

# The Effect of Relaxation on Reducing Anxiety and Choosing the Type of Delivery in Prim Parous Women

Soheila Gaini<sup>1</sup>, Nemat Sotoudeh Asl<sup>1\*</sup>, Ameneh Moazedian<sup>2</sup> and Shahrokh Makvand Hosseini<sup>1</sup>

<sup>1</sup>Department of Psychology, Islamic Azad University, Semnan, Iran

<sup>2</sup>Department of Educational Psychology, Islamic Azad University, Semnan, Iran

## Abstract

**Objective:** The rate of cesarean section in industrialized and developing countries including our country has an increasing trend an important factor of which is anxiety about natural childbirth. The aim of this study was to determine the effect of relaxation on reducing anxiety and choosing the type of delivery in prim parous women in Karaj.

**Methods:** In this interventional study, 86 primiparous women in Shahid Madani Hospital in Karaj were selected using purposive sampling method and randomly assigned to experimental and control groups (48 in each group). Spiel Berger manifest anxiety questionnaire and researcher-made test for choosing the type of delivery in pre-test and post-test were taken from both groups. Finally, the data were analyzed using SPSS19 and Covariance analysis method.

**Results:** Anxiety score in pregnant women under intervention was  $82/7 \pm 3/13$  before the study and reached  $61/23 \pm 6/43$  after the study. Paired T-Test showed that this decrease was significant ( $P < 0.001$ ). Despite the increased interest in choosing a normal delivery in the experimental group, there was no significant difference between the two groups in terms of choosing the type of delivery ( $P < 0.05$ ).

**Conclusion:** The results of the present study showed that relaxation as a non-pharmacological method has a significant effect on reducing delivery anxiety, but has no significant effect on the choice of natural childbirth and it seems that the choice of natural childbirth by primiparous women requires more measures. This study suggests the use of relaxation in reducing anxiety and taking further measures to select the type of delivery in the care and counseling program during pregnancy of nulliparous women.

**Keywords:** Childbirth • Delivery anxiety • Cesarean section • Pregnant women

## Introduction

Childbirth is an evolutionary stage that turns "woman" into "mother". Women will remember the memory of childbirth for the rest of their lives. This memory shapes their minds about themselves as a woman and a mother [1]. Pregnant women experience physiological, social, and emotional changes during pregnancy as well as concerns about motherhood, relationships, physical image, and medical problems, and anxiety about their health and that of the baby [2]. Pregnancy is a stressful time for many women which require psychological adjustment. Anxiety is twice as common in women as in men and is due to the existence of unique stresses such as pregnancy and childbirth [3]. Fear, anxiety and pain are three factors that play an important role in the delivery process during childbirth and if fear and anxiety go away, peace of mind and body will replace it [4,5]. Research shows that childbirth anxiety is one of the most common medical problems and as a threat to the individual's abilities and forces the person to ask for help [6,7].

Maternity anxiety and fear during pregnancy may increase the risk of emergency cesarean section, which in turn increases the risk of maternal death by up to 8 times that of a normal delivery. Most pregnant women experience some degree of severe labor anxiety, and this can be one of the reasons for the occurrence of emergency cesarean section in which psychological interventions during pregnancy can prevent this anxiety[8].

Pregnancy anxiety is sometimes seen as a natural mechanism to deal with a mother's mental concern about having children that can prepare the mother for pregnancy and the changes that accompany it, but anxiety can take the form of illness and become so severe. It is found that it affects the mental health of the pregnant mother and even causes the birth of a low birth weight baby or premature delivery due to the increased secretion of stress hormones in the mother [9]. The results of Spice K, Jones show

that 33% of pregnant women experience labor anxiety in the last trimester of pregnancy and the symptoms of this anxiety follow a U-shape so that the level of anxiety is higher in a pattern of the first trimester, decreases in the second trimester and increases again in the third trimester [10,11]. On the other hand, the increase in cesarean section rates in recent decades in industrialized and developing countries has raised many concerns. Cesarean delivery refers to the removal of the fetus, placenta, and membranes through an incision in the wall of the abdomen and uterus [12]. Cesarean section was initially performed to save the lives of mothers who were at risk of death due to the cessation of natural childbirth and has played a major role in saving the life of the mother, but gradually the indications for it were increased. It is not possible to provide a complete list of causes of cesarean section. However, conditions such as pelvic stenosis or fetal enlargement, abnormal fetal position in the uterus decreased or altered fetal heart rate, prolonged labor, severe bleeding, severe pregnancy poisoning, ruptured bladder, failure to initiate labor pain, and any disruption in the normal progress of labor that prevents a normal delivery leads to a cesarean section. The available statistics show that the rate of cesarean section in the world has tripled compared to the last 23 years [13]. Some studies have estimated the prevalence of cesarean section in Iran at about 50 to 60 percent, which is 3 to 4 times the rate recommended by the World Health Organization[14].

