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INTRAPERSONAL CONFLICT IN FUNCTIONAL INFERTILITY: POSSIBILITIES OF EMDR THERAPY

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List of Abbreviations

- EMDR — Eye Movement Desensitization and Reprocessing
- PTSD — Post-Traumatic Stress Disorder
- ART — Assisted Reproductive Technologies
- IVF — In Vitro Fertilization
- AIP — Adaptive Information Processing
- IES-R — Impact of Event Scale – Revised
- IDS — Infertility Distress Scale
- SUD — Subjective Units of Distress scale
- VoC — Validity of Cognition (валидность когниций)
- PTGI — Posttraumatic Growth Inventory
- ABI — Acquired Brain Injury

Introduction

Relevance of the Study

Functional infertility is conceptualized as a multifactorial condition wherein, in the absence of pronounced organic pathology, psychological and social determinants of reproductive behavior and reproductive health assume substantial significance. Publications in the psychology of the reproductive sphere emphasize the influence of individual-psychological characteristics, the level of stress load, and emotional state on the formation and maintenance of reproductive function impairments.

Studies by Sazonova V.N. (2019), Safiullina Z.N. (2024), and Solovyeva E.V. (2020) demonstrate that chronic tension, difficulties in emotional regulation, and heightened anxiety are associated with deterioration of psychophysiological well-being and may accompany reproductive difficulties [103, 101, 114].

Particular attention is warranted regarding the role of intrapersonal conflict and subjectively significant (including traumatic) experience. Psychological conflicts related to attitudes toward motherhood, features of self-attitude, and family scripts are considered as conditions capable of intensifying emotional tension and impeding the realization of reproductive intentions [41, 95]. Research also indicates the significance of early family experience, stressful life events, and emotional vulnerability as factors associated with maladjustment at the level of mental and somatic functioning [112].

Within the structure of emotional states accompanying functional infertility, anxiety, depressive manifestations, and neuropsychological tension are most frequently discussed. The application of clinical-psychological diagnostic tools, including the Mendelevich–Yakhin questionnaire, enables the assessment of neurotic manifestations, which may co-occur with somatic complaints, including reproductive ones [132]. Several studies emphasize that the combination of chronic stress (including data from PSS-10) and unresolved internal contradictions forms a stable background of emotional maladjustment, which is significant for understanding the psychosomatic components of functional infertility [33].

Against the backdrop of developing psychotherapeutic approaches, there is a growing need for scientifically grounded methods that enable work with emotional tension and the consequences of traumatic experience. The Eye Movement Desensitization and Reprocessing (EMDR) method, based on the Adaptive Information Processing (AIP) model, is described as

an effective therapeutic approach for post-traumatic symptomatology, anxiety, and depressive states [61, 97]. However, Russian-language literature contains insufficient research dedicated to the application of EMDR therapy specifically in the context of functional infertility and associated intrapersonal conflict, which constitutes a methodological and practical gap.

Thus, the relevance of the present study is determined by the necessity to clarify psychological factors accompanying functional infertility and to scientifically evaluate the possibilities of EMDR therapy as a method aimed at reducing emotional tension and processing subjectively significant experience in women with functional infertility [33, 61, 95, 132].

Degree of Scientific Development of the Problem

Psychological aspects of reproductive health and infertility are represented in Russian-language and international research, where interrelations between reproductive difficulties and the level of stress load, emotional state, and individual-psychological characteristics of women are discussed. Several studies emphasize that, in cases of infertility, pronounced neuropsychological tension, heightened anxiety, and depressive manifestations are more frequently recorded; these may accompany the course of reproductive impairments and intensify subjective distress [103, 101, 114].

A separate research direction is associated with the analysis of psychological factors of reproductive behavior: attitudes toward motherhood, features of self-attitude, and the influence of family scripts. It has been shown that uncertainty of reproductive goals, internal contradictions, and unconscious attitudes may be associated with emotional maladjustment and increased conflictual tension in situations of reproductive difficulties [41, 95]. The contribution of stressful life events and subjectively traumatic experience to the formation of stable emotional maladjustment and psychosomatic manifestations significant for the reproductive sphere is also considered [112].

The empirical basis of the problem relies on the application of clinical-psychological methods and scales for assessing emotional state and stress load. The use of instruments for evaluating perceived stress and affective symptomatology (in particular, PSS-10, PHQ-9), as well as methods aimed at diagnosing intrapersonal conflict and emotional tension, enables the identification of associations between stress, anxiety-depressive manifestations, conflictual experience, and psychosomatic complaints in women of reproductive age [33, 114, 132].

At the same time, in the field of psychotherapeutic care, approaches oriented toward working with the consequences of stressful and traumatic experiences are actively discussed.

The EMDR method, based on the Adaptive Information Processing model, is described as effective in correcting post-traumatic symptomatology and stress-associated conditions, including anxiety and depressive manifestations [61, 97]. However, Russian-language literature contains insufficient works specifically dedicated to the application of EMDR therapy in functional infertility and to evaluating its impact on indicators of intrapersonal conflict and emotional maladjustment in women of this category [33, 61, 95].

Thus, despite the presence of a significant body of research on the psychology of reproductive health and emotional maladjustment in situations of infertility, the question of the interrelation between intrapersonal conflict and functional infertility, as well as the possibilities of EMDR therapy in psychological work with this population, remains partially developed, which determines the necessity of the present study.

Object and Subject of the Study

Object of Study

Intrapersonal conflict in women with functional infertility.

Subject of Study

Psychological features of intrapersonal conflict and their dynamics under the influence of psychotherapy using the EMDR method.

Aim and Objectives

Aim

To investigate the therapeutic impact of the EMDR method on intrapersonal conflict in women with functional infertility.

Objectives

1. To analyze theoretical and methodological approaches to studying functional infertility and the role of intrapersonal conflict in its etiology.
2. To describe the psychoemotional profile of women with functional infertility based on standardized psychodiagnostic methods.
3. To identify the structure and severity of intrapersonal conflict in women with functional infertility and compare these with indicators from a control group.
4. To develop and substantiate a psychotherapeutic program based on the EMDR method, aimed at processing maladaptive emotional experience and reducing intrapersonal conflict.
5. To evaluate the effectiveness of EMDR application in reducing the level of

intrapersonal conflict and associated emotional states in women with functional infertility.

Research Hypothesis

In women with functional infertility, the severity of intrapersonal conflict and associated stress-emotional tension is significantly higher than in women without reproductive impairments, and the application of EMDR therapy leads to a reduction in conflict severity and normalization of emotional state.

Theoretical and Methodological Foundation

The methodological foundation of the study included a combination of theoretical, empirical, and statistical approaches ensuring a comprehensive investigation of intrapersonal conflict in functional infertility and evaluation of the effectiveness of psychotherapeutic intervention.

