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ORIGINAL ARTICLE

Psychodrama as a new intervention for reducing fear of childbirth: a randomised controlled trial

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ABSTRACT

This study was designed to examine the potential benefit of the addition of psychodrama classes to antenatal education as a new technique to address fear of childbirth. This was a randomised controlled trial. A total of 150 women were initially enrolled in two groups. Psychodrama sessions were added to standard antenatal education in the experiment group. The control group participated only in routine antenatal education classes. Birth outcomes and fear of childbirth were measured and analysed to assess the impact. The analysis was completed with an experimental group of 50 women and a control group of 49 women. At the conclusion of the training, it was observed that there was a greater decrease in fear of childbirth in the experiment group than in the control group. Additionally, in the postpartum period, the experimental group had a higher rate of vaginal childbirth and a shorter childbirth time than the control group. Psychodrama may be an effective means of reducing fear of childbirth and reduced caesarean section childbirth. Psychoeducation should be added antenatal education programs. Thus, it may represent an important tool in the efforts to improve maternal mental health and also provide broader social benefits.

IMPACT STATEMENT

- **What is already known on this subject?** Studies examining means to reduce fear of childbirth have found that psychoanalysis, cognitive behavioural therapy, eye movement desensitisation and reprocessing, haptotherapy and art therapy were useful.
- **What the results of this study add?** Psychodrama as a new intervention may be beneficial decreased of fear of childbirth, increased of normal birth rate and at improving the experience of pregnancy and childbirth.
- **What the implications are of these findings for clinical practice and/or further research?** Protecting and caring for the mental health of the mother and child benefits the entire community. It has been reported that 1 in 5 mothers experience psychiatric difficulties during the postpartum period, and 7 of 10 do not receive treatment, which has a negative impact on the mother, the child and family. Assesment of the mental health of women during the postpartum period is not regularly performed in many countries and women are frequently left to struggle on their own. The identification of pregnant women who have a high fear of childbirth and who are at risk of developing a psychiatric disorder by nurses is an important element of providing of appropriate, high-quality care.

KEYWORDS

Antenatal education; psychodrama; psychoeducation; fear of childbirth; mode of childbirth

Introduction

The act of giving birth is a significant experience in the life of a woman (Ayers 2017; Saxbe et al. 2018). In studies of birth psychology, women and their spouses often describe the birth of a child as the most difficult and the most important life experience. It can have a substantial and lasting influence on the family (Saxbe et al. 2018). Understanding and addressing fear of childbirth (FOC) is essential to promoting maternal wellbeing. FOC can include complex emotions of anxiety and fear that occur before, during, and after childbirth (Wijma and Wijma 2017). It can be mild or debilitating; a low level of FOC can motivate women to prepare for childbirth, however, intense fear can have a negative effect on the childbirth process and the postnatal period (Demšar et al. 2018).

Therefore, antenatal education to manage FOC is vital. In Türkiye, pregnant women generally undergo four medical check-ups at specified intervals during pregnancy (Prenatal Care Routine in Türkiye 2021). While antenatal education may be available, it is not compulsory. As in many countries, the content is generally related to basic information and fear is largely addressed with respect to labour pain. However, FOC is associated with more than labour pain; complex emotions may originate from a variety of sources, including earlier trauma, fear of invasive procedures and loss of control, previous birth experiences, inner conflicts or depression, frightening stories of the

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experience, inadequate or inaccurate knowledge and social support, and more (Toohill et al. 2014; Dencker et al. 2019; Bayri Bingol and Demirgoz Bal 2020).

FOC can have biological, psychological, and social causes (Nilsson et al. 2018; Sezen and Unsalver 2019). The prevalence of severe FOC has been reported to be approximately 9%, and a high level of fear was recorded in 36.7% in a recent review (O'Connell et al. 2019). The literature suggests that FOC can contribute to pre-traumatic stress symptoms and may also be related to a preference for a caesarean section (CS) childbirth (Poggi et al. 2018). Though there may be many reasons for increased rates of CS, it has been noted that fear of vaginal childbirth is a common motivation. Women with a previous difficult childbirth and FOC were found to have a 5.2 times higher probability of a CS childbirth in a subsequent pregnancy, and also had an active labour that was some 40 minutes longer than women without FOC (Sydsjö et al. 2013). Traumatic stress symptoms during pregnancy have also been associated with prolonged labour, a greater risk of developing obstetric complications, and increased use of epidural anaesthesia (Molgora et al. 2018; Dencker et al. 2019).