Studies show that despite the benefits of natural childbirth and the complications associated with cesarean section, the rate of cesarean section has increased dramatically in recent years. High levels of anxiety during pregnancy, in addition to increasing the frequency of cesarean section choices, increase the risk of depression, anxiety, and decrease the production and secretion of breast milk in the postpartum period and can lead to problems with order and subsequent hyperactivity. Negative

\*Corresponding Author: Nemat Sotoudeh Asl, Department of Psychology, Islamic Azad University, Tehran, Iran; Email:sotudeh1@yahoo.com

**Copyright:** © 2022 Gaini S, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

**Received:** 12-Apr-2022, Manuscript No. CSRP-22-60486; **Editor assigned:** 14-Apr-2022, PreQC No. CSRP-22-60486 (PQ); **Reviewed:** 28-Apr-2022, QC No CSRP-22-60486; **Revised:** 03-May-2022, Manuscript No. CSRP-22-60486(R); **Published:** 12-May-2022, DOI: 10.3371/CSRP.GSNA.051222.

emotions lead to irritability, more crying and more unstable condition in the baby and decreased mental development of the child at the age of two [15,16]. A significant increase in the rate of cesarean section can cause complications; such as bleeding, wound infection, thrombosis, placental adhesions, damage to the limbs, infertility, hysterectomy, the need for blood transfusions, postpartum anxiety and depression, and increased maternal mortality. Cesarean section can also have adverse consequences for the infant; including low Apgar score, increased respiratory problems, prematurity, increased intensive care hospitalization, infant death, and mother-infant communication problems [17].

A review of research shows that psychological interventions during pregnancy have positive effects on women and their infants. For example, special pre-pregnancy education has been shown to increase women's use of coping strategies and greater partner involvement [18,19]. The results of a study in Iran also showed that counseling with women in the third trimester of pregnancy on various issues of pregnancy and childbirth reduces their anxiety at the beginning of childbirth [20].

The results of the study of Rafiei also indicate that prenatal psychological training can play an important role in maternal and infant health during and after delivery and play a significant role in reducing the number of difficult and abnormal deliveries and reducing the rate of cesarean section [21]. Accordingly, the purpose of this study is to answer the question that if pregnancy anxiety is not well managed, it can become a long-term crisis that puts a lot of stress on the mother and those around her. Therefore, an intervention should be used to reduce the anxiety of pregnant women. Although many studies of relaxation techniques to reduce anxiety have examined the fear of childbirth in primiparous women, studies that regularly publish relaxation techniques to reduce anxiety and the tendency to choose the type of delivery of primiparous women are rarely found.

## Materials and Methods

The present study was a quasi-experimental study with a two-group design and pre- and post-training tests. The statistical population of this study includes primiparous pregnant women who were referred to Shahid Madani Hospital in Karaj from June to March 2017. Research sample size with alpha 0.05, test power 80%, impact factor 0.7, and according to the formula; 48 people in the intervention group and 48 people in the control group were estimated. Lottery method was used for random assignment of samples to control and test groups. The lottery method was used to randomly assign the samples to the two groups of "control and test".

$$n_1 = \frac{(\sigma_1^2 + \sigma_2^2/r)(Z_{1-\alpha/2} + Z_{1-\beta})^2}{(\pi_1 - \pi_2)}$$

Inclusion criteria include: being pregnant for the first time, age ranged from 18 to 36 years, having Manifest anxiety, completing the 14<sup>th</sup> week of pregnancy and not starting the 36<sup>th</sup> week, diploma education and above and exclusion criteria include: No chronic disease, such as heart disease, hypertension, lung disease, iron deficiency anemia, diabetes, urogenital infections, thyroid disease, epilepsy, no history of miscarriage, and no history of severe psychiatric illness and severe health problems to prevent effective attendance at the training course.

