

Research Article

Antenatal Hypnosis: Does it Have an Effect on Fear of Childbirth?

 Caganay Soysal,  Elif Yilmaz

Department of Obstetrics and Gynecology, Dr. Sami Ulus Women's and Children's Health Teaching and Research Hospital, Ankara, Türkiye

Abstract

Objectives: This study aimed to examine the effect of hypnosis applied during the antenatal period on labor pain and fear in pregnant women.

Methods: 100 pregnant women who were administered hypnosis and 100 women who were not, were included in this prospective descriptive study, between January and June 2019. The Wijma Birth Expectation/Experience Scale Version A Questionnaire was applied to the pregnant women at the end of hypnosis, and at the same week to the pregnant women who were not hypnotized, and the results of both groups were compared.

Results: Total Wijma scores of the hypnotized group were statistically significantly lower (the higher the score, the higher the fear), while the pain perception scores at birth were significantly higher (negatively loaded question) ($p < 0.05$). It was concluded that the expectation of pain in labor changed significantly after hypnosis and the fear of childbirth decreased significantly.

Conclusion: Considering the positive effect of hypnosis on the fear of childbirth, it should be emphasized that hypnosis, which is an important alternative method in our country where the rate of birth fear and related cesarean section is gradually increasing, has a calming effect and changes the negative perceptions of pregnant women about childbirth.

Keywords: Childbirth, fear, hypnosis, pain, tokophobia

Cite This Article: Soysal C, Yilmaz E. Antenatal Hypnosis: Does it Have an Effect on Fear of Childbirth? EJMI 2022;6(4):394–400.

Although fear of childbirth, also called tokophobia, affects all pregnant women, it is more frequently seen in pregnant women who are anxious, pessimistic, and have a low pain threshold, and can cause psychological problems with increasing severity.^[1] It is more common in people who have heard scary stories about childbirth or have had bad experiences. Fear of childbirth is classified from insignificant to severe, and as its severity increases, the rate of impact on the daily life quality of pregnant women also increases.^[2] Studies on the frequency of fear of childbirth have revealed that all women are afraid of childbirth, but that severe fear of childbirth is between 20-26%, and that

6-10% of women experience an extremely severe fear of childbirth ("disabling" fear of childbirth), which can affect their quality of life.^[3,4] While primary tokophobia develops in pregnant women who do not have a pregnancy history, it usually develops due to the scary labor stories they have heard; secondary tokophobia is seen in pregnant women who have a traumatic obstetric history in one of their previous pregnancies.^[2,5] However, it has been reported that the fear of childbirth is higher in patients with their first pregnancy than in patients with a previous pregnancy and delivery history.^[6] Although many reasons are stated for fear of childbirth, such as losing control at birth, surgical

Address for correspondence: Elif Yilmaz, MD. Kadin Hastaliklari ve Dogum Klinigi, Dr. Sami Ulus Kadin ve Cocuk Sagligi Egitim ve Arastirma Hastanesi, Ankara, Türkiye

Phone: +90 532 706 08 91 **E-mail:** elifakkasyilmaz@gmail.com

Submitted Date: May 10, 2022 **Accepted Date:** July 20, 2022 **Available Online Date:** September 30, 2022

©Copyright 2022 by Eurasian Journal of Medicine and Investigation - Available online at www.ejmi.org

OPEN ACCESS This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.



interventions such as episiotomy in normal birth, and complications that may occur in the mother and baby during birth, the most common reason is reported as fear of pain at birth.^[4,7,8] Pregnant women tend to perceive uterine contraction as pain because of their fears.