Appropriate recognition of prenatal FOC can enable women to admit and manage feelings of uncertainty about childbirth and motherhood, assist with a healthy pregnancy and postpartum emotional wellbeing, and reduce fear of vaginal childbirth (Dencker et al. 2019). Antenatal training classes, midwife support, and psychoeducation programs have been beneficial (Toohill et al. 2014, 2017; Missonnier 2018; Moghaddam-Hosseini et al. 2018; Klabbers et al. 2019; Uçar and Golbasi 2019).

Psychoeducation programs may also provide broader benefits to women, families, and society at large. It can be an opportunity for women to benefit from psychotherapy that may not otherwise occur (Erdem 2015; Missonnier 2018). During pregnancy, women may experience intense anxiety, fear, and internal conflicts. A woman may be able to openly express previously withheld feelings or unsaid thoughts directly and clearly (Erdem 2015). Providing a safe venue and appropriate guidance at a vulnerable time can yield literally lifesaving results with widespread impact.

Psychoeducation and psychotherapy have been shown to reduce FOC (Toohill et al. 2014; Fenwick et al. 2015; Akgün et al. 2019). However, it is not generally part of standard antenatal training. Psychoeducation is an intervention designed to provide a systematic, structured, and didactic knowledge transfer related to an illness and its treatment that integrates emotional and motivational aspects to enable patients to cope with the illness and improve treatment adherence and efficacy (Aguilera-Martín et al. 2021). In addition to providing information, antenatal psychoeducation provides a secure setting for women to express their thoughts and emotions freely and to increase their self-awareness and their capacity to overcome problems (Brown 2011). A systematic review examining FOC provided evidence of the benefits of theory-based psychoeducation (Striebich et al. 2018). Studies examining means to reduce FOC have found that psychoanalysis (Missonnier 2018), cognitive behavioural therapy (Saisto et al. 2006; Nieminen et al. 2016; Striebich et al. 2018; Uçar and Golbasi 2019), eye movement desensitisation and reprocessing (Baas et al. 2017), haptotherapy (Klabbers et al. 2019), and art therapy (Sezen and Unsalver 2019) were useful. The BELIEF (Birth Emotions and Looking to Improve Expectant Fear) program has led to reduced fear and greater confidence among women (Fenwick et al. 2015; Toohill et al. 2017). Holistic (Rouhe et al. 2013; 2015) and other approaches (Taheri et al. 2014) have proved successful. Psychodrama is another technique that has been shown to assist with lessening fear (Altinay 2015).

A psychodrama is an experiential form of therapy that integrates philosophical, sociological, and psychological theories with spontaneity and creativity to encourage participants to develop new perspectives. This method offers an interactive means of exploring potentially difficult issues and emotions through role playing and guided small group discussion (Altinay 2015). Research of the effectiveness of psychodrama has demonstrated increased self-awareness and empathy skills in the participants (Dogan 2018), as well as psychological enpowerment, and reduced burnout (Özbaş and Tel 2016). A systematic review noted decreased fear, loneliness, hopelessness, aggression, anxiety, and depression, and greater problem-solving ability, overall quality of life, spontaneity, and social functions (Orkibi and Feniger-Schaal 2019).

Psychodrama for FOC management

Prenatal psychodrama sessions were designed by a psychodrama-trained psychotherapist to be held in group therapy settings. The sessions provide a pregnant woman with opportunities to examine and think about herself, her child, her partner, her mother, her fear of childbirth and the moment of birth, among other powerful issues. Unfinished business from the past can be closed and released, and the future can be imagined and planned for in a safe, therapeutic environment. Greater emotional awareness can be a very effective tool to reduce fear (Karabekir 2016; 2017).