The instruments used in this study were the interview form including personal and pregnancy information and the manifest anxiety questionnaire (Form 1y Spielberger anxiety). The Spielberger State-Trait Anxiety Inventory (STAI) contains 40 questions and includes state or over state anxiety and trait anxiety. The Manifest Scale (Form y1) includes twenty sentences that measure a person's feelings in "the moment and the moment of response". This questionnaire has no time constraints. A weight between 1 and 4 is assigned to each of the test expressions based on the answer provided. In this test, the anxiety score can be obtained between 10 and 40. The validity and reliability of this questionnaire was obtained in the research of Hosseini et al. for women in 94% position anxiety. It also has high reliability in studies abroad [22,23].

This randomized controlled clinical trial recruited 112 pregnant women

presenting to the health centers in Maragheh, Iran, from February 2016 to June 2017. Both test and control groups received routine educational intervention during pregnancy according to programs set by the Ministry of Health. These trainings include: anatomical, physiological and hormonal changes in pregnancy, the effect of pregnancy changes on the body and mind of the pregnant mother, strategies to better adapt to pregnancy changes, proper nutrition, personal hygiene, health and mental health and familiarity with fetal development in different months of pregnancy. In addition to receiving the above routine care, the subjects received a 40-minute Benson relaxation calming program from the second trimester of pregnancy to 36 weeks of gestation.

In these sessions, in addition to practical relaxation training, the effect of relaxation on the following was explained: maternal physical and mental health, improved sleep, maternal nutrition and maternal attachment to the fetus and its effect on the delivery process and the need for relaxation in Stages of childbirth, postpartum recovery, breastfeeding and reduction of anxiety during and after childbirth.

It should be noted that each intervention session was organized by providing assignments and giving feedback to sample members and performing appropriate exercises as well as a review of previous sessions. In order to ensure that pregnant women do relaxation at home, they were given a checklist for doing exercise at home as well as a relaxation CD. Mothers were asked to do the exercise at least once a day using a relaxing CD with soft music and to record in a relaxation checklist (Table 1).

At the beginning of the next session, the educational materials of the previous week were reviewed and people's questions were answered. In relaxation training, practical demonstrations, role-playing, lectures and relaxation training CDs were used. Also, in each session, first theoretical discussions were presented and then pregnant women and the researcher performed the relaxation technique.

The control group received only routine care and at the end of the study. In order to maintain their morals, all the trainings were given to them in the form of a booklet and a relaxation training CD. At the end of the intervention, at the end of the 36<sup>th</sup> week of pregnancy, the Spielberger manifest anxiety questionnaire was completed again for all groups. Both groups were followed up until the end of pregnancy and the method of delivery was recorded in both groups. Two days after delivery the participants were asked if they had been able to relax during labor.

For data analysis from SPSS17 software and T-Test of independent and paired groups and Chi-square was used at the significant level of  $p < 0.05$ .

## Findings

In this study, 96 women (48 in each group) of primiparous women in Karaj Educational and Medical Center were studied. The mean and standard deviation of age of women participating in the relaxation group was  $50/28 \pm 38/3$  and the control group was  $65/27 \pm 29/3$ . The two groups were homogeneous in terms of age ( $P > 0.05$ ). 13.8% of the subjects had undergraduate education, 54.86% had a diploma, 22.9% had a bachelor's degree and 8.3% had a higher education. Chi-square test of two independent groups showed that there was no significant difference between the two groups in terms of education ( $P > 0.05$ ). The mean and standard deviation of marriage interval to first pregnancy was  $3/42 \pm 1/2$  in the study groups and the results showed that there was no statistically significant difference in terms of interval between marriage and first pregnancy at the beginning of admission ( $P > 0.05$ ).

Table 2 shows the manifest anxiety of pregnant women at the time of enrollment. The mean and standard deviation of anxiety scores of relaxation and control groups were  $55/23 \pm 4/22$  and  $54/35 \pm 4/27$ ; respectively. Independent T-Test was used to compare delivery anxiety between the two groups. The results showed that the mean score of the subjects' anxiety in the test and control groups before the intervention was not significantly different ( $P = 0.77$ ); but after the intervention was significantly different.

