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THE EFFECT OF MINDFULNESS-BASED CHILDBIRTH AND PARENTING EDUCATION TO MATERNAL AND PATERNAL ATTACHMENT, BIRTHING PARAMETERS AND POSTPARTUM ADAPTATION

Study Protocol and Statistical Analysis Plan

NCT: NONE

ENTRANCE

The word parent means mother and father according to the Turkish Language Association. It is also called nuclear family. is explained and represents the mother and father of a child (Cüceloğlu, 2016; TDK, 2023). The meaning of being a parent It is defined as the continuous provision of care, needs and support for a child's development and survival (Aksoy, 2005).

Becoming a parent is one of the developmental transition periods that include radical changes and new roles and responsibilities in an individual's life (Meleis, 2010; Young et al., 2020). This process of change is called the transition to parenthood (Cowan & Cowan, 2003). Although there are many different views on when the transition to parenthood begins and ends, the most widely accepted view is that it begins with pregnancy for individuals who become mothers/fathers for the first time and ends within a few months after birth, and the parenthood period begins (Fox, 2019).

The transition to parenthood also brings about parent-infant bonding. The term attachment is the ability to establish and maintain an emotionally positive, mutual, and supportive relationship between babies and parents. If the relationship is established appropriately, adults adapt themselves to their babies and babies give adults clues about their needs. This relationship, which develops in the early period, has an important place in the physical, psychological, and intellectual development of the child and continues to have an effect throughout life. The process of parent-infant bonding develops in three periods: pregnancy, birth, and postpartum (Condon et al., 2013). During pregnancy, parents feel and caress their babies physically, believe that their babies are in touch with them, talk to the fetus, say its name, think about their babies, and have positive feelings about their babies. It is important for the development of attachment to feel and imagine the future situation of the baby (Çelik and Ergin, 2019; Marzouk and Nabil, 2015). It has been observed that the attachment that begins during pregnancy gradually increases as the pregnancy progresses, and continues after the baby is born. It is stated that prenatal attachment is strengthened (Bouchard, 2011; Hicks et al., 2018). In a study examining attachment, prenatal attachment It has been determined that there is a strong and significant relationship between attachment and postpartum attachment (Condon et al., 2013). The conscious emotions it creates are motivating during pregnancy and facilitate adaptation to the parenting role, thus positively affecting the parent-infant adaptation process (Duyan et al., 2013; Hicks et al., 2018; Yılmaz, 2013).

Pregnancy period, to parenthood oriented physiological, psychological, social And emotional changes happened And This to the changes rapport

It is seen as an important preparation period that requires preparation (Van Vreeswijk, Broersen, Schurink, 2014). Especially individuals who will become mothers and fathers for the first time may experience some feelings of uncertainty regarding the changes experienced in the pregnancy, birth and postpartum period. Parents want the pregnancy to be smooth and the birth to be painless and with high satisfaction (Figo, 2012; Taşkın, 2020). However, during this process, they experience complex emotions such as anxiety, fear and excitement together (Ay et al., 2019). Fears usually arise from the idea of an episiotomy during vaginal birth, the possibility of a perineal tear, the pain felt during all these processes and the responsibilities related to baby care that parenthood brings (Bolsoy et al., 2019; Lukasse et al., 2014; Sluij et al., 2020).

There are many educational programs that focus on attitudes and behaviors for parents in order to facilitate individuals' adaptation to these changes and to better manage the transition to parenthood. These programs have a positive effect on the individual well-being of parents, their ability to acquire parenting skills in a healthy way, and the healthy development of the child (Feinberg and Kan, 2008; Feinberg and Sakuma, 2011; Hock et al., 2022; Vural Batık and Kalkan, 2018). By supporting the uncertainty of this transition process with educational programs in the prenatal period, family-baby bonding and adaptation can be achieved, and pregnancy, birth, and the postpartum process can be continued in a healthy way (Seyhan, 2023).

One of the behavioral intervention programs used to adapt to the changes experienced during pregnancy, birth and postpartum and to maintain the transition to parenthood in a healthy way is Conscious Awareness-Based Practices (Goetz et al., 2020; Matvienko-Sikar et al., 2016). Conscious awareness is an experiential process in which attention is directed purposefully and consciously to what is happening in the body and mind at that moment, and the content that emerges as a result of these observations is accepted with curiosity, understanding and compassion without judgment, analysis or reaction (Atalay et al., 2017; Hall et al., 2016; Hisli Şahin, 2015; Kabat-Zinn, 2015). It is a skill that allows us not to be passive towards everything that is happening in the moment and is associated with all our positive, negative and neutral experiences, reducing all levels of suffering and increasing our well-being (Özyeşil et al., 2011). Because of their reported effects, these interventions may help parents increase their awareness and acceptance of thoughts, feelings, and body sensations, reduce reactivity, avoid distressing experiences, accept the roles and responsibilities of parenting in a nonjudgmental manner, learn to use mechanisms to cope with the stress of parenting, and develop compassion for themselves and their children. to show (Corthorn and Milicic, 2016; Duncan et al., 2009; Hall et al., 2016;). In addition, as stated in the 12th Development Plan (Ministry of Strategy and Budget, 2023), the goals of sustainable development will be served by increasing qualified, sustainable, accessible and behavioral change-oriented parent education starting from pre-birth.

