

Evaluation of the effect of hypnobirthing education during antenatal period on fear of childbirth

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ABSTRACT

Objectives: The objective of this research was to analyse the effect of hypnobirthing education given to pregnant women during antenatal period on fear of childbirth.

Methods: This is an educational interventional case-control study. A total of 51 pregnant women were studied together during the 12th week of pregnancy. Ethical Committee and related consents were taken. Data was evaluated by using descriptive statistics.

Results: The age average of the pregnant in the control group was 28.70 ± 5.42 years while it was 25.74 ± 5.16 years for the case group. Women's gestational week averages were 20.87 weeks for study and 24.10 weeks for control group. In the study, the pre-training scale scores of the cases and control groups were compared with the average level of birth fear of the groups ($t = 1.848, p = 0.073$). There was a significant difference between pre- and post-hypnotic scale scores in the birth preparation class ($t = -5.329, p < 0.001$). Before the training; 48% of the case group. Fifty-two percent of the control group is adequately informed about the hypnobirthing problem.

Conclusions: It was found that among the pregnant women who had attended birth preparation classes, positive labour perception of the intervention group pregnant women was higher than that of the control group pregnant women who hadn't had hypnobirthing education and there was a significant difference between them.

Keywords: Birth preparation, fear of childbirth, hypnobirthing, midwife, pregnant

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Pregnancy and labour are normal physical events which are emotionally, psychologically and culturally important for women and their families [1]. Many pregnant women's concerns about the approaching delivery increase throughout pregnancy. However, some women experience certain significant fear and anxiety about giving birth [2].

Fear affects a woman's decision making process. According to Dick Read's "fear-tension-pain syndrome", fear causes muscular and psychological

tension which results in prolonged labour and increase in pain perception. A woman who has decided upon hypnobirthing learns how to relax her whole body, especially perineal and uterus muscles, and keep them under control [3].

Reasons for fear of childbirth vary, current literature shows that there are many reasons like infant death or impairment during delivery, experiencing pain, compulsory delivery by caesarean section, death, episiotomy, being helpless at delivery, the baby being



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malformation, not trusting delivery staff, damage or laceration at expulsion phase, thinking herself incapable of giving birth, panicking during delivery, involuntary screaming, losing self-control, being alone during delivery and not knowing how delivery will be [4]. Fear of childbirth is a preliminary factor for elective and urgent caesarean section. Maximum effort is required to prevent traumatizing negative delivery experience especially in women who have never given birth before [2].

The objective in birth preparation training is to help mother-to-be and couples make accurate decisions about pregnancy, labour and postnatal periods and go through these periods in the most pleasant way [5]. It was found in a study by Melender [6] that 78% of the women had fears about pregnancy and labour. It has been observed that doctors, nurses and midwives working at delivery rooms today provide support to delivery with two philosophies. One of them is “the pregnant cannot do delivery alone and so intervention is required”. Although rare, the second is “delivery is done by the pregnant herself, but it should be reinforced” [7].

The frequently used descriptive treatment modalities for labour pain can be listed as yoga, meditation, hypnosis, relaxation, imagery and breathing exercises [8]. Rather than being a technique, hypnobirthing can be called a labour philosophy that prepares the pregnant for delivery physically and psychologically. This approach is getting more and more prevalent in many countries around the world as HypnoBirthing Institutes, set up by Marie F. Mongan with its headquarters in the USA, regularly train practitioners [7].

Hypnobirthing focuses on teaching self-hypnosis, breathing slowly, letting oneself go and the art of enjoying labour calmly and serenely, discovering the method of delivery without stress, forming a positive expectation, trust and faith in the spontaneity of labour. Midwives enable the pregnant to live the natural process of labour by teaching the basic labour philosophy, physiological and chemical consequences of fear, how to do away with the hitches of fear and stress and how to relax before and at the time of delivery [7]. A pregnant woman who has decided for hypnobirthing learns how to relax her whole body, perineal and uterus muscles in particular, and how to keep them under control [9]. Current literature has

shown that by decreasing childbirth fear and anxiety, hypnobirthing decreases pain perception and use of analgesic and oxytocin, increases vaginal delivery rate and level of labour satisfaction, decreases postpartum depression rate and is a safe method for it does no harm to mother or newborn [10]. The objective of this research was to analyse the effect of hypnobirthing education given to pregnant women during antenatal period on tokophobia. The research hypotheses are as follows: H0: There is no significant difference in terms of childbirth fear between women who have had hypnobirthing training and who haven't. H1: Fear of childbirth in women who have had hypnobirthing training is less than those who haven't had this training.

