-Q in the intervention group compared to the controls (30).

In the present study, solution-focused counseling increased preference for normal delivery in the intervention group in comparison with the control group;

however, after the delivery, the preference for normal delivery was not different between the two groups. The fact that participants' experience of childbirth was not significantly different between the two groups seems to explain the observed equal level of preference for normal delivery between the two groups after childbirth. This result shows that if the interventions during pregnancy were not accompanied by changes in the conditions, environment, and atmosphere in which women give birth, they would not have a long-lasting effect on preference for normal delivery. It seems that women's increased recognition of their ability to cope with labor pain which was achieved in counseling sessions, had a positive effect on their preference for normal delivery during pregnancy.

The results showed that solution-focused counseling could lead to a positive pregnancy experience. The women in the intervention group had a better experience of their pregnancy due to their ability to control their fear of childbirth and pregnancy anxiety. In Nelson's qualitative study of 12 postpartum women in Sweden, positive experience is defined as the ability to cope with pain and having control of the body during labor (31).

During our interactions with women, we encouraged them to find practical solutions to overcome their fears and anxieties. According to the theory of planned behavior, the increased awareness and knowledge about a given behavior's advantages does not guarantee that individuals will perform the desired behavior. In fact, individuals must come forward, be willing for change, and feel empowered and ready to change (32).

Various methods have been used to reduce anxiety in pregnant women, such as spiritual counseling (33). In future studies, we recommend that solution-focused counseling be compared with psycho-educational intervention and spiritual counseling in reducing pregnant women's fear and anxiety. We also suggest that the effects of solution-focused counseling on the mental health of depressed pregnant women be investigated.

The present study was performed on nulliparous pregnant women participating in childbirth preparatory classes, so in generalizing the results to other groups, such as multiparas and those who obstetricians and rural women only supervised, should be cautious. In addition, we used the ASP and WDE-Q to collect data on pregnancy anxiety and fear of childbirth; so, the limitations of using scales in studies such as the accuracy of the participant in assessing their feelings and their honesty in expressing their feelings should be considered.

This study's strong point is that we found a robust result in favor of the solution-focused counseling approach. The weak point of the study is that due to the lack of a comprehensive and valid tool for measuring pregnancy and childbirth experience, we used one item to measure pregnancy and childbirth experience. We recommend that the pregnancy and childbirth experience scales be translated into Persia and validated for examining the pregnancy experience in future studies.

Conclusion

Solution-focused counseling reduced the pregnancy anxiety and fear of childbirth in pregnant women participating in counseling sessions in comparison with the controls. Solution-focused counseling was also effective in creating a satisfying pregnancy experience. It seems that women's increased knowledge about childbirth is not enough to reduce women's pregnancy anxiety and fear of childbirth. Women need to find practical solutions to overcome their anxiety and fear.

Solution-focused counseling therapy is a simple way to use alongside childbirth preparatory classes to help women controlling pregnancy anxiety and fear of childbirth. We recommend that this method be used in counseling pregnant women with pregnancy anxiety and fear of childbirth. We also recommend that midwives working in health systems and those who instruct childbirth preparatory classes should be trained in using this method.

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Conflict of interest

The authors declare that they have no competing interests.

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