In a study conducted in Türkiye, a conscious awareness-based approach was applied to women who were being followed up in the clinic with a diagnosis of premature rupture of membranes and its effect on their adaptation to motherhood in the prenatal period, maternal attachment levels and adaptation to motherhood in the postpartum period was investigated. evaluated. After the intervention, women's pregnancy acceptance, preparation for birth, maternal attachment

and it was determined that there was an increase in the competence levels related to the motherhood role (Körükçü and Kukulu, 2017). In a study where a systematic review was made of mindfulness-based interventions during pregnancy, it was determined that unwanted situations such as anxiety, depression, fear of childbirth and perceived distress were reduced. overcome for is useful and psychological well-being It has been found that it increases (Dhillon And al., 2017; Hulsboch, 2020; Khoury et al., 2013; Veringa, 2016; Vieten and Astin, 2008;). Pan et al. (2019) increase for their work As a result; awareness And birth essence sufficiency levels increased significantly . Shorey et al. (2019) reported that mindfulness interventions implemented to improve maternal outcomes has positive effects on maternal well-being They emphasized that state of well-being not only psychologically but also physically in blood pressure and blood sugar organized, heart slows down the heart rate, fatigue And activity levels healed results They reported.

Mindfulness-based training can be integrated into childbirth preparation training as it is a method that can be used to improve birth parameters. When the literature is examined, there are studies examining the effects of Mindfulness-Based Parenting and Childbirth Preparation Training on mothers in the perinatal period, but there are limited studies that include fathers in the practice and studies examining the relationship between adaptation and attachment with awareness. It is stated that actively including both parents in group-based parenting training is more effective in increasing the efficiency of the program (McHale and Negrini, 2018; Xiao and Loke, 2022).

Meleis (2010) stated that conscious awareness is an important feature of the transition. The higher the awareness of the individual about the new role he/she will assume at the end of the transition, the more competence and achievement level that high will be (Bryne et al., 2014; Dunn et al., 2012; Meleis, 2010; Prinds et al., 2016; Schumacher & Meleis, 1994). Therefore, Mindfulness-Based Parenting and Childbirth Preparation Education Parenting Competence and adaptation to their roles, facilitation of the birth process, ensuring maternal and paternal bonding are important as they will increase the quality of pregnancy, birth and postpartum care. In this context, in the 12th Development Plan prepared by the Presidency of Strategy and Budget of the Republic of Turkey, (2024-2028) stated "Starting from the prenatal period children Increasing accessibility and provision of services for health, nutrition, early learning, responsive care, safe environment and social protection policies; "The quality of the service will be increased" It is thought that it will serve the article. In this direction, it is expected that awareness-based birth preparation trainings will affect the behavioral changes of parents. In addition, parents will be able to easily access the trainings and will be able to make the awareness-based practices they learn in the training sustainable by integrating them into every moment of their lives and parenting roles.

For all these reasons, this study was planned to investigate the effects of the Awareness-Based Parenting and Birth Preparation Education given to couples on maternal-paternal attachment, birth parameters and postpartum sleep. It is thought that the education that parents receive with awareness of their own bodies and the birth process will positively contribute to the pregnancy, birth and postpartum process. In this way, it is aimed that this education activity, which is organized for expectant mothers to have a healthy birth, will contribute to the third goal of Sustainable Development, "Securing Healthy and Quality Life at All Ages" and will develop awareness for expectant mothers to have a healthier birth and to act with mother-baby health in mind during pregnancy, birth and postpartum.

1.1. Problem Status

The research question was formulated as "What is the effect of Mindfulness-Based Parenting and Childbirth Preparation Education on maternal-paternal attachment, birth parameters and postpartum sleep?"

1.1.1. Sub Problems

- Awareness Fundamentally Parenthood And To birth Preparation His education maternal to connect What is the effect ?
- Awareness Fundamentally Parenting and To birth Preparation His education paternal to connect effect why?
- Awareness Fundamentally Parenthood And To birth Preparation His education in parents birth to fear effect why?
- Awareness Fundamentally Parenthood And To birth Preparation His education birth expectation/experience effect why?
- Awareness Fundamentally Parenting and To birth Postpartum Preparation Training sleep What is the effect ?