Although the World Health Organization has stated that ideal cesarean rates should be 10-15% of all births since 1985, cesarean rates have been increasing worldwide in recent years.^[9,10] Studies have shown that fear of childbirth has a significant effect on birth outcomes and is one of the most important reasons for the dramatic increase in cesarean section deliveries.^[11] The fear that the baby will be harmed during normal delivery is one of the most important maternal concerns, especially in developing countries. Thus, pregnant women prefer cesarean section considering that it is safer for the baby and more comfortable because it will not cause labor pain.^[8,12,13] Pregnant education classes in the antenatal period have become increasingly popular and common in recent years to inform parents about pregnancy, the postpartum process, and birth, as well as about breathing exercises and control of uterine contractions at birth. Although positive results have been documented in studies on the effects of these classes on women's birth anxiety and fears, there is still no clear consensus.^[14]

In recent years, alternative medical methods have started to gain importance in preventing the fear of childbirth in pregnant women, and especially the use of hypnosis in this field has begun to be emphasized. While the conscious part of the human mind controls his/her daily life, the manager of the autonomous nervous system in the body is the subconscious part. All sudden and involuntary reactions are under the control of the subconscious part, and all fears emerging from past experiences lie there. Therefore, women's fears about labor and birth pain emerge from the subconscious brain. The first thing to do for a calm and comfortable birth is to clear these fears and negative emotions, and this is where hypnosis is effective. With hypnosis applied to pregnant women, it is possible to replace negative feelings and fears about childbirth with positive expectations. Although there are many studies on the effect of hypnosis on pain, studies specific to labor pain are limited, and there is a need to include hypnosis more in pregnancy and the field of delivery. This study aims to examine the effect of hypnosis applied during the antenatal period on labor pain and fear of labor in pregnant women.

Methods

The study is a prospective cross-sectional study and was conducted in the pregnant outpatient clinics of Dr. Sami Ulus Gynecology, and Obstetrics Training and Research

Hospital between January 2019 and June 2019. The hypnosis method was explained to the patients who applied to the pregnancy outpatient clinic, 100 single pregnant women aged 18-45, between 32-37 weeks, without any anomaly in the fetus, who had their first pregnancy and accepted hypnosis, were included in the study. For 5 weeks, hypnosis was applied to the pregnant women for a total of 5 sessions, in one day and one hour per week, on the same day and time every week. Multiparous patients, pregnant women with chronic diseases (liver, kidney, thyroid diseases, cancer patients, patients with chronic immune system disease, etc.), complicated pregnancies (hypertension, gestational diabetes, placenta previa, preterm labor) were excluded from the study. After the hypnosis sessions were completed at 37 weeks, the 'Wijma Birth Expectation/Experience Scale Version A Questionnaire' was applied to all pregnant women after the last session. As much as the number of pregnant women who filled out the questionnaire, the patients with 37 weeks of pregnancy who applied to the outpatient clinic and whose pregnancy characteristics were matched with the study group, and who agreed to participate in the study were also included in the control group. The control subjects also filled the Wijma Birth Expectation/Experience Scale Version A Questionnaire on the same day. Thus, a total of 200 patients, 100 in the study group (n=100) and 100 in the control group (n=100) were included in the study. By comparing the results of both groups, the effect of the hypnosis method on reducing the fear of childbirth was evaluated. Ethics committee approval of the study was obtained from the same hospital, and all patients were informed about the study before the study and their written consent was obtained.

Hypnosis was applied to the subjects in the hypnosis group for 5 weeks, once a week, for a total of 5 sessions, each lasting one hour, on the same day and time every week. The hypnosis was applied by the obstetrician who has the authority and certificate to apply hypnosis by the TR Ministry of Health. A preliminary conversation was made with the patients who underwent hypnosis, the patient's information about birth was questioned, and detailed information was given about birth and hypnosis. The patients were administered hypnosis in the room reserved for hypnosis in the pregnant school of the same hospital. Under hypnosis, the patient was advised to feel the labor pains only as contractions, not to feel pain, to give birth very comfortably and without fear, and they were made to imagine a comfortable, fearless, and happy birth moment. At the end of the session, the main suggestions were repeated and the patient was taught auto-hypnosis to use at the time of birth. W-DEQ-Awas developed by Klaas and Barbro Wi-