To the best of our knowledge, the present study is the first to use psychodrama to explore pregnancy, childbirth, and the postpartum period. The study was constructed to examine the effects on FOC and childbirth mode of psychodrama used as an addition to antenatal education.

The current study addressed the following hypotheses:

I. The FOC of the women in the psychodrama experiment group during the pregnancy will decrease more than that of the control group.
II. The FOC of the women in the experiment group will be lower than that of the control group during the childbirth.
III. The experiment group will have a higher rate of vaginal childbirth than the control groups.

Materials and methods

Study design and setting

This randomised-controlled study was conducted at the antenatal training class of Sancaktepe Şehit Prof.Dr. Ilhan Varank Training and Research Hospital in Istanbul.

Study population and sampling

In all, 521 pregnant women were admitted to Sancaktepe Şehit Prof.Dr. Ilhan Varank Training and Research Hospital in 2017. Power analysis was performed using G*Power (3.0.10) software to determine the sufficient number of participants for each of the study groups. A sample of 47 pregnant women and 47 controls provided a power of 80% with a 0.05 margin of error and 0.5 effect level. Of the original group of 521 patients, 273 were excluded from the study because they did not meet the inclusion criteria and 98 declined to participate (total: 371 excluded). A group size of 75 was selected, accounting for potential loss of data during the course of the study. Randomisation of the groups was ensured using the Research Randomiser tool (ramdomizer.org). From the start of the study, randomisation was carried out considering the order of the women who applied to the pregnant school. Participants were randomised and enrolled to the experimental and control groups by the midwife in the antenatal education class. A single-blind technique was utilised to reduce assessment bias and to increase the accuracy and objectivity of the findings by the responsible researcher. During the course of a six-week pregnancy education course, one day was reserved for the psychodrama experiment group and one day for the control group. During the research period of December 2018 to February 2020, six separate experiment groups (min = 9, max = 14 participants) and control groups (min = 11, max = 14) were created and analysed. Since the pandemic started, the last follow-up could not be made. CONSORT Flow Diagram is presented as Figure 1.

Inclusion criteria

Voluntary participation, pregnancy of minimum 20 and maximum 30 weeks, primipara, 18+ years of age, score of 38+ on the Wijma Delivery Expectancy/Experience Questionnaire scale, living with her partner, no diagnosis of high-risk pregnancy, no significant comprehension, hearing, or visual difficulties in order to allow for full participation in group work.

Exclusion criteria

Pregnancy risk developing during the training, not attending in the first week of antenatal education, absence of more than a week, difficulty following the group work and incomplete forms.

Another 25 women from the experiment group and 28 from the control group were excluded during the course of the study (Figure 1). The analysis was completed with an experiment group of 50 women and a control group of 49 women. In order to avoid possible bias, the basic antenatal education was provided by a single instructor and the content and duration of the education was the same for both groups.

Routine antenatal education (control group)

Standard antenatal education provided by the Turkish Ministry of Health in a six-week course delivered once a week for three hours.

Antenatal education with addition of psychodrama (experimental group)

In addition to the routine antenatal education, 90 minutes of psychodrama therapy was provided by an expert therapist (Fadime Bayrı Bingöl, Ph.D., R.N., Psychiatric and Mental Health Nurse). The curriculum is described in Table 1.

There were no deviations in planned interventions for members of the control or experiment group. Only pregnant women participated in the education sessions studied; at present, partners rarely participate in antenatal education classes provided by state hospitals in Türkiye.

Data collection instruments

The data were collected using an initial information form, the Wijma Delivery Expectancy/Experience Questionnaire, and the Wijma Delivery Expectancy/Experience Questionnaire Version B.

Initial information form

The researchers created a form based on a literature review. All of the questions were open-ended and requested details related to age, education, employment, number of pregnancies, week of the pregnancy, pregnancy planning, type of pregnancy, health problems during pregnancy, and any previous miscarriage.