1.1.2. The research Hypotheses

H_{01} : Mindfulness-based parenting and childbirth preparation education has no effect on maternal attachment in primiparous women. H_{11} : Mindfulness-based parenting and childbirth preparation education has an effect on maternal attachment in primiparous women. H_{02} : Mindfulness Based Parenting And Preparation for Birth Education in primiparas has no effect on paternal attachment. H_{12} : Awareness-Based Parenting and Childbirth Preparation Education has an effect on paternal attachment in primiparas. H_{03} : Awareness-Based Parenting and Childbirth Preparation Education has no effect on fear of childbirth in parents.

H_{13} : Awareness Based Parenting And Preparation for Birth Education of parents fear of birth H_{04} : Awareness-Based Parenting and Childbirth Preparation Education has no effect on childbirth expectation/experience.

H_{14} : Awareness Based Parenting And Preparation for Birth Education based on birth expectation/experience H $_{05}$: Awareness-Based Parenting and Childbirth Preparation Education has no effect on postpartum sleep.

H_{15} : Awareness Fundamentally Parenthood And Preparation for Birth His education postpartum sleep effect There is.

1.2. Aim And Goals

Araştırmanın amacı doğuma hazırlık sınıflarında verilen Farkındalık Temelli Ebeveynlik ve Doğuma Hazırlık Eğitiminin maternal-paternal bağlanma, doğum parametreleri ve postpartum uyuma etkisini değerlendirmektir.

Bu doğrultuda birinci iş paketinde veri toplama formları hazırlanarak müdahale grubuna gönderilecek ev ödevlerini içeren ses kayıtları derlenecektir. İkinci iş paketinde müdahale ve kontrol gruplarının randomizasyon yöntemiyle atanması sağlanacaktır. Üçüncü iş paketinde ön testler uygulanacaktır. Dördüncü iş paketinde eğitimler verilecektir. Beşinci iş paketinde son testler uygulanacak ve altıncı iş paketinde ise veri analizi ve bulguların yorumlanması yapılacaktır.

1. METHOD

1.1. The study The pattern

This quantitative in the study research experimental method pattern has been used. Quantitative research, current situation and research that involves the process of observing and measuring numerical values objectively and systematically in order to gain information about the facts and the measurements made can be repeated (Burns and Grove, 1993). Quantitative research focuses on the relationships and differences between variables and aims to provide future provides instructions for And generalization to its purpose (Başol, 2008). In quantitative research based on the positivism approach, hypotheses are clearly determined and tested (Fraenkel and Wallen, 2006). In the study, a sample group that has reached the power to represent the universe was subjected to the Mindfulness-Based Parenting and Birth Since the effects of the Preparatory Training on maternal-paternal bonding, birth parameters and postpartum sleep were examined, a pre-test post-test control group experimental design was used in the study (Büyüköztürk, 2007).

1.2. The research The Universe And Sample

The universe of the study consisted of pregnant women who applied to the Kayseri City Hospital Pregnancy School and Pregnancy Polyclinic between October 1 and December 31, 2023. The number of pregnant women who attended the Pregnancy School in these three months was approximately 100, and the number of pregnant women who attended the Pregnancy Polyclinic was approximately 100. The number of pregnant women who applied was 800. In determining the number of pregnant women to be included in the study sample, in the study of Duncan and Bardacke (2010), the mean difference of pre and post Mindfulness values (0.30) was taken as basis and 95% confidence (1- α), 95% test power (1- β) and d=1.111 effect size were calculated with the Gpower program and as a result of the paired samples t test, it was found that a total of 13 couples should be included in the study. It was planned to include 15% more couples (1.95) considering that there may be data losses in the study. Therefore, 15 couples will be included in the study. In the study, couples will be assigned to groups according to the randomization list below (Figure 1).

List Randomizer

There were 15 items in your list. Here they are in random order:

1. 2.ebeveynler
2. 15.ebeveynler
3. 6.ebeveynler
4. 11.ebeveynler
5. 9.ebeveynler
6. 14.ebeveynler
7. 10.ebeveynler
8. 4.ebeveynler
9. 8.ebeveynler
10. 1.ebeveynler
11. 7.ebeveynler
12. 12.ebeveynler
13. 13.ebeveynler
14. 3.ebeveynler
15. 5.ebeveynler

Shape 1. Randomization list

Randomization on the list first eight couple intervention group while creating remainder seven couple control group will create.

1.3. The research It was made Place And Features

The research will be conducted in Kayseri City Hospital Pregnancy School and Pregnancy Polyclinic. There is one pregnancy school and 10 pregnancy polyclinics in Kayseri City Hospital. Pregnancy polyclinics and pregnancy school provide service in the Gynecology and Obstetrics building. Polyclinics are on the ground floor of the Gynecology and Obstetrics building, and the pregnancy school is on the ground floor. It provides service on the third floor. Each pregnancy clinic has a doctor and a secretary. Each pregnancy clinic provides service to an average of 60 pregnant women per day. Two midwives take turns in training at the pregnancy school. Pregnant women who are 24 weeks pregnant and over can attend the pregnancy school. Training is provided at different times for pregnant women who are in the clinic and those who come from outside. Training is provided in the morning for pregnant women who are in the hospital and in the afternoon for pregnant women who come from outside. Training lasts 1 week, 5 days a week and 3 hours per day for a group.