**Table 1.** Comparison of anxiety by groups before and after relaxation intervention.

Stage	Number	Control group		Intervention group		Sig
		Mean	SD	Mean	SD	
Before	48	54.35	4.27	55.23	4.22	0.77
After	48	54.63	4.67	46.40	6.65	0.01

**Table 2.** Comparison of the choice of type of delivery before and after the educational intervention.

Groups	Type of delivery	Pre to intervention		After intervention		Significance
		Number	Percent	Number	Percent	
Intervention (relaxation)	Normal	21	43.75	26	54.2	0.56
	Cesarean section	27	56.25	22	45.8	
Total		48	100	48	100	
Normal	Control	22	45.8	21	43.75	
Cesarean section		26	54.2	26	18.1	
Total		48	100	70		

The mean and standard deviation of the subjects' anxiety before and after the intervention were shown to be around 1. Table 2, shows the effect of relaxation intervention on delivery choices in of prim parous women before and after the relaxation intervention. As can be seen, the effect of relaxation on the choice of type of delivery in of prim parous women was not statistically significant.

## Results and Discussion

Regarding the first hypothesis of the study that relaxation reduces the anxiety of prim parous women, the results of the present study showed that relaxation has a significant effect on reducing the anxiety of prim parous women. Consistent with these results, Bouzari et al. found in his research that relaxation exercises are effective in reducing the inability to fear childbirth and also reduces the anxiety of pregnant women in the experimental group compared to the control group [24].

The results of the study of Bodaghi et al. also support the claim that training in relaxation techniques by reducing coping mechanisms reduces stress, anxiety and depression in pregnant women and promotes health [25].

Watankhah et al. also showed in his research that relaxation through meditation along with prayer was effective in reducing the anxiety of primiparous women and this reduction in the anxiety of prim parous women reduced the choice of cesarean section as a type of delivery and caused the choice of normal delivery [26].

Explaining the results, it can be said that women are afraid of childbirth because they think the pain is beyond their control and they are also become worried and anxious about their baby's health. The big challenge for pregnant women, which makes them feel helpless, is deciding how to give birth. Pregnant women experience a great deal of anxiety due to the bombardment of misinformation about childbirth, which goes through a vicious cycle and exacerbates the pain and fear of childbirth at the time of childbirth [27,28]. One of the most effective ways to deal with anxiety and labor pain is to use non-pharmacological methods. Studies have shown that relaxation reduces the anxiety of childbirth, facilitating and accelerating the birth process. Relaxation affects the autonomic nerves and cause relaxation. Doing regular relaxation exercises during pregnancy increases the mother's success rate of relaxation during labor. Relaxation increases the secretion of endorphins or analgesics and decreases the secretion of adrenaline [29]. According to the above results, relaxation training is of special importance as one of the educational interventions and skills that a pregnant mother can use to improve her quality of life for the rest of her life. This method is a non-pharmacological method in reducing anxiety and resulting labor pain. This method is also cheap and harmless and has been suggested to reduce fear and anxiety, especially during pregnancy. Regarding the effectiveness of the muscle relaxation technique, it can be

said that relaxation techniques produce an anti-stress response in the body called the relaxation response, which reduces heart rate, deepens breathing, lowers blood pressure, improves blood flow, and relieves muscles cramps resulting in the body returning to its normal state. Relaxation training helps a person to recognize, despite the fact that many bodily responses are self-sustaining, she can identify and change them [30].

Raakel L et al. on the importance of using this method stated that the combination of counseling and pregnancy education along with relaxation during pregnancy, reduces maternal anxiety and increases the weight of the baby and reduces the length of stay of the baby in the neonatal ward [31]. Moreover, in another study, Alipour et al. concluded that due to the prominence of muscle tension in anxiety, various relaxation interventions for anxiety disorders were evaluated and showed their effectiveness [32]. Pregnancy anxiety is sometimes seen as a natural mechanism to deal with a mother's mental concern about having children that can prepare her for pregnancy and the changes that come with it. But concern and anxiety can take the form of illness and become so severe that it affects the pregnant mother's mental health. If childbirth preparation classes can change people's attitudes toward childbirth, women will be better prepared to bear the pain of childbirth and will avoid unnecessary cesarean sections performed because of anxiety about labor pains. Educational techniques will help to change dysfunctional thoughts about pain and childbirth and, as a result, reduce the amount of people avoiding and withdrawing from stimuli that cause pain [33]. Therefore, cesarean section is expected to have few and specific uses and its rate do not exceed a certain limit. Unfortunately, today the prevalence of cesarean section in the country is more than acceptable [34].