At the theoretical level, an analysis of Russian-language and international works dedicated to psychosomatic aspects of reproductive function, the influence of traumatic experience and chronic stress on emotional regulation, as well as principles of applying the EMDR method in working with affectively saturated memories, was conducted. Theoretical analysis enabled the delineation of the research problem, clarification of the conceptual framework, and formulation of a hypothesis regarding the role of intrapersonal conflict in maintaining functional infertility.

Research Methods

Research Methods — standardized psychodiagnostic instruments and semi-structured interviews were employed; psychotherapeutic intervention was conducted using the EMDR method. Data processing included descriptive statistics, Student's t-test (independent/dependent samples), and calculation of Cohen's d.

Scientific Novelty

1. The features of the psychoemotional state and structure of intrapersonal conflict in women with functional infertility have been clarified based on a complex of standardized psychodiagnostic methods. A combination of heightened emotional vulnerability, neuropsychological tension, stress reactions, and conflict severity regarding self-perception, interpersonal relationships, and reproductive attitudes has been demonstrated.

2. It has been shown that in women with functional infertility, higher severity of intrapersonal conflict is associated with elevated indicators of perceived stress, depressive symptomatology, and neuropsychological tension according to standardized methods, which

clarifies the psychoemotional characteristics of this group.

3. A short-term psychotherapeutic program based on the EMDR method has been developed, implemented, and tested for women with functional infertility; its applicability for working with emotionally significant experience and reducing the severity of intrapersonal conflict related to reproductive attitudes and ambivalence regarding motherhood has been demonstrated.

4. Data on statistically significant changes in indicators of intrapersonal conflict and psychoemotional state in women with functional infertility following a course of EMDR have been obtained based on applied methods; the indicators demonstrating the most pronounced changes have been specified.

5. Criteria for psychological dynamics reflecting changes in the structure of intrapersonal conflict under the influence of psychotherapy have been formulated.

Theoretical Contribution

The content of the concept of intrapersonal conflict in the context of functional infertility has been clarified. The present study elucidates which emotional, cognitive, and motivational components form the conflict structure in women with psychogenic reproductive impairments and how this relates to their life experience and self-perception.

The role of maladaptive emotional memories and chronic stress as key factors maintaining intrapersonal conflict has been substantiated, which expands existing understanding of the psychology underlying the formation of functional infertility.

Theoretical propositions of the Adaptive Information Processing (AIP) model have been developed with application to psychosomatic conditions. It has been shown that fixation of traumatic experience may be linked to psychophysiological causes potentially influencing the reproductive sphere; its processing may contribute to reducing internal tension.

The possibility of using EMDR therapy for resolving intrapersonal conflict related to the reproductive sphere has been substantiated. The elements of the method most relevant for processing ambivalent attitudes, reducing anxiety, and restoring integrity of self-perception have been identified.

A conceptual model of psychological dynamics in functional infertility has been proposed, including interrelationships between anxiety, depression, stress, and types of intrapersonal conflict.

Practical Significance

The developed and tested psychotherapeutic assistance program based on the EMDR method may be used in the practice of psychologists and psychotherapists working with women facing functional infertility, heightened anxiety, emotional instability, and pronounced conflictual experiences related to motherhood.

The obtained data enable psychologists to more accurately diagnose the structure of intrapersonal conflict in women with functional infertility, identifying specific combinations of anxiety, depression, neuropsychological tension, and family scripts.

The research results provide opportunities to optimize comprehensive support for patients in reproductive clinics; inclusion of the EMDR approach in psychological assistance programs contributes to reducing emotional tension, enhancing stress resilience, and improving the quality of psychological preparation for pregnancy.

The psychodiagnostic complex used in the study may be applied as a standardized tool for assessing emotional state and intrapersonal conflicts in psychosomatic and stress-associated disorders.

The established criteria for positive psychological dynamics may be used as benchmarks for evaluating the effectiveness of psychotherapeutic assistance aimed at processing traumatic experience and reducing conflictual tension in the reproductive sphere.

Recommendations

Based on the obtained results, it is recommended:

— to use comprehensive psychodiagnostics for registering intrapersonal conflict in women with functional infertility, including the FPI-R, Mendelevich–Yakhin questionnaire, PSS-10, PHQ-9, and instruments for assessing reproductive attitudes;

— to include the EMDR method in psychological support programs for women with functional infertility as an effective tool for reducing emotional tension and severity of intrapersonal conflict;

— to conduct targeted processing of maladaptive emotional memories related to reproductive losses, childhood traumas, and previous unsuccessful conception attempts, using EMDR protocols;

— to account for heightened emotional vulnerability and stress reactivity in women with functional infertility when planning therapy and to apply resource-based and stabilizing techniques alongside EMDR;

— to implement regular monitoring of psychoemotional state at stages of psychotherapy

and treatment, using standardized psychometric instruments to assess dynamics;

— to include partners and family members in the consultative process to enhance the quality of interpersonal support and reduce external and intrafamily stress impact;

— to integrate EMDR therapy into support programs implemented in reproductive centers as a method with proven effectiveness for emotional and conflictual states associated with functional infertility.

Thesis Statements

1. Functional infertility in women is accompanied by a specific structure of intrapersonal conflict, manifested in a combination of heightened anxiety, emotional vulnerability, stress reactions, and ambivalent attitudes toward motherhood.

2. The severity of intrapersonal conflict is interrelated with psychometric indicators of anxiety, depressive symptomatology, irritability, and neuropsychological tension, reflecting the emotional maladjustment of women with functional infertility.

3. The EMDR method is an effective means of reducing intrapersonal conflict tension in women with functional infertility, including through processing traumatic memories, normalizing emotional reactions, and reducing the level of stress-induced overload.

4. Conducting a short-term EMDR procedure leads to statistically significant positive changes in indicators of anxiety, depression, subjective stress, and severity of intrapersonal conflict.

5. The developed and tested psychotherapeutic intervention program may be used in the practice of psychological support for women with functional infertility, as it ensures positive dynamics of emotional state and contributes to reducing internal contradictions related to the reproductive sphere.

Dissertation Structure

The dissertation consists of an Introduction, four chapters, a Conclusion, a List of References, and Appendices. The dissertation is presented on 124 pages, contains 27 tables, 2 figures, and 10 appendices. The Conclusion summarizes the findings and formulates key conclusions. The List of References includes 134 sources.

Chapter 1. Theoretical and Methodological Foundations of the Study of Intrapersonal Conflict in Women with Functional Infertility

1.1 Intrapersonal Conflict

Intrapersonal conflict describes an internal contradiction affecting the motivational, value-meaning, and emotional-regulatory spheres of personality. Unlike interpersonal conflict, which unfolds between interaction participants, intrapersonal conflict occurs within the subject and is expressed in the collision of incompatible tendencies—needs, motives, goals, attitudes, norms, social roles, or self-representations [10, 47]. At the level of subjective experience, it manifests as internal tension and ambivalence, difficulty in making choices, and a sense of "rupture" between the poles of "want" and "must," "can" and "should," as well as between the "actual self" and the "ideal self" [52, 100].