Kayseri City Hospital Pregnant School Education Plan:

Monday: Education is given about introductions and expectations, the pregnancy process, the physiology of pregnancy, the formation of pregnancy, fetal development, physiological and psychological changes that occur during pregnancy, daily life during pregnancy and individual preparations during pregnancy, followed by practical breathing exercise training.

Tuesday: Education is given about perception of birth, normal labor, signs of birth, massage methods, breathing exercises, skin-to-skin contact and safe birth, followed by practical breathing exercise training.

Wednesday: Training is given on the postpartum period, breast milk and breastfeeding techniques, newborn care, family planning methods, followed by practical breathing exercise training.

Thursday: Affirmations, positive to birth focusing, subconscious work, sleep meditation is being done.

Friday: Pregnancy Pilates is done. At least Pregnant women who have received three sessions of training can participate in pilates. Those with risky pregnancies and those with systematic and chronic diseases cannot participate in pregnancy pilates.

1.4. Dependant And Independent Variables

Independent Variables: Sociodemographic features (age, education situation, job, economic situation), with pregnancy relating to characteristics (gestational week, planned/unplanned pregnancy, birth method preference)

Dependent Variables: Maternal-paternal bonding, birth parameters and postpartum compliance scores

Intervention variable: Mindfulness-Based Parenting and Childbirth Preparation Education

1.5. To the research Including Being made Criteria

- 18-35 in the age group ,
- First pregnancy the one which,
- 24-28. pregnancy in the week the one which,

- The research was made Dates between Pregnant To the polyclinic Applicant And Pregnant School to their education acceptance the said,
- Most little literacy education at the level of the one which,
- Communication obstacle not available Persons to work including will be done.

1.6. From research Exclusion Criteria

- Psychiatric discomfort those who have,
- Early birth at risk path can open with pregnancy relating to risk factor the one which... pregnant women,
- Early birth at risk path can open chronic to the disease owner the one which... Pregnant women to work including will not be made.

1.7. Data Collection Tools

In the prenatal period; Parent Introduction Form, Conscious Awareness Scale (Özyeşil et al., 2011), Prenatal Attachment Scale (Türkmen Çevik & Kurnaz, 2018), Prenatal Paternal Attachment Scale (Benli & Aksoy Derya, 2019), Fathers The Fear of Childbirth Scale (Calpbinici et al., 2023) and the Wijma Childbirth Expectation/Experience Scale Version A (Körükcü et al., 2009) will be used for mothers.

In the postpartum period; Conscious Awareness Scale (Özyeşil et al., 2011), Wijma Birth Expectation/Experience Scale Version B (Körükcü and al., 2014), Postpartum Self-Assessment Father-Infant Attachment Scale (Taşçı & Mete, 2010) Scale (Güleç & Kavlak, 2013) and Maternal Attachment Scale (Kavlak & Şirin, 2009) will be used.

1.7.1. Parents Promotion The form (ETF)

The ETF, created by the researcher, is a data collection tool consisting of 16 questions to examine the obstetric history, pregnancy and birth preferences and sociodemographic characteristics of pregnant women and the sociodemographic characteristics of fathers (Appendix-1).

1.7.2. Conscious Awareness The scale (BFO)

The English version of the Mindful Attention Awareness Scale (MAAS) was developed by Brown and Ryan (2003) and its Turkish adaptation was made by Özyeşil et al. (2011). The aim of the scale is to evaluate the individual differences in the state of being conscious in the daily experiences of individuals, the frequency of being conscious, and the awareness and attention in the present moment. Mindful awareness includes the experiences in the present moment and towards these experiences It measures the tendency to be aware (Özyeşil et al., 2011). It has a 6-point Likert scale ("1=almost always", "2=most of the time", "3=sometimes", "4=rarely", "5=fairly rarely", "6=almost never"). The scale consists of 15 items. There are no reverse items in the scale. The lowest score that can be obtained from the scale is 15, and the highest score is 90. A high score indicates a high level of conscious awareness. The Cronbach Alpha internal consistency coefficient of the scale is 0.80 (Özyeşil et al., 2011) (Appendix-2).