jma in 1998 based on the clinical experience of women's fear of childbirth and is a self scale assessment instrument commonly used in many studies.^[15] It consists of 33 questions, with scores ranging from 'not at all (0) to 'extremely' (5), giving a score between 0-and 165. A higher score indicates increased fear of childbirth. The answers to some of the questions that are positively formulated have to be reversed for the calculation of a subject's total score. According to the severity of fear, the fear of birth was evaluated in 4 categories:fear of childbirth at a lower (score≤37), moderate (score 38-65), severe (score 66-84), and clinical level (score≥85). In W-DEQ, question 24 is related to birth pain. Pregnant women were asked to explain their prediction of birth pain and were asked to score it between 1 and 5. The scores on the scale range from 0 to 5. Zero-point means extreme pain, and 5-pointsmean that there is no pain. This questionnaire is negatively charged and is calculated by converting the score to the opposite direction to adapt to the measurement. The reliability and validity study of the scale in Turkish was established by Korukcu et al. in 2012 and it was found to be reliable and valid, meaning that it measures the level of fear of childbirth among Turkish pregnant women.^[9] Pregnant women were placed in a quiet room to complete the questionnaire on their own, and the completed measures were checked by the researcher to ensure that there was no obvious problem in their scoring.

Statistical Analysis

Statistical analyzes were performed using a package program called SPSS (IBM SPSS Statistics 24). Frequency tables and descriptive statistics were used to interpret the findings. Non-parametric methods were used for the measurement values that did not conform to the normal distribution. In accordance with non-parametric methods, the "Mann-Whitney U" test (Z-table value) method was used to compare the measurement values of two independent groups. "Pearson-χ²" crosstabs were used to examine the relationships between two qualitative variables.

Results

The mean age of the study group was 24.6 years, the mean age of the control group was 25.3 years, and there was no statistically significant difference between the groups in terms of mean ages (p>0.05). Socio-demographic characteristics of the study group is shown in Table 1.

When the results of the study group's fear of birth before and after hypnosis were compared, a significant decrease was found in the fear of childbirth after hypnosis (Table 2). While there was a fear of birth at a clinical level in the majority of the study group before hypnosis, this ratio was found to change in favor of low fear at birth after hypnosis. When the total Wijma scores of the study and control groups were evaluated, it was found that the mean score

Table 1. Socio-demographic characteristics of the study group

Group Variable	Hypnosis group (n=100)		Control group (n=100)		Total (N=200)		Statistical analysis* Probability
	n	%	n	%	n	%	
Age							
<24	22	22.0	22	22.0	44	22.0	χ ² =0.034 p=0.998
24-26	25	25.0	24	24.0	49	24.5	
27-29	35	35.0	36	36.0	71	35.5	
≥30	18	18.0	18	18.0	36	18.0	
Working Status							
Yes	42	42.0	45	45.0	87	43.5	χ ² =0.183 p=0.669
No	58	58.0	55	55.0	113	56.5	
Education Level (%)							
Primary School	10	10.0	18	18.0	28	14.0	χ ² =3.943 p=0.414
High School	31	31.0	35	35.0	66	33.0	
University	59	59.0	47	47.0	106	53.0	
Education Level of Spouse (%)							
Primary School	7	7.0	6	6.0	13	6.5	χ ² =2.057 p=0.725
High School	23	23.0	32	32.0	55	27.5	
University	70	70.0	62	62.0	132	66.0	

*: "Pearson-χ²" crosstabs.