The concept of internal conflict has been present in psychological theory since its early stages of development and is particularly clearly articulated within the psychodynamic tradition. In classical psychoanalysis, internal conflict is regarded as a fundamental characteristic of psychic dynamics: the contradiction between impulses and prohibitions, as well as tension between different psychic instances, is conceived as a source of anxiety, the formation of defenses, and symptom formation [43, 44]. The further development of the idea of internal conflict occurred across different directions in psychology and reflected shifts in research emphasis. Thus, in motivational and socio-psychological models, attention was devoted to the conflict of tendencies and choice under conditions of competing valences (following the logic of K. Lewin's field theory), which emphasizes the role of the situation, goals, and motivational forces in the emergence of internal contradiction [70, 71]. In Russian psychology, internal contradictions of personality are examined through the prism of activity structure, the relationship between motives and goals, as well as through the analysis of experiencing critical situations and ways of overcoming them, which allows describing conflict not only as a state but also as a process of self-regulation and personality change [68, 125]. Thus, the category of intrapersonal conflict is formulated as interdisciplinary and integrates psychodynamic, motivational-activity, and experiential explanations.

In its most general form, intrapersonal conflict can be defined as a state and process of internal contradiction arising from the collision of tendencies significant for the personality,

which are perceived as incompatible and requiring either choice or reconciliation [10, 47]. In research, a distinction is usually made between, on the one hand, the "structure" of conflict—what exactly enters into contradiction (motives, roles, norms, values, self-images)—and, on the other hand, its "experience," that is, the emotional-meaning reflection of the situation of internal collision [47, 125]. From a psychodynamic perspective, conflict is interpreted as a contradiction between needs and internal prohibitions, as well as a collision of conscious and unconscious tendencies; the main causes in this model are anxiety and psychological defenses [43, 44]. Within the motivational-activity tradition, conflict is described as competition between motives and goals, which disrupts the consistency of activity regulation and complicates decision-making [68, 70]. The cognitive approach emphasizes the role of contradictions in the system of beliefs, attitudes, and behavior; in particular, cognitive dissonance theory explains internal tension as inconsistency among cognitions and considers it a factor prompting the restoration of consistency through changes in attitudes or behavior [39]. In the humanistic tradition, intrapersonal conflict is associated with incongruence—a mismatch between subjective experience and self-concept, as well as with a deficit of unconditional acceptance, which impedes personal growth [99, 100]. A similar explanatory model in its logic is proposed by self-discrepancy theory, where negative emotions and tension arise from discrepancies between the "actual," "ideal," and "ought" selves [52]. The existential-meaning approach interprets internal conflict as the experience of contradictions at the level of meanings and life choices, arising in situations of freedom and responsibility, loss, and the search for meaning; such contradictions are often accompanied by anxiety and a sense of uncertainty [42, 69]. Despite differences in interpretation, most theories converge on the point that intrapersonal conflict always involves personally significant content, is accompanied by internal tension, and presupposes the necessity of resolving or integrating contradictory tendencies [69].

1.1.1. Key Features of Intrapersonal Conflict

A key feature of intrapersonal conflict is the presence of two or more tendencies experienced by the subject as mutually exclusive, whereby it is precisely their subjective significance that gives the situation the character of conflict rather than ordinary doubt [10, 47]. Since conflict affects meanings, values, identity, and life goals, it is naturally accompanied by emotional tension and ambivalence, manifesting in anxiety, feelings of guilt or shame,

despondency, irritability, and a sense of internal impasse. At the behavioral level, internal contradiction is often reflected in difficulty making choices and reduced effectiveness of self-regulation: decisions are postponed, avoidance intensifies, "stuckness" and fluctuations in motivation are possible; when attempting to compensate for tension, rigid control, perfectionism, or excessive responsibility may develop [10, 47, 68]. It is also significant that intrapersonal conflict is often not fully conscious: a person registers tension or a symptom but does not associate it with internal contradiction, as a result of which defensive reactions are actualized, temporarily reducing anxiety but capable of maintaining inconsistency. In chronic courses, internal tension may be accompanied by psychophysiological manifestations and somatovegetative reactions, which is consistent with general models of stress, adaptation, and coping [66, 102, 106].

The situation of infertility can act as an independent chronic stressor that intensifies the experience of internal contradiction and the subjective feeling of "powerlessness/loss of control" over a significant sphere of life. In a systematic review by G. Simionescu et al., it is noted that typical psychological reactions to diagnosis include shock, sadness, depressive experiences, anger, and frustration, as well as reduced self-esteem and self-confidence and a general sense of loss of control. Additional tension is formed under the influence of social expectations: infertility is often perceived as a "private" topic, so couples tend to conceal emotions and experiences, which increases vulnerability to social pressure. Against this background, relationships with partners, friends, and relatives may suffer; to reduce discomfort and avoid painful comparisons, some couples curtail social contacts (especially with pregnant women and acquaintances who have children), which intensifies isolation and maintains internal tension [111].

The situation of infertility is often experienced as a biopsychosocial crisis and belongs to stressors with low subjective controllability, which naturally intensifies the experience of loss of control and internal tension. The literature emphasizes that reproductive difficulties may be accompanied by generalization of the feeling of "loss of control" to other spheres of life, growth of hopelessness, difficulties in planning the future, social withdrawal, as well as anxiety-depressive manifestations; these reactions are considered as manifestations of insufficient psychological adaptation to the situation of infertility [77].

At the same time, the degree of adaptation varies significantly and is largely determined by intrapersonal resources and vulnerabilities. It has been shown that worsening adaptation is

associated, in particular, with rigid meaning-based attitudes, when a child is perceived as a necessary condition for the "completeness" of marriage, as well as with an avoidant attachment style, implying a tendency toward distancing and withdrawal from emotionally significant experience. Conversely, more favorable adaptation is associated with internal resources (e.g., intrinsic religiosity), and at the interpersonal level—with perceived family support and maintenance of satisfaction in intimate-marital relationships [77].