1.7.3. Prenatal Attachment The scale (PBO)

In the womb of pregnant women by Türkmen Çevik and Kurnaz (2018) level of attachment to the baby a measuring tool The scale, PBÖ, consists of 33 items. The scale items are graded in three and each item is answered as I definitely agree (3), I partially agree (2), I definitely disagree (1). There is no reverse statement in the scale. The lowest score that can be obtained from the scale is 33, and the highest score is 99. A high score obtained from the scale indicates a high level of prenatal attachment. The scores that can be obtained from the curiosity and excitement factor vary between 13-39; from the acceptance and enthusiasm factor between 9-27 and from the hope factor between 11-33. The total internal consistency coefficient of the scale was calculated as 0.94 and it was determined that the scale is a reliable and valid tool for measuring the level of attachment to the baby in pregnant women (Appendix-3).

1.7.4. Birth Pre Father Attachment The scale (DOBBÖ)

The scale, developed by John Condon (1993) and adapted into Turkish by Benli and Aksoy Derya (2019), consists of 16 Likert-type items. Each item of the scale measures the father's feelings, attitudes, behaviors, and thoughts towards the developing fetus in the womb. measure over while focusing, most items fathers last two in the week to their experiences is based on. The scale measures the father's emotional experience when thinking about the baby in the womb, the "quality of attachment", and the intensity of preoccupation with the fetus. It has two factors, namely "time spent on attachment". Items 1, 3, 5, 6, 7, 8, 12, 13 and 15 in the scale is reverse scored. Sixth and articles 13 scale total is added to the score. The scale is An item is scored as 1 = no feelings towards the fetus; 5 = very strong feelings towards the fetus. The scale can be obtained from point 16-80 is between; attachment sub quality from the size available to be taken point 8-40; to connect spent time The score that can be obtained from the sub-dimension is 6-30. Increasing scores indicate a higher degree of attachment. Cronbach's α in the total of the DÖBBÖ is 0.82. The same scale was later studied by Güleç Şatır and Kavlak (2021) under the name "Paternal Antenatal Attachment Scale" (Appendix-4).

1.7.5. Fathers Birth Fear of The scale (BDKO)

The scale was developed by Ghaffari et al. (2021) to determine the levels of fear of childbirth in expectant fathers during pregnancy. The scale consists of two sub-dimensions: the birth process (12 items) and hospital fear (5 items), which affect fathers' fear of childbirth. It is a 5-point Likert-type scale and the items are answered as strongly disagree (1), disagree (2), undecided (3), agree (4), and strongly agree (5). The score that can be obtained from the scale varies between 17 and 85. Scores of 17-35, 36-54, and > 55 indicate low, moderate, and high fear of childbirth, respectively. Higher scores indicate a higher level of fear related to childbirth (Ghaffari et al., 2021). The Cronbach alpha coefficient of the scale was calculated as 0.84. The validity and reliability of the scale in Turkish was performed by Calpbinici et al. (2023). The content validity index of the scale was found to be 0.96. Cronbach alpha reliability coefficient for the entire scale is 0.93 (Appendix-5).

1.7.6. Wijma Birth Expectation/Experience The scale A Version (WDBDÖ- A)

This scale was developed by Wijma et al. (1998). The aim of the scale is to evaluate the fear of childbirth experienced by women during pregnancy. The Turkish validity and reliability study was conducted by Korukcu et al. (2009). The scale consists of 33 items. The responses on the scale are numbered from 0 to 5 and are in the six-point Likert type. Zero is expressed as "completely" and 5 as "not at all". The minimum score on the scale is 0, while the maximum score is 165. A high total score indicates a high level of fear. The negatively loaded questions in the scale (2, 3, 6, 7, 8, 11, 12, 15, 19, 20, 24, 25, 27, 31) were turned in the opposite direction to ensure consistency in measurement. is calculated. From the scale received score of 37 small is light level Fear of childbirth, between 38-65 indicates moderate fear of childbirth, between 66-84 indicates severe fear of childbirth, and 85 and above indicates clinical level fear of childbirth. In the study of Körükcü et al. (2009), the Cronbach alpha value of the W-DEQ Scale A version was found to be 0.89 (Appendix-6).

1.7.7. Wijma Birth Expectation/Experience The scale B Version (WDBDÖ- B)

The current scale is for women lived in birth fear of measure purpose with Klaas And Barbaro Wijma (1998) by developed. Scale to women birth after doing later in their rooms is applied. Six Likert in type the one which... This scale 32 from matter It

consists of (Wijma and (al., 1998). Answers From 0 To 5 and numbered up to 0 “completely”, 5 whereas "none" shaped expression is being done. Minimum of scale score 0, maximum score It is 160. The scale some your questions Answers Which to the number equivalent if it is coming he in this way

When calculating the W-DEQ, questions numbered "2, 3, 6, 7, 10, 11, 14, 18, 19, 23, 24, 26 and 30" are calculated by turning them in the opposite direction. The calculated W-DEQ- B score ≤37 is low level, Intermediate level between 38-65, Between 66-84 heavy level, ≥ 85 and above indicates a level of fear of childbirth that requires clinical treatment (Wijma et al, 1998). The scale was adapted to Turkish and its validity and reliability study was conducted by Körükcü et al in 2014, and the Cronbach alpha value was found to be 0.88 (Körükcü et al, 2014) (Appendix-7).