Table 2. Classification of fear of birth according to W-DEQ before and after hypnosis

Fear of Birth (n=100)	n	%
Wijma Classification before hypnosis		
Fear of birth at a low level	-	-
Fear of birth at a moderate level	8	8.0
Fear of birth at a severe level	46	46.0
Fear of birth at a clinical level	46	46.0
Wijma Classification after hypnosis		
Fear of birth at a low level	90	90.0
Fear of birth at a moderate level	10	19.0
Fear of birth at a severe level	-	-
Fear of birth at a clinical level	-	-

of the hypnotized group was statistically significantly lower compared to the control group (24.91 ± 10.48 (min 10-max 61); 85.11 ± 16.31 (min). 50-max 124)), ($p < 0.05$). Considering that as the score increases, the fear of childbirth increases, it was observed that the fear of birth decreased significantly in the hypnosis group. The fact that the mean score in the hypnotized group was lower and the mean score in the control group revealed impairment in terms of birth fear at clinical degree also shows the significant effect of hypnosis in reducing the fear of childbirth (Table 3).

When the results of both groups regarding labor pain were evaluated, it was found that the pain score of the control group was statistically significantly higher than the hypnosis group. The average scores of both groups were given in Table 4 ($p < 0.05$). Since it is a negatively charged question, the degree of pain expected by pregnant women who underwent hypnosis during labor was found to be significantly lower than those who did not, according to this question of which scoring was calculated by reversing it.

Discussion

Although anxiety about childbirth is observed in almost all pregnant women, when it is at the level of high severity, it negatively affects the quality of life of the pregnant and the choice of delivery method. Especially in first pregnancies, since there is no previous birth experience, this situation is more common due to the anxiety of the unknown, causing pregnant women to avoid normal birth and demand cesarean section. In this study, it was aimed to examine the effect of hypnosis on reducing the subconscious labor pain and fears of pregnant women, and it was found that the perception of labor pain and fear of labor were significantly reduced in the hypnotized group.

Studies have revealed that almost all pregnant women experience anxiety about childbirth. In their study conducted with 401 pregnant women in Australia to investigate the levels of pre- and postpartum fear of childbirth and the relationship of this fear with birth outcomes, Fenwick et al. found that 26% of the pregnant women had a low level, 48% a moderate level, and 26% high-level anxiety and reported that high levels of anxiety were highly associated with emergency cesarean section.^[3] Similarly, in their study on low-risk nulliparous pregnant women in Sweden and Denmark, Kjærgaard et al. concluded that 10% of pregnant women experienced severe fear of childbirth and that the fear diminished at 37 weeks was correlated with the severity of the fear experienced during admission to the maternity unit.^[4] Similarly, a significant difference was found in the hypnosis group in terms of pre-hypnotic/post-hypnotic fear of childbirth scores in our study. While there was a fear of birth at a clinical level in the majority of the study group before hypnosis, this ratio was found to change in favor of low fear at birth after hypnosis.

Table 3. Comparison of Wijma Birth Expectation/Experience Scale Version A results by groups

Variable (n=200)	Hypnosis (n=100)		Control (n=100)		Statistical analysis* Probability
	$\bar{X} \pm SD$	Median [Min-Max]	$\bar{X} \pm SD$	Median [Min-Max]	
Wijma	24.91 ± 10.48	23.0 [10.0-61.0]	85.11 ± 16.31	84.5 [50.0-124.0]	Z=-12.154 p=0.000

Table 4. Comparison of pain scores according to groups

Variable (N=200)	Hypnosis (n=100)		Control (n=100)		Statistical analysis* Probability
	$\bar{X} \pm S.D.$	Median [Min-Max]	$\bar{X} \pm S.D.$	Median [Min-Max]	
Pain	3.63 ± 1.00	4.0 [1.0-5.0]	1.79 ± 1.27	2.0 [0.0-5.0]	Z=-8.978 p=0.000

*The "Mann-Whitney U" test (Z-table value) statistics were used to compare the measurement values of two independent groups in non-normally distributed data.