1.1.2. Structure and Typology of Intrapersonal Conflicts

For the analysis of intrapersonal conflict for research purposes, it is important to consider which specific components of personality are involved in the contradiction. The literature describes motivational conflicts arising from competition between goals or "approach-avoidance" tendencies, value-meaning conflicts expressing the collision of life values and meaningful grounds for choice, as well as role conflicts conditioned by the incompatibility of social expectations and subjectively significant roles. In the context of reproductive issues, motivational-value contradictions often concentrate around an unfulfilled life goal. It is emphasized that biological "malfunction" becomes a subjectively significant problem primarily when there is a pronounced desire to have a child, especially a biological one; in recommendations for counseling in infertility, the central focus is designated as "unfulfilled desire or life goal" [75]. Within psychodynamic logic, a special place is occupied by normative-moral conflict, manifested in the contradiction between desires and internal prohibitions. Separately distinguished is self-concept conflict, in which tension is associated with the discrepancy between the self-image and actual experience, that is, with the mismatch between the "actual self" and the "ideal" or "ought" self, as well as with the phenomenon of incongruence. Such typology allows clarifying the content of internal contradiction and provides grounds for its operationalization in empirical research [10, 69, 70].

In the situation of infertility, the content of intrapersonal conflict is often specified through various levels of frustration. Social frustration is distinguished (associated with fear of criticism and reduced social acceptability of a childless couple), psychological frustration (undermining self-acceptance and self-esteem against the background of inability to realize a significant goal), and existential frustration (experience of loss of meaning associated with continuation of the family line and parenthood). Such division allows more precise description

of which component of internal contradiction proves to be leading—social expectations, self-attitude, or the meaning sphere [92].

In studies of the psychological impact of infertility, it has been shown that the inability to conceive a child may be perceived as a challenge to personal identity and self-worth, especially when the capacity for childbearing is culturally linked to notions of femininity. In this case, self-concept conflict is specified as the experience of "mismatch" with oneself and the expectations of significant others and is accompanied by negative self-evaluative judgments (lowered self-esteem, feelings of inferiority, experience of "defectiveness/incompleteness"), as well as doubts about competence in parental and marital roles [75].

Within the framework of the present study, intrapersonal conflict is regarded as a persistent experience of internal contradiction between significant motivational-value tendencies and/or self-representations, accompanied by emotional tension and difficulties in self-regulation, and manifesting in the sphere of self-attitude, interpersonal interaction, and activity [10, 47, 69].

In the structure of intrapersonal conflict, stable personality-dynamic parameters play an important role, setting the typical way of experiencing contradiction and its regulation. Such parameters include attachment features (as a system of "working models" of self and other), ways of maintaining self-esteem, and preferred defensive reactions. Thus, in a comparative study of the psychological profile of women with infertility, it has been shown that, compared to fertile women, they exhibit more pronounced indicators reflecting tension in the sphere of intimacy and dependency (higher discomfort in intimacy and greater "preoccupation with relationships" with lower confidence in relationships), as well as features of self-esteem regulation (higher level of narcissistic characteristics, interpreted by the authors as compensatory). Simultaneously, differences are identified in defensive ways of processing tension: among women with infertility, the use of mature defenses is more pronounced, and among specific defenses—sublimation and idealization [91].

Thus, intrapersonal conflict can be described not only through the content of contradiction (e.g., "want/am afraid," "must/cannot") but also through its structural "framework": conflict between the need for intimacy and fear of vulnerability; conflict between self-worth and experience of inferiority; conflict between acceptance and expectation of rejection, which are maintained by characteristic defensive strategies. This refines the typology of conflicts, showing that the same life stressor may take shape in different variants of

intrapersonal conflict depending on attachment style, principles of self-regulation, and defenses.

1.1.3. Psychological Defenses as a Cause of Conflict Maintenance

Intrapersonal conflict often has a partially unconscious character and is accompanied by tension that is subjectively experienced as anxiety, guilt, or a sense of internal contradiction. Under such conditions, the psyche activates ways of psychological defense that perform an adaptive function—to temporarily reduce the intensity of experiences and limit access of traumatizing content to consciousness. In particular, it is described that defensive reactions may form as a response to contradiction between conscious strivings and repressed experiences, blocking painful memories and thereby maintaining internal "divergence" between conscious and unconscious [107].

Empirical data show that the very medical diagnosis of infertility acts as a significant stressor: in a longitudinal study of couples, the most pronounced level of psychological distress was recorded at the stage of the initial medical interview and at the moment of diagnosis, after which it decreased on average as the examination progressed. That is, under conditions of recurring "peaks" of tension, the probability of activation of defensive strategies aimed at subjective restoration of control and reduction of emotional overload increases [26].

With prolonged maintenance of such internal inconsistency, defensive functions cease to be merely a short-term means of self-regulation and begin to maintain chronic stress. According to the model of somatization of intrapersonal conflict, under prolonged exposure to stress tension, psychological contradiction receives physiological expression: psychosomatic reactions are triggered, which manifest at the level of bodily disturbances and may affect, among other things, the reproductive sphere. Within this logic, infertility is considered as one of the possible outcomes of somatization of prolonged conflict and associated defensive processes.

With prolonged maintenance of conflict and recurring reproductive failures, an increase in neurotization is possible, accompanied by intensification of anxiety, depressive symptomatology, and psychosomatic manifestations. In this case, psychological contradiction increasingly evokes bodily reactions and becomes fixed as a stable circuit of chronic tension [92].

An important variant of defensive regulation is compensatory reactions aimed at restoring self-esteem and a sense of efficacy. They may be relatively adaptive (increase in professional, social, or educational activity, returning a sense of significance and orderliness of life goals) or conflictogenic (demonstrative emphasis on one's own merits and "competitiveness," intensifying rivalry, irritation, and interpersonal conflicts). When consolidated, such strategies cease to be short-term self-help and become a factor in maintaining the stress background [75, 92].

In the situation of infertility, the intensity of experiences is determined not only by the very fact of reproductive difficulties but also by the psychological meaning that a person assigns to this event, as well as by the leading coping style. In internal conflict, it is precisely the appraisal of the situation ("what does this say about me," "what kind of person am I," "what will happen next") that may intensify tension and consolidate contradictory experiences. Defensive-coping strategies of the avoidant type (active avoidance of contacts and topics related to pregnancy, children; withdrawal into activity; passive waiting) often perform the function of short-term relief but, in the long term, are associated with growth of psychological maladjustment and intensification of stress. Conversely, more constructive prove to be strategies of active coping and imparting positive meaning to the situation, since they reduce emotional overload and decrease fixation on the conflictual linkage "desire-fear-self-blame" [30].

Thus, the linkage "intrapersonal conflict – defensive reactions – chronic stress – somatization" makes it possible to explain how psychological contradictions may indirectly participate in the formation of functional reproductive disorders: not by directly "causing" the diagnosis, but by creating a stable background of tension and bodily dysregulation [67, 90].

1.2 Intrapersonal Conflict in the Situation of Infertility: Stress, Loss of Control, and Sociocultural Pressure

Infertility is often experienced as a biopsychosocial crisis and a stressor with low subjective controllability. The literature emphasizes that reproductive difficulties are accompanied by cognitive-affective consequences: generalization of the feeling of loss of control to other spheres of life, hopelessness, difficulties in planning the future, social withdrawal, as well as anxiety-depressive manifestations. These reactions are viewed as

indicators of insufficient adaptation to the situation of infertility and create a background for intensifying intrapersonal conflict, as they affect core meanings, identity, and life goals.