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

This self-report instrument was developed by Wijma et al. (1998) to measure women's antenatal FOC and cognitive appraisal of childbirth. A validity and reliability study of a Turkish version was performed by Korukcu et al. (2012). The scale is designed to assess a pregnant woman's thoughts and feelings over the previous month about the upcoming birth, including what they think the birth experience might be like and how it will feel, particularly labour pain. The sum score can range from 0 to 165; a higher score indicates greater FOC. A score of $\leq$37 reflects a low level of fear, a score of 38-65 suggests mid-level fear, a score of 66-84 indicates a high level of fear, and a score of $\geq$85 indicates a clinical degree of fear.

Wijma Delivery Expectancy/Experience Questionnaire Version B (W-DEQ-B): Klaas and Barbro Wijma also developed a postnatal version of the W-DEQ to assess the experience, rather than expectations. A validity and reliability study of a Turkish version of the scale included six subscales (Korukcu et al. 2016). The questionnaire consists of 32 items and uses a similar 6-point Likert scale. The total score can range from 0 to 160; a higher score indicates a higher level of fear. It is

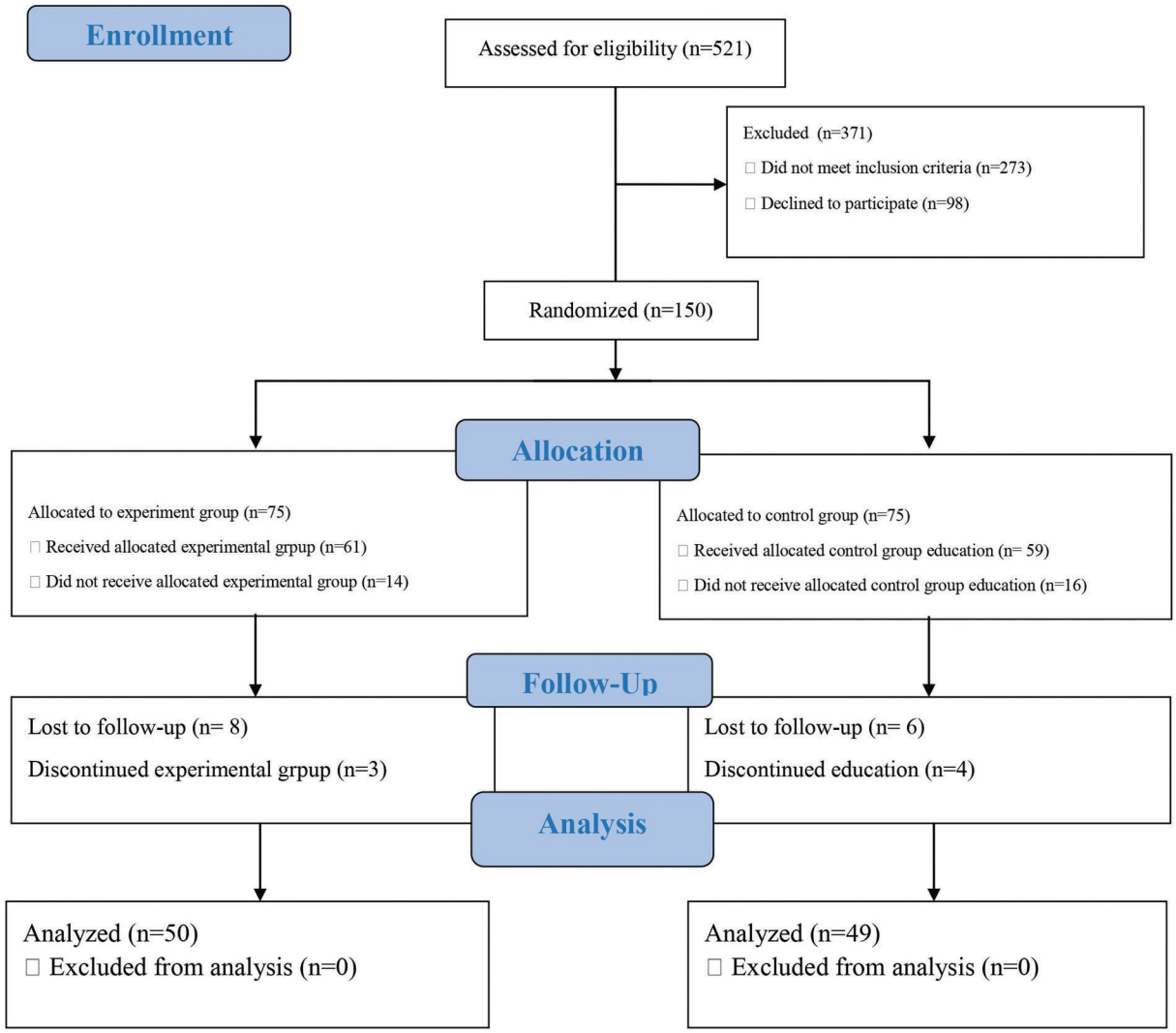

Figure 1. CONSORT flow diagram. Guidelines for reporting parallel group randomised trials.

recommended that the scale be administered between two hours and 15 days after childbirth. In this study, responses were gathered between the 7th and 14th days post-partum.

Collection of research data