1.7.8. Postpartum Self Evaluation The scale (PKDO)

The Cronbach alpha value of the scale, whose validity and reliability study was conducted by Taşçı and Mete (2010), was determined as 0.84. It is an 82-item, 4-point Likert-type scale developed by Lederman and Weingarten in 1981 to evaluate the adaptation of women in the postpartum period to motherhood. The scale has 7 sub-dimensions that evaluate the postpartum adaptation of mothers. 39 of the items in the scale are reverse-biased. The numbers of the reverse-biased items in the scale are as follows; 1, 2, 4, 6, 9, 10, 14, 15,16, 22, 29, 30, 32, 33, 36, 38, 40, 41, 42, 43, 44, 46, 47, 49, 51, 53, 54, 59, 61, 62, 67, 69, 71, 73, 77, 78, 79, 81, 82.

The scale is measured with a 4-point evaluation. Postpartum adjustment is rated from "1" to "4" (4: "Describes very much", 3: "Partially describes", 2: "It describes a little bit", 1: "It doesn't define anything") until changing your points evaluated based on the results. The entire scale A minimum score of 82 and a maximum score of 328 can be obtained for . Low scores indicate high postpartum adjustment (Appendix-8).

1.7.9. Father Baby Attachment The scale (BBBBÖ)

It was developed by Condon et al. (2008) to measure the postpartum father-infant bond. The validity and reliability of the Turkish version was done by Güleç and Kavlak (2013). Each item of the scale is scored between one and five points. 12 items in the scale (4, 5, 7, 8, 9, 10, 11, 12, 13,14, 15,16) are reverse-coded. High scores obtained from the scale indicate high bonding. The original scale consists of three sub-dimensions and 19 items. The Turkish version of the scale includes three sub-dimensions (patience-tolerance, pleasure in interaction, love-pride) and 18 items (item 16 was removed) (Appendix-9).

1.7.10. Maternal Attachment The scale (MBO)

MBI was developed by Mary and Muller (1994) to measure maternal love and attachment. In the study in which Kavlak and Şirin (2009) tested the validity and reliability of the scale in Turkish society, Cronbach's alpha reliability of the scale was found. The coefficient was found to be 0.77 for mothers with 1-month-old babies and 0.82 for mothers with 4-month-old babies. It was determined that it can be used safely for mothers with babies in the 1st and 4th months after birth. The scale is a 4-point Likert-type scale consisting of 26 items. Each item contains direct expressions and always (a) = 4 points, often (b)=3 points, It is calculated as sometimes (c) = 2 points and never (d) = 1 point. The lowest score that can be obtained from the scale varies between 26 and the highest score is 104. A high score indicates that maternal attachment is high (Appendix-10).

1.8. Data Analysis

From this research The obtained data were obtained using SPSS for Windows 22.00 (Statistical Package for Social Sciences) will be analyzed with a statistical package program. Descriptive statistics will be given as number of units (n), percentage (%), mean ± standard deviation ($\bar{x}$ ±ss), minimum value (min), maximum value (max). Whether the data show a normal distribution will be determined with the Kolmogorov-Simirnov test and $p>0.05$ will be considered statistically significant. Also, kurtosis skewness values mode The median and median values will be evaluated within the framework of the normality test.

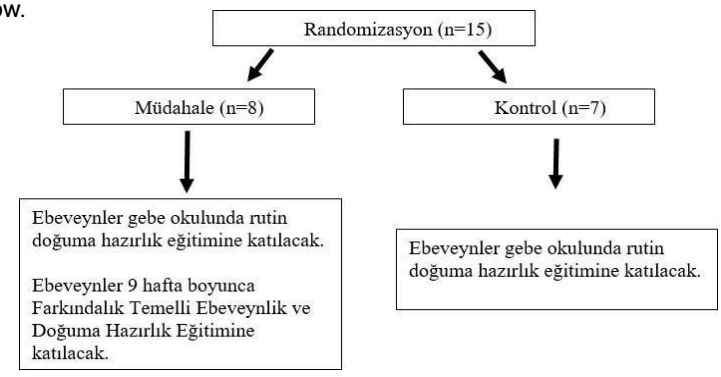
In case of normal distribution of data, comparisons of groups in time for numerical variables will be made with Paired-Samples t (dependent groups) test in repeated measurements and comparisons between groups will be made with Independent-Samples t (Independent groups) test. The relationship between scale scores will be evaluated with Pearson correlation analysis. In all comparisons, $p<0.05$ value will be accepted for the significance level of statistical tests (Pallant, 2020). In case of non-normal distribution of data nonparametric tests will be used.