METHODS

Study Population

This educational interventional case-control study was conducted in February 2015 at Özgül Gündüz Public Health Building of Bornova Municipality in İzmir. The research population consisted of pregnant women during the 12th week or more at the time of the research who applied to pregnancy class at Özgül Gündüz Public Health Building of Bornova Municipality in İzmir.

The control group was determined as at least 30 participants in accordance with parametric tests and later its capacity was assessed using power analysis. With I. Type error $\alpha = 0.05$ and II. Type error $\beta = 0.1$ (power = 90%), the sampling size was determined as total 60 participants; 30 study group and 30 control group.

Upon the approval and consent of Ege University Medical Faculty Clinical Research Ethics Committee, the case group involved 31 pregnant women who applied to the institution for antenatal education at the time of the research but didn't have hypnobirthing education.

The control group involved 20 pregnant women chosen among the population who had previously participated in antenatal education but hadn't had hypnobirthing education, resided at the stated residence at the time of the research and accepted to participate in the research willingly.

The education was given one hour a week totalling

four hours in four weeks. The data gathering tools used in the research were a questionnaire developed by the researchers within the scope of literature review involving 36 questions for descriptive characteristics of the women (socio-demographic, obstetric) and 25 questions to determine the knowledge of the women about hypnobirthing and “Wijma Delivery Expectancy/ Experience Questionnaire (W-DEQ)-A Version”, whose reliability and validity had been done by Körükçü *et al.* [12], to measure the fear of childbirth level of the pregnant women.

The dependent variable was fear of childbirth score while the independent variables were the case of having hypnobirthing education, pregnancy number, delivery type and educational status.

Data Gathering

The research data were gathered in three stages. The 1st stage was conducted with only the study group in birth preparation class at the institution at the start of the four-week training process and the 2nd stage was conducted with only the control group by calling the group who had previously had birth preparation education to the institution while the 3rd stage was conducted with the study and control groups at the end of the four-week education.

Data Gathering Tools

The entire data gathering forms of the study were gathered by the researcher through face-to-face interview and observation methods. The study and control groups were applied:

1. Informed Voluntary Consent Form
2. Case Report Form-1 involving descriptive characteristics (Appendix I)
3. Case Report Form-2 involving information about hypnobirthing (Appendix I)
4. Wijma Delivery Expectancy/ Experience

Questionnaire (W-DEQ)-A Version (Appendix II)

Statistical Analysis

The analyses of the data were conducted on the computer using Statistical Package for Social Science 16 (SPSS 16.0). For number and percentage (%) distributions of the descriptive data in parametric conditions, t-test was used in dependent and independent groups while chi-square test was used for the data acquired by counting. The results were analysed at 95% reliability interval and 0.05 significance level.

RESULTS

Socio-Demographic Findings

The age average of the pregnant in the control group was 28.70 ± 5.42 years (the youngest: 21, the oldest: 37) while it was 25.74 ± 5.16 years (the youngest: 17, the oldest: 39) for the case group. The gestational week average of the pregnant in the case group was 20.87 weeks, while it was 24.10 weeks for the control group. 35.50% of the women in the case group were secondary school graduate while 35.50% were high school graduate or above. Whereas 20.00% of the women in the control group were secondary school graduate, 10.00% were high school graduate or above. The case of voluntary pregnancy in the women in the case group was 90.30% and it was the same in the women in the control group (90.00%). While 35.50% of the pregnant women in the case group stated that they had given at least one live birth, 70.00% of those in the control group stated that they had given at least one live birth. 49.10% of the pregnant revealed that they were anxious and added that the first reason for their anxiety was the fear that their baby would get harmed during delivery. While

Table 1. The mean (W-DEQ)-A points for study and control group before hypnobirthing education

Pre-Education	Case Group (n = 30)		Control Group (n = 30)		t test	
	Mean	SD	Mean	SD	t	p
(W-DEQ)-A	79.47	11.58	84.60	16.71	-1.38	3.71

(W-DEQ)-A = Wijma delivery expectancy/ experience questionnaire-A version

Table 2. The mean (W-DEQ)-A points of study group before and after hypnobirthing education

Case Group	Pre-Education (n = 30)		Post-Education (n = 30)		t test	
	Mean	SD	Mean	SD	t	p
(W-DEQ)-A	79.47	11.58	67.10	11.00	5.21	< 0.001

(W-DEQ)-A = Wijma delivery expectancy/ experience questionnaire -A version

76.48% of the women stated that they hadn't heard of hypnobirthing before, it was also determined that 56.86% had a bath when they experienced pain during pregnancy.