The primary outcome research data were obtained using an initial information form and the W-DEQ-A, which was administered to the participants during the second or third trimester of pregnancy. The psychodrama group completed the scale before and after receiving the psychodrama training, and the control group also completed the scale twice: before and after the standard 6-week antenatal program. The secondary outcome of the research was the evaluation of the birth results and birth experience. The W-DEQ-B was administered during face-to-face interviews held between the 7th and 14th day after childbirth to examine the experience. The women were also asked open-ended questions related to the number of weeks of the pregnancy, duration of childbirth, mode of childbirth, interventions implemented during the childbirth, and any complications occurring in the mother or the infant, and the responses were categorised and analysed.

Assessment of the data

The study data were assessed using SPSS (Version 21.0) software. Descriptive statistics of the continuous variables were presented as mean and standard deviation values, and categorical variables were shown using numbers and percentage. The distribution of the data was evaluated with the Kolmogorov-Smirnov test and was determined to be compatible with normal distribution. The Student *t*-test and a Chi-Squared test were utilised to compare the demographic characteristics of the experiment and control group participants. The length of labour of both groups recorded on the W-DEQ-B was also compared using Student's *t*-test. Logistic regression analysis was applied to assess the mode and duration of childbirth of both groups. A statistical significance level of $p < .05$ was accepted for all of the analyses.

Results

The mean age of the women was 26.39 ± 4.05 years in the experiment group and 26.03 ± 3.24 years in the control group. The mean years of formal education of the women in the experiment group was 13.25 ± 2.76 years and 13.13 ± 2.98 years

Table 1. Content of weekly education.