1.9. The research Ethic Direction

Erciyes University Faculty of Health Sciences Academic Board decision was received (09.10.2023, 2023/50, Decision number: 71) (Appendix- 11). Institutional permission was received from Kayseri City Training and Research Hospital Education Planning Board (24.11.2023, Number: 76397871) (Appendix-12). Ethics committee permission was received from Kayseri City Training and Research Hospital Clinical Research Ethics Committee (31.10.2023, Decision no: 938) (Appendix-13). Pregnant women who volunteer to participate in the research during the data collection phase will be asked to read and sign the Informed Consent Form (Appendix-14).

1.10. APPLICATION The steps

Kayseri City Hospital Pregnant School and Pregnant Polyclinic on October 1st 2024- November 1st Dates 2024 Fifteen pairs of parents who applied between and met the inclusion criteria will be assigned to groups according to the randomization list. Awareness-Based Parenting and Childbirth Preparation Education will be given as a group education on Mondays of each week during the hours when the pregnancy school does not provide education. The control group constituent Kayseri to parents City The hospital is conducting a birth No intervention will be made other than the preparatory training. The flow chart (Figure 2) is given below.



Shape 2. Flow scheme

1.10.1. Control Group APPLICATION The steps

No additional application will be made to the control group other than the 1-week birth preparation training at the Kayseri City Hospital Pregnancy School. In the first session, written consent will be obtained from parents who meet the criteria for inclusion in the study and agree to participate, and the researcher will fill out the questionnaires in the first hour of the training. In this session, the pregnant woman and her partner will be introduced and the ETF will be filled out in order to learn her socio-demographic information. BFÖ, PBÖ, DÖBÖ, BDKÖ, WDBDÖ-A will be applied. Later, the trainer at the pregnancy school will start the pregnancy school's own training.

1 week to birth preparatory training after completion then BFÖ, PBÖ, DÖBÖ, BDKÖ, WBDÖ-A will be applied.

WBDÖ-B will be applied on the first postpartum day to determine the birth experiences of the mothers.

Contact with mothers via phone in the 1st and 4th months postpartum The PKDÖ will be used to assess mother-infant adjustment, and the MBI will be used to assess mother-infant attachment; and the fathers will be contacted at the 6th postpartum month to assess father-infant attachment.

1.10.2. Intervention Group APPLICATION The steps

In addition to the 1-week birth preparation training at the Kayseri City Hospital Pregnancy School, the intervention group will receive Mindfulness-Based Parenting training. This training aims to teach participants how to monitor their thoughts and emotional states, how to deepen their sensory awareness of their bodies and how to be more careful about how their minds work, and how to deepen their sensory self-awareness, so that they can be more sensitive during the birth and parenting processes. A total of 9 separate sessions are planned. Mindfulness-Based Parenting and Birth Preparation Training will be held for 9 weeks, with one session per week, and the duration of each session will vary according to the parents' compliance and needs. each One session It will take approximately 120 minutes. Practices education researcher during to be taught by and the sections related to practice will be marked and shown in the training booklet and read once in class. Home practice assignments, audio recordings containing guiding conscious awareness practices and the Mindfulness-Based Parenting and Birth Preparation Training Booklet developed by the facilitator and containing the training protocol will be distributed for each session. If you do not attend the training for any reason, For parents who cannot attend, make-up training for the relevant week will be provided on a different day.

1. Session (120 min)

The first session will be held on Monday of the first week. In the first hour of this session, the researcher will fill out the questionnaires. The pregnant woman and her partner will be introduced and ETF will be filled out in order to learn their socio-demographic information. BFÖ, PBÖ, DÖBÖ, BDKÖ, WDBDÖ-A will be applied. Then, the training will start and in the first session, the definition of awareness, the purpose and content of Awareness-Based Parenting and Childbirth Preparation Training will be explained, when did she first learn about pregnancy, what did she do after learning what he did and what Talking about feelings, Breath Awareness Meditation, Together with Baby Practice of Being and Raisin Meditation will be included.

2. Session (120 min)

The second session will be held on Monday of the second week. In this session, Body Scanning Practice, Breath Awareness Practice, Being with the Baby Practice and Birth Yoga Practices will be done. She will discuss the milestones in her life and the mother- Questioning role models related to fatherhood and mindfulness-based eating behavior will be discussed. (Doing mindfulness-based eating exercises with raisins and in the next session, eating experiences will be discussed and it will be expected that this mindfulness will be adapted to every moment of the pregnancy and birth process). Formal and informal practical homework assignments will be evaluated. Formal Practices: Usually guided (self, with a guide or recording) progress (body scan, sitting meditation) etc). Informal Practices: Daily alive what we did activities with awareness to do includes (external scrub, cooking etc.)