Lack of knowledge about the complications of cesarean section and negative attitude towards natural childbirth are important reasons for increasing the tendency of pregnant women to cesarean section, and special programs should be done to relieve anxiety and stress caused by labor pains for patients and their companions so that while gaining trust and responsibility, they themselves can take action to choose more natural childbirth. Providing specialized psychological support and counseling for pregnant women and their families in parallel with prenatal care programs along with the use of relaxation methods can be very helpful to make childbirth a sweet and repetitive experience. It is suggested that arrangements be made to assess pregnant women and their families in terms of the need for systemic psychological support, as well as the provision of related services alongside antenatal care clinics. Although the patients expect to be the final controller and decision maker in the conclusion process for the type of delivery, they also expect their physicians to play an effective role in choosing the final type of delivery and to act responsibly in this regard. Therefore, it is necessary to comprehensively correct the cultural shortcomings of the tendency to cesarean section in society. Physicians are at the core of this program and can help reduce cesarean section by providing appropriate and timely information during pregnancy [35]. Besides, due to the difficulty of correcting social misconceptions, the



role of the media and television in this regard is very important and should be coordinated with the health care system to build and provide a variety of related educational and cultural programs; this is something we have seen less of in recent years. By accepting a normal delivery by educated people and with a higher social class, you can subtly model for people. Given the desire of our society to have more children, people should be realistically informed about the complications of cesarean section so that they can make better decisions for their families. This study showed that the designed intervention has significant positive effects on reducing anxiety in pregnant women. Therefore, due to the limitation of effective mental interventions and prioritizing physical health over mental health among pregnant women, it is suggested that a set of trainings in the form of mental health of pregnant women (relaxation training) be included in pregnant women care programs. In addition, awareness of the fear and anxiety of pregnancy allows members of the health care team to play a more effective role in the first examination of women who are stressed or requesting a cesarean section [36].

## Conclusion

Using the method of reducing fear and anxiety based on mindfulness and relaxation, due to having conscious and being far from judgment techniques, can have beneficial effects in reducing the fears and worries of pregnancy that lead a person to choose a cesarean section and finally lead to the cessation of cesarean section and a positive attitude and turning to natural childbirth.

Given the risk factors involved in the development of postpartum anxiety and its negative consequences, it is suggested that researchers emphasize screening and educating high-risk pregnant mothers who are at risk of developing anxiety during labor and delivery. Due to the limited number of people and the duration of training, it is recommended that this training be performed through a longer duration and on a larger sample size of pregnant women. The effectiveness of this method should be compared with other therapeutic and psychological methods on the dependent variables of this research in practice. Moreover, in order to evaluate the effect of time passage on the retention rate of educational achievements, it is suggested that researchers consider follow-up courses in future research. Considering that one of the limitations of the present study was the use of a questionnaire in the data collection process, it is suggested that another study with other tools (observation and interview) examine the level of anxiety, fear of childbirth and the tendency to choose the type of labor of primiparous women.