An important psychological factor in adapting to reproductive difficulties is the subjective perception of control over the situation. Within the framework of the "health locus of control" concept, three relatively stable orientations are distinguished: internal (the conviction that the outcome depends primarily on one's own actions), orientation toward "significant others" (perceiving control as dependent on specialists, doctors, and external assistance), and orientation toward chance/fate (the belief that the outcome is determined by luck, destiny, or unpredictable circumstances). In infertility, it is precisely the distribution of control among these poles that can shape the character of experiencing the crisis—either intensifying tension through attempts to "hold onto" the uncontrollable or, conversely, reducing distress by accepting the limited manageability of the situation [4].

From the perspective of subjective experience, infertility can act as a trigger for internal contradiction due to typical emotional reactions and changes in self-attitude. Common reactions to infertility include shock, sadness, depressive experiences, anger, and frustration, as well as reduced self-esteem and self-confidence and a general feeling of loss of control. Such states intensify ambivalence, maintain the experience of an internal "impasse," and may contribute to fixation on rigid control or, conversely, avoidance as temporary ways of reducing tension [111].

Under conditions of a chronically poorly controllable situation, the tendency to rely exclusively on "internal control" is not always resourceful. When the desired outcome fundamentally depends not only on a person's efforts, attempts to completely "take responsibility upon oneself" may intensify frustration, the experience of helplessness, and self-blame. Therefore, in infertility, a shift of control to the external sphere — to the figure of a specialist or to the factor of fate/chance — is often actualized as a way to psychologically withstand uncertainty and reduce the intensity of stress [4, 26].

An additional factor in maintaining the conflict becomes social pressure: infertility is often perceived as a "private" topic, so couples tend to conceal emotions and experiences, which increases vulnerability to external expectations and evaluations. As a result, relationships with partners, friends, and relatives may become complicated; to avoid painful comparisons and discussions, some couples curtail social contacts (including with pregnant women and acquaintances who have children), which intensifies isolation and consolidates internal tension. Thus, infertility can simultaneously act as a source of psychological distress and as a context in

which intrapersonal conflict becomes more pronounced and stable.

From the perspective of modern empirical data, it is important to consider that stress associated with infertility impairs psychological well-being not only "directly" but also through emotional reactions. A study of outpatients at a reproductive clinic showed that infertility-associated stress is statistically linked to reduced quality of life and an increase in negative emotional states (primarily anxiety and depression). Moreover, negative emotions act as a partial mediator: stress related to infertility has a direct contribution to the decline in quality of life and an indirect contribution — through the intensification of anxiety-depressive experiences. Chronic tension in the situation of infertility is maintained not only by cognitive-evaluative and sociocultural factors but also by stable emotional reactions that intensify the experience of an internal impasse, helplessness, and subjective loss of control [2, 110].

Human reproductive function is not only a biological process aimed at procreation but also a multidimensional psychological phenomenon deeply woven into the structure of personality, the emotional sphere, and the system of social relations. The ability to conceive, carry, and give birth to a child is often perceived as an integral component of personal maturity and completeness. This is especially pronounced in female identity, where motherhood is traditionally considered an important stage of self-realization and confirmation of femininity. From an early age, girls are socialized within a cultural context that forms expectations and representations of future motherhood as one of the central life scenarios. Thus, reproductive capacity becomes not only a physiological possibility but also a symbol of conformity to social norms, family expectations, and internal self-representations. In this sense, the loss or limitation of reproductive function can be perceived as a deep existential crisis affecting the sense of self, self-worth, and life perspective [16].

At the same time, infertility represents a significant global medical and social problem [56, 120]. According to statistics, impairment of reproductive function is observed in 10–20% of married couples. According to the World Health Organization, in 2023, infertility was observed in 17.5% of the adult population worldwide, that is, approximately one in six people. In Russia, statistics are also concerning: over the decade from 2011 to 2021, the prevalence of female infertility increased by a third, and male infertility almost doubled. In 2023 alone, the number of women with a newly established diagnosis of infertility amounted to 66.8 thousand people. In various regions of our country, the frequency of infertility ranges from 17% to 24% [5, 7, 38, 50, 54].

Modern society demonstrates a paradoxical dynamic: on the one hand, motivation for childbearing is decreasing among young people, while on the other, the number of couples experiencing difficulties in achieving pregnancy is increasing. These factors reflect a general trend of growing reproductive disorders. When analyzing the etiology of infertility, it has been revealed that in approximately one third of cases it is due to a male factor, in one third to a female factor, and in the remaining part it has a combined or unexplained nature [96]. Over the past three decades, alongside progress in the diagnosis and treatment of reproductive disorders, significant shifts have been observed in the field of psychological assistance. An increasing number of patients are seeking consultations related to conception difficulties, which underscores the growing role of psychological support in the comprehensive therapy of infertility [21, 118, 129].

In the structure of factors associated with the experience of infertility, the duration of reproductive difficulties plays a significant role: with an increase in the period of infertility, the severity of stressful experiences increases, reflecting the effect of frustration chronification and growing uncertainty. Orientation toward chance or fate may be accompanied by a lower level of stress responsiveness, acting as a kind of psychological "softening" of the pressure from an uncontrollable situation. At the same time, orientation toward "significant others" and the expression of an internal locus of control may not provide an independent contribution to the variability of stress, which highlights the specificity precisely for the situation of infertility as a poorly manageable life event [4, 91].

Intrapersonal conflict and functional infertility belong to different levels of problem description and are therefore not identical concepts. Intrapersonal conflict represents a psychological state arising from the collision of contradictory motives, values, and attitudes of the personality and accompanied by persistent emotional tension, anxiety, and internal inconsistency. Functional infertility, on the contrary, describes an impairment of reproductive function (failure to achieve pregnancy) in the absence or insufficiency of detectable organic causes, when functional and psychogenic reactions may play a substantial role. In this context, intrapersonal conflict can act as one of the factors maintaining chronic stress and psychosomatic dysregulation, which potentially affects the reproductive sphere; at the same time, infertility itself, as a long-term frustrating situation, often intensifies the conflict, forming a "vicious circle" of mutual maintenance of psychological distress and functional impairments.

Understanding the features of intrapersonal conflict makes it possible to identify the

main targets of psychotherapy for the psychogenic component of infertility: (1) reduction of self-blame and shame, (2) processing of traumatic experiences related to diagnosis, treatment failures, and social pressure, (3) restoration of a cohesive self-esteem and self-image, (4) formation of a flexible balance between control and acceptance, (5) development of emotional regulation skills and supportive communication within the couple.