3. Session (120 min)

The 3rd session will be held on Monday of the third week. In this session, the Body Scan Practice will be applied. How to do daily activities such as brushing teeth, driving, taking a shower, shaving, washing dishes, and cooking with awareness will be discussed. Breath Awareness Meditation and Being with the Baby Practice will be done. The Calendar of Pleasant Events will be explained and homework will be given to the couples. The formal and informal homework given in the previous week will be evaluated. Talking about what kind of mother she dreams of being, talking about her fears and concerns about the future, and breastfeeding education will be discussed. Breastfeeding Education: The structure of breast tissue, the importance of breastfeeding, how breastfeeding is performed, placing the baby on the breast, breastfeeding positions, evaluating breastfeeding, starting supplementary foods, breast care, possible problems related to the nipple, burping the baby after breastfeeding, and rehearsing breastfeeding with a baby model will be discussed. Formal and informal homework assignments will be evaluated.

4. Session (120 min)

The 4th session will be held on Monday of the fourth week. Birth Yoga Practices and Body Scan Practice will be applied. Breath Awareness Practice and Three-Minute Breathing Break Practice and Being with the Baby Practice will be applied. Formal Pain Practice will be applied with ice. Formal and informal homework will be evaluated. Unpleasant Events The calendar about A statement will be made and will be assigned. Baby care Education Baby Care Training: Umbilical cord care, baby bath and skin care, nail care, excretion, diaper use and diaper rash, thrush, body temperature assessment and dressing, vaccination, baby care rehearsal with a baby model will be done.

5. Session (120 min)

The 5th session will be held on Monday of the fifth week. Birth Yoga Practices, Body Scan Practice, Breath Awareness Practice, Being with the Baby and Formal Pain Practice will be practiced. Mindful Pooping Practice will be discussed. Formal and informal homework assignments will be evaluated. After the practices, the mother-to-be will be given training on how to care for herself during the postpartum period. This training will include early mobilization, lochia follow-up, perineal care, care if an episiotomy was performed, breast care and problems, information on milk expression and storage conditions, information on the wound healing process and facilitating factors if a cesarean section was performed, nutrition, sleep and rest, Kegel exercises and postpartum exercises, transition time to sexual activity and contraception, emotional preparation for the process and information on support systems.

6. Session (120 min)

The 6th session will be held on Monday of the sixth week. Birth Yoga Practices, thirty-minute Sitting Meditation and Body Scan Meditation will be applied. Formal Pain Practice will be done. Fear and Happiness Research Practice will be done. Walking

Meditation And Speech And Listening His research will be implemented. Formal And informal given house your homework

will be evaluated. In this session, the choice of delivery method, preparation of the delivery bag, signs of labor and ways to make birth easier will be discussed. * A Daily Mindfulness Practice assignment will be given between Week 6 and Week 7.

7. Session (120 min)

The 7th session will be held on Monday of the seventh week. Sitting Meditation, Choiceless Awareness, Body Scan, Birth Yoga Practices, Compassion Meditation and Family Roots Talking About and Listening Research will be applied. Formal and informal homework assignments will be evaluated. In this session, fear of birth and subconscious factors in pain perception will be discussed.

8. Session (120 min)

8. The 8th session will be held on Monday of the week. Compassion Meditation is applied. How much time do you spend looking at your mobile phone, texting or sharing on social media? How might this be related to your stress? The practice of spending one day of the week as a "technology-free day" is explained by seeking answers to these questions. Formal and informal homework assignments will be evaluated.

9. Session (120 min)

9. The 9th session will be held on Monday of the week. The practices that the group found most useful are re-implemented. The section titled "Endings and Beginnings: The Last Lesson" is read and discussed. They are told to share with each other the things that come to mind together with their partners. They are given homework to continue to apply formal pain practices at certain intervals until they give birth. They are encouraged to continue to develop their awareness in every moment of their daily lives by approaching routine activities with awareness. They are encouraged to practice Being with the Baby, Compassion Meditation, and Three-Minute Breathing Break. On the day the 9th session is completed, BFÖ, PBÖ, DÖBÖ, BDKO, WBDÖ-A will be applied. WBDÖ-B Version will be applied on the 1st day postpartum to determine the mothers' birth experiences. Mothers will be contacted by phone in the 1st and 4th months postpartum. mother baby harmony In order to evaluate the PKDÖ and mother and baby MBI will be applied to assess father-infant bonding; fathers will be contacted at the 6th month postpartum and BBBI will be applied to assess father-infant bonding.

1.11. Awareness Fundamentally Parenthood And To birth Preparation Education Booklet
"Mindfulness-Based Parenting and Birth Preparation" was created by the researcher by scanning the relevant literature (Atalay, 2018; Bardacke, 2012; Vreeswijk, 2019) The "Education Booklet" (Annex-15) will be sent to the participants in printed form and the audio recordings to be played during meditation (Annex-16) will be sent to the participants via WhatsApp application. Before using the booklet, the Birth-Women's Health and It was presented to the opinion of two academicians who are experts in the field of Disease Nursing and the booklet was finalized in line with the suggestions received.