	Control group-Routine antenatal education*	Experiment group-Psychodrama education**
Week 1	Male and female reproductive anatomy and physiology, physical and emotional changes due to pregnancy, balanced nutrition during pregnancy, exercise, smoking, alcohol and drug use, employment, sexuality, growth and development of the infant in the placenta, health checks during pregnancy.	Group members were organised according to the stage of pregnancy and subdivided into smaller groups (The expectation of have a boy or a girl baby, home/hospital birth, vaginal/caesarean childbirth) and met each other. Fear of childbirth was measured using sociometric tools and participants were encouraged to express themselves about specific fears of childbirth (birth pain, loss of control, harm to themselves or the child, etc.) to increase awareness. They were asked to draw a picture that reflected their feelings related to birth and were asked to talk to their own mother (or any relative) about their own birth for discussion in the next session. The group was asked to share their thoughts about the session.
Week 2	Birth physiology, childbirth symptoms, skin-to-skin contact, first breastfeeding, interventions in the childbirth room, preparing a bag for childbirth.	The participants were asked to share stories of their own mothers and childhood and group members with the most intense feelings were invited to be the protagonist in an activity to act out the moment of childbirth.
Week 3	Birth pain, methods to reduce birth pain (massage, breathing, relaxation, mental techniques), effective pushing during childbirth.	A trust activity was conducted as a warm-up. The women were asked to share opinions about the theme of trust, including their views of trust related to the birth team. The member with the most intense feelings was selected to be the protagonist in a psychodrama exercise.
Week 4	Breastfeeding (benefits and features of breastmilk, factors that increase/reduce breastmilk, frequent problems/solutions, milking techniques, storage conditions, breast care, flatulence).	Participants were asked to divide into pairs. Blind man's bluff was used as a warm-up activity with each member of the pair playing both roles. The women were asked to share experiences and thoughts related to trust and devotion as experienced during the activity as well as in their lives. They were also asked to share their opinions about trust and devotion with respect to the healthcare team when they may be more vulnerable during childbirth. The participant with the most intense feelings was selected to play a protagonist role in a psychodrama exercise.
Week 5	Neonatal care (appearance, clothing, umbilical care, bathing, cutting of nails, baby massage, communicating), frequently encountered problems/solutions, postnatal health checks, vaccination calendar).	Pairs were formed to conduct a mirror game as a warm-up. Each member of the pair played both roles. The participants were asked to share opinions about managing or being managed in their lives. This discussion included views about the people who will support them in the postnatal period. The group member who displayed the most intense feelings was selected to play a protagonist role in a psychodrama exercise.
Week 6	Physical and psychological changes occurring in postpartum period, assessment of postpartum bleeding, uterus massage to control bleeding, nutrition and hygiene, caring for suture after caesarean section, postpartum sexuality and birth control methods.	Pairs were formed to play a "Don't cross the line" warm-up game. Each participant played the role of defending the line and crossing the line. The women were asked to share opinions about setting boundaries and affection. They were also asked to share their thoughts in this context about the people who will help them in the postpartum period. The group member who displayed the most intense feelings was selected to play a protagonist role in a psychodrama exercise. Finally, an activity designed to explore learning and leaving things behind was conducted.

*Routine antenatal education as recommended by the Türkiye Ministry of Health.
**Sessions concluded with the protagonist and the other group members sharing their thoughts and a guided group discussion. All but the first session was also initiated with an opportunity to discuss thoughts about the previous session. Protagonist activities used basic psychodrama techniques of role reversal, doubling, and mirroring. The researchers conducted an assessment after each session.

in the control group, which represented no statistically significant difference ($p > .05$) (Table 2).

It was determined before the study that the FOC level of the women in both groups was not. significantly different (Experiment group: 74.16 ± 24.85, Control group: 73.60 ± 24.94; $p > .05$). At the conclusion of the training, it was observed that there was a greater decrease in FOC in the experiment group than in the control group (Experiment group: 26.07 ± 23.46, Control group: 49.83 ± 21.66; $p < .001$). The experiment group also reported less fear during the childbirth process (Experiment group: 46.48 ± 24.74, Control group: 67.31 ± 24.63; $p < .001$). The experiment group had a higher rate of vaginal childbirth than the control group (Experiment group: 70%, Control group: 38.8%; $p < .05$). In addition, the study results showed that the mean duration of childbirth of the women in the experiment group was 12.17 ± 8.03 hours while it was 17.74 ± 9.59 hours in the control group, which was a statistically significant difference ($p < .05$) (Table 3).

In the logistic regression analysis, it was determined that the birth time of the control group took 1.06 times (CI 1.00-1.12) longer than the experimental group, and the experimental group completed normal birth 0.35 times (CI.14-1.12) control group. Again, according to the logistic regression analysis, it was determined that the control group experienced 3.7 times more (CI $= 1.63 - 8.50$) fear of childbirth (WDBDS > 37) than the experimental group after the training (No table).

Discussion

Our results demonstrated that the addition of psychodrama to antenatal education classes resulted in a greater reduction in FOC at the time of childbirth and in the postpartum period. Additionally, women who participated in psychodrama sessions, they reported there was a greater rate of vaginal childbirth and a shorter duration of childbirth. Some studies have indicated that antenatal education has been effective at reducing of FOC in comparison with no antenatal education (Taheri et al. 2014; Rouhe et al. 2015). It can increase self-confidence in terms of overcoming labour pain, reduce the number of interventions and costs, and improve

Table 2. Characteristics of women in terms of age, education, financial state, psychiatric diagnose, pregnancy plan and mode of childbirth ($n = 150$).