1.3. Functional Infertility: Definition, Classification, Relationship with Personal and Emotional Factors

Functional infertility is a term accepted in clinical practice to designate cases where medical examinations do not reveal organic causes preventing pregnancy. In this context, "functional" indicates reversible regulation disorders (including neuroendocrine ones) not accompanied by structural changes. Such a diagnosis is usually established by exclusion. In WHO and ICD-10 classifications, functional infertility is not singled out as a separate diagnosis but is described within infertility of unspecified etiology (N97.9 — female infertility, unspecified), where a possible role of non-medical (including psychological) factors is indicated [27, 129].

The choice of the term "functional infertility" in the present study is conditioned by the desire to emphasize the integrative and clinically relevant nature of the phenomenon, in which psychological and physiological reactions are closely interconnected but do not necessarily lead to organic damage. The term allows avoiding a one-sided focus (either solely on the psyche or solely on the body) and creates a foundation for an interdisciplinary approach—combining medical diagnostics, psychological assistance, and psychotherapeutic support.

Impairment of reproductive function, especially in functional (psychosomatic) infertility, is accompanied by the formation of stable emotional, cognitive, and behavioral patterns in a woman that contribute to the consolidation of dysfunction and worsening of the psychoemotional state. The absence of detected organic pathology against the background of persisting inability to conceive causes internal conflict: between a strong motivation for motherhood, reinforced by social and family expectations, and a feeling of loss of control over the situation. This becomes a breeding ground for increasing mental tension, manifested in chronic anxiety, guilt, reduced self-esteem, and pronounced emotional instability. A woman may experience a conviction of her own inadequacy and "defectiveness," especially in the

context of social norms where motherhood is equated with confirmation of female identity. Under these conditions, obsessive thoughts, catastrophic expectations, emotional burnout, as well as somatic manifestations reflecting unconscious mental discomfort—such as sleep disorders, menstrual cycle irregularities, sexual dysfunctions, and general somatic exhaustion—are formed [65, 81]. Such symptoms can serve as a kind of expression of unresolved internal conflicts that do not find verbalization. Thus, a vicious circle is formed: emotional tension, fear of failure, and the striving for hypercontrol of physiological processes hinder the onset of pregnancy despite the absence of medical obstacles. In view of this, functional infertility should be considered a complex psychosomatic disorder requiring an integrative approach that includes not only medical but also psychotherapeutic support [84, 134].

According to international clinical criteria, the diagnosis of "infertility" is established in the absence of pregnancy within one year of regular sexual life without the use of contraceptives [38]. A particular cause for concern is the fact that approximately 25% of women seeking help for inability to become pregnant have infertility of unexplained etiology. Moreover, as the total number of infertile couples increases, so does the proportion of cases where the etiological factor remains unidentified [3, 7, 22, 72, 82].

Modern clinical literature uses a number of terms describing reproductive function impairments in the absence of organic causes—psychogenic, psychosomatic, and functional infertility. Despite partial overlap, these concepts have different semantic loads and require differentiation.

Psychogenic infertility is a term emphasizing the psychological nature of impairments. It focuses attention on unconscious conflicts, attitudes, traumas, and emotional blocks that prevent conception. This term is often used within the psychodynamic or psychoanalytic paradigm and implies that psychological causes act as primary in relation to somatic manifestations [19, 122].

Psychosomatic infertility indicates the interconnection of psyche and body, where psychological factors cause or exacerbate somatic disorders (e.g., disruptions in the hypothalamic-pituitary-ovarian axis, ovulatory dysfunctions, menstrual cycle irregularities). This concept relies on the model of bodily embodiment of psychological distress and is more frequently used in interdisciplinary approaches [83].

Modern research on human reproductive function emphasizes the importance of considering not only biological but also cultural and social determinants that define behavior

and self-identification of an individual. According to Filippova G.G. (2024), in every society a so-called cultural model of gender identity is formed, within which expected roles and qualities of women and men aimed at ensuring successful reproduction are defined. These models reflect not only biological differences but also historically established representations of acceptable and desirable behavior, and, under conditions of their transformation, form additional psychoemotional loads, especially for women of reproductive age [40].

Gender transformations of recent decades have had a substantial impact on the psychoemotional state of women and men, particularly in the aspect of their parental and sexual roles. The striving of society toward unification of sexual roles ("unisex"), on the one hand, expands opportunities for self-realization, but on the other—leads to the blurring of biologically determined differences, which entails a growth in reproductive disorders, including those of a functional nature [32].

According to a review by Anikina V.O. et al., women using ART often demonstrate a high level of anxiety and emotional vulnerability. The authors emphasize that even in the presence of medical indications for treatment, it is precisely the psychoemotional background of patients that can play a key role in adapting to procedures and perceiving their own reproductive difficulties. Alongside feelings of guilt and self-doubt, women exhibit somatoform manifestations and symptoms of mental burnout, especially after unsuccessful conception attempts [8].

In a systematic review by Simionescu et al. (2021), it is emphasized that women with infertility often exhibit emotional barriers such as fear of pregnancy, childbirth, bodily changes, as well as anxiety about the future child and uncertainty in their own maternal qualities. These attitudes may unconsciously hinder conception, acting as a functional block in realizing reproductive potential [111].

Functional infertility represents a form of reproductive function impairment where conception does not occur in the absence of detectable organic, hormonal, or genetic causes. This type of infertility is considered a psychosomatic disorder arising from disrupted interaction between the psychoemotional sphere and physiological procreation. In clinical practice, functional infertility is diagnosed by the principle of exclusion, when after a comprehensive medical examination no objective obstacles to conception are detected in partners, and reproductive organs retain their morphological and functional competence [23].

1.3.1 Classification of Functional Infertility

The classification of functional infertility can be based on several criteria. Depending on origin, primary functional infertility (in the absence of pregnancy in anamnesis) and secondary functional infertility (with at least one pregnancy in the past) are distinguished. By formation method, one can identify:

– stress-associated infertility, linked to prolonged psychoemotional tension, anxiety, or crisis life situations;

– psychogenic infertility, conditioned by unconscious internal conflicts (e.g., fear of motherhood, negative attitudes, repressed traumas);

– psychosomatically mediated infertility, where mental tension causes disruptions in neuroendocrine system regulation (hypothalamic-pituitary-ovarian axis), affecting ovulation, menstrual cycle, or embryo implantation.

An important aspect is the connection of functional infertility with personality features and the emotional background of a woman. Research shows that among such patients, pronounced anxious and asthenic traits, perfectionism, increased need for control, rigidity of thinking, as well as a tendency toward somatization are more often observed. The emotional background is characterized by chronic anxiety, a tendency to suppress negative emotions, unexpressed aggression, and reduced capacity for authentic emotional responding. Often in the anamnesis of such women, significant psychotraumatic events can be traced—violence, loss, emotional deprivation in childhood, unresolved intrafamily conflicts, or fear of motherhood as a source of threat to identity or stability.