Findings of Hipnobirthing and Fear of Childbrth

Fear of childbirth was found that similiarly between case and control group pre- hypnobirthing education (t =-1.38, p = 3.71) (Table 1).

In case group pregnancies who get hypnobirthing education in the birth preparation class, it was found that there was a significant difference between pre and post education scale mean scores. (t = 5.21, p < 0.001) (Table 2).

Table 3 shows level of hypnobirthing knowledge pre-hypnobirthing education in case and control groups. In terms of knowledge status, 48% of the case group and 52% of the control group were found to be sufficient.

DISCUSSION

In terms of some individual characteristics of the pregnant, it was found that age average of the pregnant in the case group was 25.74 ± 5.16 years, while it was 28.70 ± 5.42 years for those in the control group. In terms of the age average of the women who had participated in birth preparation classes, among the

studies in Turkey, Şeker and Sevil [12] found the age average 27.47±3.62 years in her study and among the international studies, Bergström *et al.* [13] found the age average of 28 ± 8 years. The age average of the pregnant in our study shows similarities to the other study results. While 35.50% of the women in the case group were secondary school graduate and 35.50% of them were high school graduate or above, 20.00% of those in the control group were secondary school graduate and 10.00% of them were high school graduate or above. In line with our study, it was found in a study by Coşar and Demirci [14] that education level of the pregnant in the case group (77.20% university graduate) was higher than education level of those in the control group (51.40% elementary school graduate).

The groups also showed similarities in gestational week and the case of voluntary pregnancy. It was determined in an intergroup comparison before education that 6.50% of the case group and 20.00% of the control group were found adequate in knowledge status. When the scale score averages of the pregnant before education were compared according to groups, the difference wasn't found to be significant (p > 0.05). When the averages of "Wijma Delivery Expectancy/ Experience Questionnaire" scores of the groups in birth preparation class before and after Hypnobirthing education were compared, scale score averages of the pregnant after education were found

Table 3. Comparison of hypnobirthing knowledge level of case and control groups pre- education

Group	Sufficiency Level of Hypnobirthing Knowledge				TOTAL	
	Sufficient (X ≥ 70)		Insufficient (X ≤ 69)		n	%
	n	%	n	%		
Case	14.3	47.7	15.7	52.3	30	100.0
Control	15.7	52.3	14.3	47.7	30	100.0
TOTAL	30	100.0	30	100.0	60	100.0

(Chi-square: 0.267, p = 0.606)

to be lower than those before education. The difference between the score averages was statistically significant ($t = .329, p < 0.001$). After education, there was a decrease in fear perception of the pregnant. It was determined that after hypnobirthing education, knowledge scores of the pregnant increased ($t = -9.117, p < 0.001$) and their fear of childbirth perception decreased. In the literature, it is stated that having education during antenatal period decreases fear of childbirth.

CONCLUSION

In our study, a significant difference was found between fear of childbirth perception of the pregnant before and after education, which in line with the literature. This study will yield more extensive discussions about the evaluation of the effect of antenatal education based on hypnobirthing philosophy on birth perception and delivery adaptation process and will thus become a basis for future studies. It was determined that birth perception of the pregnant became more positive when they attended antenatal education and birth preparation classes and were given labour support. It is suggested that birth preparation classes based on hypnobirthing philosophy should be implemented and made more common and that birth preparation education should be included in the curriculum to teach hypnobirthing philosophy to students of midwifery and nursing.

Ethical Explanations

Approval and consent of Ege University Medical Faculty Clinical Research Ethics Committee were obtained. Official consent was obtained from Bornova Municipality. Consent of Öznur Körükçü, who adapted W-DEQ-A scale to Turkish, was obtained to use the scale. Written and oral consent of the pregnant women who accepted to participate in the research was obtained.

Authors' Contribution

AB: Conception and design, acquisition of data, analysis and interpretation of data, drafting of manuscript and final approval of manuscript; **EÇF:**

Analysed data, did review and critical revision; **NS:** Did review and critical revision.

Conflict of interest

The authors disclosed no conflict of interest during the preparation or publication of this manuscript.

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