		Experiment group (n = 75)		Control group (n = 75)		
Individual features		Mean ± SD		Mean ± SD		*P*
Age (years)		26.39 ± 4.05		26.03 ± 3.24		[a].549
Education level		13.25 ± 2.76		13.13 ± 2.98		[a].799
		n	%	*n*	%	
Family type	Nuclear family	68	90.7	68	90.7	[b]1.000
	Extended family	7	9.3	7	9.3	
Financial status	Income less than expenses	10	13.3	11	14.7	[b].530
	Income equal to expenses	59	78.7	54	72	
	Income more than expenses	6	8	10	13.3	
Employment status	Employed	21	28	13	17.3	[b].860
	Unemployed	54	72	62	82.7	
Previous psychiatric diagnosis		7	9.3	4	5.3	[b].530
Pregnancy plan	Yes	68	90.7	60	80	[b].050
Type of pregnancy	Unplanned pregnancy	70	93.3	72	96	[b].350

[a]Student *t*-test; [b]Pearson chi-squared test.

Table 3. Comparison of childbirth expectations and mode of birth and duration of childbirth ($n = 99$).

		Experiment group	Control group	
		Mean ± SD/*n*	Mean ± SD/*n*	*p*
During pregnancy	Pre-education W-DEQ	74.16 ± 24.851/($n = 75$)	73.60 ± 24.94/($n = 75$)	[a].891
	Post-education W-DEQ	26.07 ± 23.46/($n = 61$)	49.83 ± 21.66/($n = 59$)	[a].001
	Between groups (p/n)	t:37.482 0.001[b]/($n = 61$)	t:17.935 0.001[b]/($n = 59$)	
Postpartum	W-DEQ-B	46.48 ± 24.74/($n = 50$)	67.31 ± 24.63/($n = 49$)	[a].001
		n %	*n* %	
Vaginal birth		35 70	19 38.8	[c].002
Caesarean section		15 30	30 61.2	
		Mean ± SD	Mean ± SD	
Duration of childbirth (hours)		12.17 ± 8.03	17.74 ± 9.59	[a].004

[a]Student *t*-test; [b]Paired Student *t*-test; [c]Pearson Chi-Squared test.

the health of mothers (Toohill et al. 2014). However, since antenatal education may be insufficient to reduce the fear of childbirth, it is recommended to add psychoeducation to the programs (Klabbers et al. 2019).

The relevant literature includes randomised controlled studies (Toohill et al. 2014; Rouhe et al. 2015; Nieminen et al. 2016; Toohill et al. 2017; Klabbers et al. 2019; Uçar and Golbasi 2019; Boz et al. 2020), as well as systematic reviews (Striebich et al. 2018; Akgün et al. 2019) that have determined the benefits of psychoeducation in antenatal education. The addition of psychoeducation designed to decrease FOC is not difficult (Fenwick et al. 2015). Group therapy is a more effective method than individual therapy in terms of duration and cost (Altinay 2015). Presentation alongside routine pregnancy education programs can also make it more acceptable and accessible. Saisto et al. (2006) noted in their study of psychoeducation that women mentioned "sharing their feelings" twice as often as "receiving information" as most helpful to reducing fear (Saisto et al. 2006). Sjögren (1998) reported that the women who received psychoeducation felt stronger and more prepared for the childbirth (Sjögren 1998). Our results also revealed that the FOC of the experiment group decreased more than that of the other group. The postpartum period fear of childbirth increased in both groups; however, the increase was greater in the control group. Fear of the birth experience can be affected by such variables as experiences with hospital rules or a healthcare team. In the present study, the level of fear and the childbirth mode was likely influenced by variations in the childbirth experience as a result of different hospitals and varied management of the process.