Despite the fact that in half of the cases infertility is caused by male factors, in pronatalist societies the social burden of childlessness more often falls on the woman. This may intensify her anxiety, feelings of guilt, and maladjustment, especially in the absence of objective medical causes, as in the case of functional infertility [64, 88].

Nevertheless, ignoring partner and family dynamics can lead to a reductionist approach and reduce the effectiveness of psychotherapeutic assistance. In a number of cases, especially in the absence of organic causes, behind a woman's infertility may lie unconscious resistance from the partner. A man may demonstrate external support but internally experience ambivalence toward fatherhood—fear of responsibility, loss of freedom, repetition of a negative parental scenario. Such attitudes may be transmitted through emotional detachment, avoidance

of sexual contact during key fertile periods, or formal participation in therapy. A woman, intuitively sensing this contradiction, may unconsciously "block" her own fertility, attempting to preserve homeostasis in the relationship [62].

Psychotherapeutic practice shows that in families facing functional infertility, suppressed conflicts that do not find expression in an explicit form are often present. This may be mutual dissatisfaction, unresolved grievances, disagreements in values and goals. Infertility in such cases may function as an unconscious way to postpone solving intrafamily problems or to protect oneself from relationship breakdown. At the same time, symptomatology may intensify as the problem becomes medicalized (e.g., in the process of ART), when external pressure on the family increases.

Attitudes toward parenthood, motherhood, and fatherhood are often formed under the influence of family scripts inherited from the family of origin. A woman may unconsciously identify with the figure of a mother whose motherhood was associated with trauma, depression, violence, or a sense of sacrifice. Such projections may cause fear of repeating fate and form an internal prohibition against conception. Similar processes may occur in a man, especially in the presence of an emotionally unavailable or aggressive father.

Functional infertility may also be a reaction to chronic family stress: income instability, housing problems, pressure from relatives, medical difficulties associated with ART. Under such conditions, reproductive function may "switch off" as a psychophysiological defense against the threat of overload. Particularly dangerous is a situation where the birth of a child becomes a "solution" to other unresolved family problems—for example, a way to "keep a partner," "wash away guilt," "restore a marriage."

It can be stated that the partner and family system plays a key role in the formation and maintenance of functional infertility. Therapeutic work in this case should be directed not only at individual psychocorrection but also at comprehending hidden processes in relationships, emotional contracts between partners, and, if necessary, couple or family therapy. This expands diagnostic possibilities and increases intervention effectiveness, especially in situations where the symptom acts as a systemic balance or defense [121, 123].

Furthermore, one of the important psychophysiological reactions underlying functional infertility is the suppression of the reproductive dominant due to the activation of the stress dominant. When external conditions arise that are not conducive to realizing reproductive function, a woman's body activates a protective self-preservation process, wherein psychic and

physiological resources are redistributed toward survival rather than procreation. These conditions, in modern society, are formed, in particular, under the influence of gender mismatches—when a woman is forced to adapt to masculine social models that do not correspond to the cyclical nature of her reproductive system [41].

In the conditions of modern gender reality, a contradiction is observed between evolutionally determined sexual differentiation of the brain and the demands placed on a woman for constant productivity, leadership, and continuous career growth. Such a system of expectations forms an internal conflict in a woman between social self-realization and reproductive strivings, capable of triggering psychosomatic reactions of fertility suppression, including at the level of hormonal regulation and the ovulatory cycle [55].

Recent works note the presence of significant diversity in individual-psychological characteristics among women with infertility of unexplained etiology. They exhibit heterogeneity across a number of indicators—from self-esteem level to the expression of perfectionism, dominance or dependency in interpersonal relationships, tendency toward suspiciousness or, conversely, carelessness. These features indicate the existence of different psychological types of women with psychogenic infertility, which is conditioned, among other things, by the perception and interpretation of family relations in childhood and the subjective image of oneself in the role of a future mother [13, 87, 115, 116, 124].

As emphasized by E.V. Solovyeva (2020), in women participating in ART programs, the high risk of psychoemotional disorders is often conditioned not only by the stress of current treatment but also by deeper factors—perinatal losses, unresolved psychological traumas, lack of internal readiness for motherhood [114].

Massarotti et al. (2019) in their study showed that infertility and IVF treatment itself significantly reduce a woman's quality of life, intensify anxiety and depression levels, especially in patients with unsuccessful reproductive experience in the past. This once again confirms the necessity of comprehensive psychodiagnostics and emotional support before starting a treatment cycle [79].

According to a systematic review by Szkodziak et al. (2020), among women with infertility, anxiety-depressive disorders, sleep disturbances, and psychosomatic complaints are diagnosed significantly more often. The authors emphasize that infertility should be considered a stress-induced state with deep psychological roots requiring an interdisciplinary approach [117].

Understanding the psychological features underlying reproductive function represents a key condition for constructing an effective strategy of psychotherapeutic assistance for women facing functional infertility. Emotional state, features of cognitive processing of traumatic experience, level of mental resilience, stress coping methods, as well as unconscious attitudes related to motherhood, are capable of exerting direct influence on reproductive processes. Under conditions of chronic psychoemotional tension, activation of psychosomatic reactions disrupting endocrine regulation and physiological cycles involved in realizing the reproductive function is possible. Accordingly, therapeutic intervention should be directed not only at reducing symptomatic distress but also at deep processing of psychotraumatic experiences lying at the foundation of emotional imbalance and somatic manifestations [20, 123].

1.3.2 Psychological Assistance for Functional Infertility

Psychological assistance for functional infertility is based on the representation that persistent intrapersonal conflict and chronic stress maintain a state of heightened psychophysiological activation. Under such conditions, emotional experiences (anxiety, guilt, shame, loss of control) are not limited to the subjective level but manifest through bodily markers—muscle tone tension, breathing changes, somatic reactions, and overall vegetative system reactivity. This creates a "closed circuit" in which conflictual experience intensifies bodily tension, and bodily tension, in turn, maintains a feeling of unsafety and hinders the processing of traumatic experience. Consequently, psychotherapeutic interventions should be directed simultaneously at reducing physiological reactivity and at processing emotionally loaded meanings lying at the foundation of the conflict [26, 111].

Body-oriented psychotherapy (BOP) represents a direction in which psychoemotional processes are considered in unity with bodily manifestations, and access to experiences and their processing is achieved through attention to sensations, breathing, muscle tone, and motor patterns. Within this approach, it is assumed that stable emotional tensions and psychological defenses can become "fixed" in the body in the form of chronic muscle clamps and breathing peculiarities, maintaining a background of anxiety and reducing the subjective feeling of safety [12]. Substantial influence on the formation of the body-oriented direction was exerted by W. Reich's ideas about "muscle armor" as a bodily analog of defenses; they were later developed in A. Lowen's bioenergetic analysis, M. Feldenkrais's method of awareness through movement,

F.M. Alexander's technique, I. Rolf's Rolfing, and other practices aimed at reducing bodily tension and restoring holistic self-experience [36, 37, 51, 76].