One of the challenging issues all over the world and especially in developing countries is the increasing cesarean rates. One of the most important reasons for the increase in cesarean rates is that pregnant women demand a cesarean section because of the fear of labor pain and birth anxiety. In many studies in the literature, it is stated that women prefer cesarean section because they are afraid of the pain they will experience during normal delivery.^[16,17] Interestingly, the result of a study conducted in our country is that although Turkish women think that the ideal delivery method is normal delivery, more than half of them state that they prefer cesarean delivery because they are afraid of normal delivery.^[18] In the study of Mancuso et al. in which they examined women's choice of delivery method and its reasons in Italy, they found that women increasingly preferred cesarean section surgery. They stated that to change these preferences of women, they should be supported psychologically during pregnancy, they should be informed about pregnancy and the birth process in a personalized way, and their worries about the fear of childbirth should be reduced.^[19]

Although fear of childbirth is caused by many reasons such as loss of control at birth, surgical interventions (episiotomy, vacuum/forceps, etc.), disability/death of the baby at birth; in the literature, it has been stated that the most common reason is the worry about labor pain.^[4,8] Demsar et al., in their study with 191 pregnant women who participated in the antenatal training group to investigate the most common causes of fear of childbirth, concluded that the 3 most common causes of fear of childbirth, although multifactorial, were episiotomy, loss of control during labor, and labor pain.^[20]

Geissbuehler and Eberhard stated that despite today's increased modern obstetric information, decreased perinatal and maternal morbidity and mortality, women still fear childbirth and the most common reason for women's fears about childbirth is their qualms about labor pain.^[21] Goselin et al. emphasized that the perception of severe pain at birth, especially in nulliparous women, causes a serious fear of childbirth and it may be associated with post-traumatic stress and postpartum depression.^[22] When the results of both groups regarding labor pain were assessed in our study, the finding that the degree of pain expected by pregnant women who underwent hypnosis to be significantly lower during labor compared to pregnant women who did not undergo hypnosis was also consistent with the literature results, and it is important in terms of showing the effect of the change in pain perception of pregnant women on fear of childbirth. In our study, expected pain and scores in Wijma questionnaire were found to be correlated to each other, and it was observed that the group with high expect-

tations of pain at birth had high fear of birth scores. This is important in that it shows that the fear of childbirth is related to the expectation of pain and that to reduce the fears of the pregnant women about the birth, their anxiety about the labor pain should be reduced initially.

Management of labor pain is an important component of antenatal care. Studies show that women who know how to cope with labor pain give birth more comfortably and are more satisfied with the birth.^[23]

Although pharmacological methods, which are the most widely used methods to reduce labor pain today, are very effective, they are preferred by fewer and fewer women due to their side effects and negative effects on the comfort of the woman. Complementary medicine methods, which have become increasingly popular in recent years in dealing with labor pain, include methods such as acupuncture, relaxation techniques, and hypnosis. An extra advantage of these methods is that they make it easier for patients to connect with healthcare professionals and birth supporters. Hypnotic techniques have been used in pain management in many areas for many years, and their effectiveness in this area has been shown in many studies.^[24,25]

Although studies of hypnosis in labor pain management are still limited, the use of this method has become increasingly popular in recent years, and it was concluded in a Cochrane review published in 2016 that the use of hypnosis reduces the need for pharmacological methods in labor pain management.^[26] In a systematic review examining the approach of women to pharmacological and non-pharmacological methods in pain management in labor, it was stated that starting hypnosis during the antenatal period is beneficial for women to feel ready, calm, and strong for childbirth, and to reduce their fear of birth.^[23] Similar to the literature, in our study, it was revealed that the fear of childbirth was statistically significantly decreased in the hypnosis group. Studies examining the use of hypnosis in labor pain management show that hypnotized women do not evaluate labor contractions as pain, so they do not experience fear of labor and are much more satisfied with their birth.^[27,28]