It has also been reported that the presence of a history of trauma or abuse can have a negative effect on a woman's birth experience as well as postpartum mental health (Dekel et al. 2017). Thus, addressing trauma and fears in the prenatal period can contribute to a positive birth experience and maternal wellbeing. Unresolved fear and anxiety can lead to an unplanned CS or other costly effects. The women in our experiment group had a higher rate of vaginal childbirth and a shorter length of childbirth. Similarly, Cantone, et al. (2017) found that participation in antenatal classes reduced the number of CS deliveries (Cantone et al. 2017). The majority of studies in the literature have indicated that education-based interventions increase the rate of vaginal childbirth. Psychoeducation-based antenatal education programs have notably affected a preference for a vaginal childbirth as well-contributed to a positive birth experience (Saisto et al. 2006; Rouhe et al. 2013; Taheri et al. 2014; Toohill et al. 2014; Rouhe et al. 2015; Toohill et al. 2017; Sezen and Unsalver 2019). In contrast, Yohai et al. (2018) found that antenatal education did not have any impact on childbirth mode (Yohai et al. 2018). It has also been reported in other studies that while psychoeducation reduced FOC, it did not have any effect on CS rates (Fenwick et al. 2015; Boz et al. 2020). The specific procedures of hospitals and the attributes of healthcare professionals may impact these differences.

In our study, the length of childbirth was shorter in the experiment group. This was similar to the findings of Uçar and Golbasi (2019), in their study of cognitive behavioural therapy (Uçar and Golbasi 2019), whereas some other authors have reported that psychoeducation-based antenatal education programs did not have any effect on the duration of childbirth (Saisto et al. 2006; Rouhe et al. 2013). Various factors can contribute to the length of childbirth, which may account for differences.

A stressful pregnancy and childbirth can trigger psychological vulnerabilities in the parents, and such circumstances may lead to disorders in the bonding process, harm to family relations, and potentially, long-term emotional, cognitive, and behavioural problems in the children (Fallon et al. 2016; Ayers 2017; Saxbe et al. 2018). Postpartum psychiatric problems have been reported to affect 1 out of 5 women, and 7 of 10 of these women do not receive any treatment. This remains an under-addressed problem that can have significant, lasting negative effects on the mother, child, and the family unit (Barnes 2015; Stramrood and Slade 2017). Reducing FOC and providing the means for a positive birth experience in antenatal education classes could have substantial benefits, and the use of psychoeducation and psychodrama would appear to be a relatively easy and inexpensive means to work towards that goal. Additional studies of the use of psychodrama conducted in Türkiye or other countries with a high rate of CS are recommended. It may represent an important tool in the efforts to improve maternal mental health and also provide broader social benefits.

Conclusion

The addition of psychodrama sessions to antenatal education appears to be an effective means of reducing FOC and improving the birth experience, which contributes to potentially significant emotional and medical outcomes. While more research is needed, reducing FOC appears to contribute to reduced CS childbirth in addition to offering other potentially significant emotional and medical outcomes.

Strengths of the study

To the best of our knowledge, this is the first experimental study in Türkiye to examine the effect of psychodrama on FOC. This research was conducted as a randomised, controlled trial, which provides for a high level of evidence. The six sessions provided to six different experiment groups consisting of 9-14 women were led by a special researcher with a psychodrama certification. The groups had few dropouts. Furthermore, the study included postpartum follow-up and comparative analysis.

Limitations of the study

Although this was a randomised, controlled experimental study, there are some limitations to the interpretation of the findings. Despite standardisation, the fact that the women gave birth in a number of hospitals with different medical teams participating in the birth and diverse delivery conditions may have had an effect on the level of FOC. This is related to how the healthcare system is structured in Türkiye and what it was possible for us to do. This study was conducted at a single centre with a limited sample due to the need for specific psychodrama training. This was experimental research conducted at a single centre with a relatively small sample. Further studies with larger groups would generate valuable data. Furthermore, follow-up was limited due to the coronavirus 2019 pandemic.

Acknowledgement

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Ethical considerations

The clinical research ethics committee of the Marmara University Faculty of Medicine and the Istanbul Health Directorate granted approval for this research. The study was also registered with ClinicalTrials.gov (NCT04690881). All of the participants were provided with information about the study, gave verbal consent, and were free to withdraw at any point.

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