## References

- Siriwan, Yuenyong R, Veena Jirapaet and Beverley AO Brien. "Support from a Close Female Relative in Labour: The Ideal Maternity Nursing Intervention in Thailand." *J Med Assoc Thai* 91 (2008): 253-60.
- Beck, Aaron T, N Epstein, G Brown and RA. Steer. "An Inventory for Measuring Clinical Anxiety: Psychometric Properties." *J Consult Clin Psychol* 56 (1988): 893-897.
- Jafarpour, M, M. Esfandiyari, Sh Mokhtarsahi and F Hoseini. "The Effect of Stressful Life Events on Postpartum Depression." *J Kermanshah Uni Med Sci* 10 (2007): 1-2.
- Tragea, Christina, George P Chrousos, Evangelos C Alexopoulos and Christina Darviri. "A Randomized Controlled Trial of the Effects of a Stress Management Programme During Pregnancy." *Complement Ther Med* 22 (2014): 203-211.
- CZ. Roland-Price A, "Management of Tocophobic Women. In: Karoshi M, Newbold S, B- Lynch C, Keith LG," *Preconceptional Med Mana* 5 (2012): 281-288.
- Farajzadeh, A, and SK Shakerian Rostami. "Study of Prevalence and Causes of Fear of Normal Delivery in Primiparous Pregnant Women in Talesh County, in 2018." *Nurs Midwifery J* 16 (2018): 660-70.
- Johnson, RC and P Slade. "Obstetric Complications and Anxiety during Pregnancy: Is there a Relationship?." *J Psychosom Obstet Gynaecol* 24 (2003): 1-14.
- Grant, Kerry-Ann, Catherine McMahon and Marie-Paule Austin. "Maternal Anxiety during the Transition to Parenthood: A Prospective Study." *J Affect Disord* 108 (2008): 101-111.
- Waldenström, Ulla, Ingegerd Hildingsson and Elsa-Lena Ryding. "Antenatal Fear of Childbirth and its Association with Subsequent Caesarean Section and Experience of Childbirth." *BJOG* 113 (2006): 638-646.
- Madhavanprabhakaran, Girija Kalayil, Melba Sheila D'Souza and Karkada Subrahmanya Nairy. "Prevalence of Pregnancy Anxiety and Associated Factors." *Inter J Africa Nursing Sci* 3 (2015): 1-7.
- Spice, Kerry, Shannon L Jones, Heather D Hadjistavropoulos and Kristine Kowalyk, et al. "Prenatal Fear of Childbirth and Anxiety Sensitivity." *J Psychosom Obstet Gynaecol* 30 (2009): 168-174.
- Teixeira, César, Bárbara Figueiredo, Ana Conde and Alexandra Pacheco, et al. "Anxiety and Depression during Pregnancy in Women and Men." *J Affect Disord* 119 (2009): 142-148.
- LK. Cunningham FG and Bloom SL. *Williams Obstetric*. New York: McGraw-Hill, (2014).
- Shakeri, Masoumeh, Saeedeh Mazloumzade and Farnaz Mohamaian. "Factors Affecting the Rate of Cesarean Section in Zanjan Maternity Hospitals in 2008." *J Adv Med Biomed Res* 20 (2012): 98-104.
- IK Cunningham and Bloom Steven. *Williams Obstetrics and Gynecology*. Newyork: McGraw-Hill, USA, (2010).
- Badiee, Shapour, Yalda Ravanshad, Anoush Azarfar and Fatemeh Dastfan, etal. "Survey of Cesarean Deliveries and Their Causes in Hospitals Affiliated to Mashhad University of Medical Sciences, Iran, 2011." *Iran J Obste Gyne Infertility* 16 (2013): 10-17.
- Karlström, Annika, Ingela Rådestad, Carola Eriksson and Christine Rubertsson, etal. "Cesarean Section Without Medical Reason, 1997 to 2006: A Swedish Register Study." *Birth* 37 (2010): 11-20.
- Toosi, Zahra. "Implementation of the Health System Reform Plan in Two Contexts of Promoting Vaginal Delivery and Reducing Out-of-Pocket Payment of Hospitalized Patients in Hospitals Affiliated to Hamadan University of Medical Sciences." *Hakim Res J* 21 (2018): 173-179.
- Paterno, Mary T, Shirley E Van Zandt, Jeanne Murphy and Elizabeth T Jordan. "Evaluation of a Student-Nurse Doula Program: An Analysis of Doula Interventions and their Impact on Labour Analgesia and Cesarean Birth." *J Midwifery Womens Health* 57 (2012): 28-34.
- Akhavan, Sharareh and Ingela Lundgren. "Midwives' Experiences of Doula Support for Immigrant Women in Sweden—A Qualitative Study." *Midwifery* 28 (2012): 80-85.
- Firouzbakht, Mozghan, Maryam Nikpour and Soraya Khafri. "The Effect of Prenatal Education on the Process of Childbirth." *Scimetr* 2 (2014): 45-54.
- Rafiee, Bahare, Marzieh Akbarzade, Nasrin Asadi and Najaf Zare. "Comparison of Attachment and Relaxation Training Effects on Anxiety in Third Trimester and Postpartum Depression among Primipara Women." *Hayat* 19 (2013): 76-88.
- Hur, Myung Haeng, Nam Youn Cheong, Hye Sung Yun and Mi Kyoung Lee, et al. "Effects of Delivery Nursing Care using Essential Oils on Delivery Stress Response, Anxiety during Labour, and Postpartum Status Anxiety." *Taeahan Kanho Hakhoe Chi* 35 (2005): 1277-1284.
- Bastani, Farideh, Alireza Hidarnia, Kristen S Montgomery and Maria E Aguilar-Vafaei, et al. "Does Relaxation Education in Anxious Primigravid Iranian Women Influence Adverse Pregnancy Outcomes?: A Randomized Controlled Trial." *J Perinat Neonatal Nurs* 20 (2006): 138-146.
- Bouzari Behnaz, "Determining the Effectiveness of Group Therapy Training with a Behavioral Approach on Reducing Disability, Fear of Childbirth and Anxiety in Pregnant Women," *J Disability Stud* 8 (2019): 6-11.
- Bodaghi, EF, Alipour, M Bodaghi and R Nori, et al. "The Role of Spirituality and Social Support in Pregnant Women's Anxiety, Depression and Stress Symptoms." *Community Health J* 10 (2017): 72-82.
- William. "Determining the Effectiveness of Relaxation by Meditation along with Remembrance Therapy on Anxiety in Nulliparous Women," *J of Law Enforce Med* 1(2016): 43-56.
- JamshidiManesh, Mansoureh, F Oskouie, Leila Jouybary, and Akram Sanagoo. "The Process of Women's Decision Making for Selection of Cesarean Delivery." *Iran J Nursing* 21 (2009): 55-67.
- Mohammadpourasl, Asghar, Parivash Asgharian, Fatemeh Rostami, and Hossein Akbari. "Investigating the Choice of Delivery Method Type and its Related Factors in Pregnant Women in Maragheh." *Know Health J* 1 (2009): 36-39.