In their study conducted with 1222 healthy nulliparous pregnant women to examine the effect of antenatal hypnosis on the birth experience of women, Werner et al. concluded that the most important issue underlying the better birth experience of hypnotized women is that they do not have fear of childbirth.^[29] In our study, the fact that the mean score in the hypnotized group was low and the mean score in the control group was classified to be fear of childbirth at the clinical level also shows the significant effect of hypnosis on reducing the fear of childbirth, which

is in accordance with the literature. As a result, nowadays, when medicine has developed so much, birth should no longer be a scary event for women. Besides, how an exciting experience birth is for women should be emphasized. It should not be kept in mind that this can be achieved by informing women about coping with labor pain in the antenatal period and preparing them for delivery in a healthy way, and alternative medicine methods should be emphasized in this area. Considering both the maternal and fetal side effects of medical treatments for pain and the advantage that hypnosis can provide suggestions for not only pain but also relieving anxiety, fear, having confidence, and keeping control at the time of birth, it is expected that the use of hypnosis in this field will increase in the coming years without any doubt.

The limitations of the study were that the study was cross-sectional, the patient group was homogeneous, especially in terms of demographic characteristics, the number of patients was low, and the patients could not be examined during delivery. However, we believe that our study is important and enlightening in terms of showing that hypnosis has a positive effect on relieving the pain expectations of pregnant women during labor and reduces the fear of childbirth, especially in our country where cesarean section rates are increasing. Larger prospective studies on the use of hypnosis in pregnant women not only in pain management but also in other psychological problems (hyperemesis, etc.) should be conducted and emphasized.

Disclosures

Ethics Committee Approval: Dr. Sami Ulus Women's and Children's Health Teaching and Research Hospital Ethics Committee, E-20/12-053.

Peer-review: Externally peer-reviewed.

Conflict of Interest: None declared.

Authorship Contributions: Concept – C.S.; Design – E.Y.; Processing – E.Y.; Analysis and/or interpretation – C.S.; Literature search – C.S.; Writing – E.Y., C.S.; Critical review – E.Y., C.S.

References

- Alipour Z, Lamyian M, Hajizadeh E, Agular Vafaei, M. The association between antenatal anxiety and fear of childbirth in nulliparous women: a prospective study. *Iran J Nurs Midwifery Res* 2011;16:169–73.
- Hofberg K, Ward MR. Fear of pregnancy and childbirth. *Postgrad Med J* 2003;79:505–10. [CrossRef]
- Fenwick J, Gamble J, Nathan E, Bayes S, Hauck Y. Pre- and postpartum levels of childbirth fear and the relationship to birth outcomes in a cohort of Australian women. *J Clin Nurs* 2009;18:667–77. [CrossRef]
- Kjærgaard H, Wijma K, Dykes A, Alehagen S. Fear of childbirth in obstetrically low-risk nulliparous women in Sweden and Denmark. *J Reprod Infant Psych* 2008;26:340–50. [CrossRef]
- Bhatia MS. Tokophobia: a dread of pregnancy. *Ind Psychiatry J* 2012;21:158–9. [CrossRef]
- Spice K, Jones SL, Hadjistavropoulos HD, Kowalyk K, Stewart SH. Prenatal fear of childbirth and anxiety sensitivity. *J Psychosom Obstet Gynaecol* 2009;30:168–74. [CrossRef]
- Saisto T, Halmesmäki E. Fear of childbirth: a neglected dilemma. *Acta Obstet Gynecol Scand* 2003;82:201–8. [CrossRef]
- Eriksson C, Westman G, Hamberg K. Content of childbirth-related fear in Swedish women and men—analysis of an open-ended question. *J Midwifery Womens Health* 2006;51:112–8.
- WHO. Appropriate technology for birth. *Lancet* 1985;326:436–7.
- Betran AP, Ye J, Moller AB, Zhang J, Gulmezoglu AM, Torloni MR. The Increasing Trend in Caesarean Section Rates: Global, Regional and National Estimates: 1990-2014. *PLoS One* 2016;11:e0148343. [CrossRef]
- Wijma K. Why focus on “fear of childbirth”? *J Psychosom Obstet Gynaecol* 2003;24:14–44. [CrossRef]
- Handelzalts JE, Becker G, Ahren MP, Lurie S, Raz N, Tamir Z, et al. Personality, fear of childbirth and birth outcomes in nulliparous women. *Arch Gynaecol Obstet* 2015;291:1055–62.
- Nieminen K, Stephansson O, Ryding EL. Women's fear of childbirth and preference for cesarean section—a cross-sectional study at various stages of pregnancy in Sweden. *Acta Obstet Gynecol Scand* 2009;88:807–13. [CrossRef]
- Gagnon AJ, Sandall J. Individual or group antenatal education for childbirth or parenthood, or both. *Cochrane Database Syst Rev* 2007;2007:CD002869.
- Wijma K, Wijma B, Zar M. Psychometric aspects of the W-DEQ; a new questionnaire for the measurement of fear of childbirth. *J Psychosom Obstet Gynaecol* 1998;19:84–97. [CrossRef]
- Cakmak B, Arslan S, Nacar MC. Opinions of Women About Cesarean Delivery on Maternal Request. *Firat Med J* 2014;19:122–5.
- Jenabi E, Khazaei S, Bashirian S, Aghababaei S, Matinnia N. Reasons for elective cesarean section on maternal request: a systematic review. *J Matern Fetal Neonatal Med* 2020;33:3867–72. [CrossRef]
- Akarsu RH, Mucuk S. Turkish women's opinions about cesarean delivery. *Pak J Med Sci* 2014;30:1308–13.
- Mancuso A, De Vivo A, Fanara G, Settineri S, Triolo O, Giacobbe A. Women's preference on mode of delivery in southern Italy. *Acta Obstet Gynecol Scand* 2006;85:694–9. [CrossRef]
- Demsar K, Svetina M, Verdenik I, Tul N, Blickstein I. Tokophobia (fear of childbirth): prevalence and risk factors. *J Perinat Med* 2018;46:151–4. [CrossRef]
- Geissbuehler V, Eberhard J. Fear of childbirth during pregnancy: a study of more than 8000 pregnant women. *J Psychosom Obstet Gynecol* 2002;23:229–35.

22. Gosselin P, Chabot K, Beland M, Goulet-Gervaris L, Morin AJS. Fear of childbirth among nulliparous women: Relations with pain during delivery, post-traumatic stress symptoms, and postpartum depressive symptoms. *Encephale* 2016;42:191–6.
23. Thomson F, Feeley C, Hall Moran V, Downe S, Oladapo OT. Women's experiences of pharmacological and non-pharmacological pain relief methods for labour and childbirth: a qualitative systematic review. *Reprod Health* 2019;16:71. [\[CrossRef\]](#)
24. Elkins G, Jensen MP, Patterson DR. Hypnotherapy for the management of chronic pain. *Int J Clin Exp Hypn* 2007;55:275–87.
25. Wortzel J, Spiegel D. Hypnosis in Cancer Care. *Am J Clin Hypn* 2017;60:4–17. [\[CrossRef\]](#)
26. Madden K, Middleton P, Cyna AM, Matthewson M, Jones L. Hypnosis for pain management during labour and childbirth. *Cochrane Database Syst Rev* 2016;19:CD009356.
27. Abbasi M, Ghazi F, Barlow-Harrison A, Sheikvatan M, Mohammadyari F. The effect of hypnosis on pain relief during labor and childbirth in Iranian pregnant women. *Int J Clin Exp Hypn* 2009;57:174–83. [\[CrossRef\]](#)
28. Prasertcharoensuk W, Thinkhamrop J. Non-pharmacologic labour pain relief. *J Med Assoc Thai* 2004;87:5203–6.
29. Werner A, Ulbjerg N, Zachariae R, Sen Wu C, Nohr EA. Antenatal hypnosis training and childbirth experience: a randomized controlled trial. *Birth* 2013;40:272–80. [\[CrossRef\]](#)