30. Hosseini, Ebrahim, Nasrin Asadi and Fatemeh Zareei. "Effect of Massage Therapy on Labour Progress and Plasma Levels of Cortisol in the Active Stage of First Labour." *Zahedan J Res Med Sci* 15 (2013): 35-38.
31. Beheshtian, Mohammad. "Efficacy of Progressive Relaxation, and Relaxation Combined by Periodic Visual Stimulation and Periodic Audio Stimulation on Blood Pressure and Heart Rate of University Students." *J of Maza Uni Med Sci* 25 (2015): 47-57.
32. Luoto, Raakel, Kirsi Laitinen, Merja Nermes and Erika Isolaari. "Impact of Maternal Probiotic-Supplemented Dietary Counselling on Pregnancy Outcome and Prenatal and Postnatal Growth: A Double-blind, Placebo-Controlled Study." *Br J Nutr* 103 (2010): 1792-1799.
33. Alipour, Monireh, Leila Ghahremani, Sedigheh Amooee and Sareh Keshavarzi. "The Effectiveness of Relaxation Techniques on Depression, Anxiety and Stress in Pregnant Women: Based on Self-Efficacy Theory." *Sci J Kurdistan Uni Med Sci* 22 (2017): 20-30.
34. Bitá, MS, Esalatfar Khadige, Roshanaei Ghodratollah and Oliaei Seyedeh Reyhaneh. "The Study of Knowledge and Attitude of Pregnant Women Concerning Physiologic Delivery at Fatemiyeh Hospital Hamadan, Iran." *E3 J Med Res* 3 (2014): 62-7.
35. Ghadimi, R, F Izadpanah, A Zarghami, and M Rajabi, et al. "Effective Factors for Choosing the Delivery Method in Primiparous Women in Babol, Iran." *J Babol Uni Med Sci* 15 (2013): 52-58.
36. Sanavi, F Shahraki, A Navidian, F Rakhshani and A Ansari-Moghaddam. "The Effect of Education on Base the Theory of Planned Behavior Toward Normal Delivery in Pregnant Women with Intention Elective Cesarean." *J Hormozgan Uni of Med Sci* 17 (2014): 531-9.

**How to cite this article:** Gaini, Soheila, Nemat Sotoudeh Asl, Ameneh Moazedian and Shahrokh Makvand Hosseini. "The Effect of Relaxation on Reducing Anxiety and Choosing the Type of Delivery in Prim Parous Women." *Clin Schizophr Relat Psychoses* 16S (2022). DOI: 10.3371/CSRP.GSNA.051222.