From the point of view of psychotherapeutic logic, BOP is valuable because it allows working with emotional and conflictual contents not only at the level of verbalization but also through bodily markers of activation, which is especially important in situations where experiences are weakly conscious or difficult to express in words. Through the formation of bodily awareness skills, breathing regulation, and reduction of muscle tension, conditions are created for more stable self-regulation, strengthening of boundaries, and reduction of overall reactivity [34, 57, 61, 73, 83, 133].

At the same time, it is important to consider that stabilization of the state and reduction of bodily reactivity do not always automatically lead to the resolution of intrapersonal conflict. If tension is maintained not only by current stress but also by fixed emotionally charged memories (experience of losses, unsuccessful attempts, traumatic medical experience, early family scripts related to motherhood and the value of "being good"), then even with improved self-regulation, triggers launching previous reactions remain. Therefore, the logic of assistance for functional infertility includes a second level of work—processing "nodal" experiences and associated negative beliefs that fix internal division between the striving for motherhood and fear/self-blame [2, 91].

Separate value is held by methods working not only with rational beliefs but also with emotionally charged memories and bodily reactions, since intrapersonal conflict in infertility is often maintained by unconscious linkages "situation – emotion – belief." In this context, approaches oriented toward processing traumatic experience and reducing distress intensity become promising, which allows weakening internal division between "I want" and "I am afraid/I am guilty," as well as reducing tension affecting behavior, relationships, and quality of life.

One of the promising methods proven effective in treating the consequences of psychological trauma and chronic stress is Eye Movement Desensitization and Reprocessing (EMDR). This approach, developed by F. Shapiro, is based on principles of processing maladaptive information "stuck" in neural structures due to strong emotional shock. The essence of the method lies in activating traumatic memory under safe conditions and its repeated processing using bilateral stimulation (most often—eye movements), which allows reducing the intensity of affective charge, changing negative beliefs associated with the experience, and

restoring psychological adaptation. In the context of intrapersonal conflict, the key target of EMDR becomes not only anxiety reduction but also transformation of conflictual linkages "emotion – belief – bodily reaction." Conflict is often held by stable negative cognitions (e.g., "something is wrong with me," "I am guilty," "I cannot cope," "I do not have the right to rest"), which are activated at any reminder of the pregnancy and treatment theme. Processing such cognitions in combination with reduction of affective charge of memories allows weakening internal division between "I want" and "I am afraid/I am guilty," as well as reducing psychosomatic reactivity hindering restoration of the feeling of safety and control [18, 26, 85, 113].

Modern research emphasizes that EMDR possesses high adaptability and does not require significant cognitive resources from the patient. This is especially important when working with women suffering from functional infertility, whose psychoemotional state is often accompanied by impaired concentration, fatigability, and reduced motivation.

The proven effectiveness of EMDR in working with patients with post-traumatic stress disorder (PTSD) against the background of acquired brain injury (ABI) expands its area of application and links the use of the method in situations requiring careful work with traumatic material. The EMDR protocol applied in the study included the standard eight phases but was modified if necessary considering patient peculiarities—for example, in case of aphasia, instructions were delivered in visual form. This experience confirms that EMDR can be a reliable tool even in the presence of severe somatic or neuropsychological limitations, which makes it a promising method in the therapy of functional infertility, especially for women with pronounced stress, losses, and psychotraumas in anamnesis [58, 60, 109, 113].

Thus, the logic of psychological assistance for functional infertility is built from the theoretical model of intrapersonal conflict to specific therapeutic targets and procedures. On the one hand, reduction of the overall level of physiological reactivity and restoration of self-regulation skills are required; on the other—processing of traumatic experiences and negative beliefs maintaining conflict and chronic distress. Within the framework of the present study, this explains the application of EMDR as a method combining work with emotionally loaded memories, cognitive attitudes, and bodily reactions. The effectiveness of intervention should be evaluated through dynamics of psychoemotional tension indicators, subjective control, and severity of stress responsiveness, which determines the choice of diagnostic tools, design, and protocol structure.

Conclusions of Chapter 1

Analysis of modern theoretical sources has shown that functional infertility should be considered a multicomponent state in which reproductive difficulties are formed as a result of stable interaction of emotional, cognitive, and psychophysiological processes. In the absence of organic pathology, psychological reactions that increase stress reactivity, disrupt self-regulation, and maintain a state of chronic internal tension acquire determining significance.

One of the main psychological factors in the structure of functional infertility is intrapersonal conflict. It manifests in inconsistency between the conscious striving for motherhood and deep, often partially unconscious experiences (fears, self-blame, experiences of unsafety, losses, trust and self-esteem impairments), which are actualized in the context of the reproductive theme. This conflict is maintained by stable linkages "situation – emotion – belief – bodily reaction," which contribute to the preservation of anxiety-depressive states and the formation of maladaptive psychophysiological responses described within models of chronic stress.

The considered psychotherapeutic approaches converge in that effective assistance for functional infertility requires work not only at the level of conscious attitudes but also at the level of emotional processing of experience and restoration of self-regulation. Within cognitive-behavioral, psychodynamic, body-oriented, and integrative paradigms, common therapeutic targets are highlighted: reduction of stress reactivity and bodily tension, processing of traumatic experiences, transformation of negative beliefs maintaining internal division, as well as restoration of adaptive coping strategies and supportive communication.

In this sense, the EMDR method can be considered a promising tool, as it combines work with emotionally loaded memories, bodily markers of activation, and negative cognitions fixing intrapersonal conflict. Its application potentially contributes to reducing the affective saturation of traumatic material and restoring access to adaptive cognitions and forms of behavior, which creates theoretical grounds for including EMDR in psychological assistance programs for functional infertility.

Chapter 2. Organization and Methods of Empirical Research

2.1 Research Design

The stages of the study were organized within a quasi-experimental design featuring pre-test and post-test assessments. The experimental group comprised women with functional infertility who received a short-term psychotherapeutic program using the EMDR method. The control group included women without reproductive impairments, which enabled comparison of psychological characteristics and identification of specific manifestations of intrapersonal conflict. This design allowed tracing changes in psychological state attributable to psychological assistance and evaluating its effectiveness. The study employs a quantitative, comparative, and quasi-experimental design. It includes three main stages:

Pre-testing – assessment results of psychological characteristics of women with functional infertility and women from the control group. A battery of validated psychometric instruments was used, aimed at evaluating personality traits, levels of anxiety, depression, stress, and severity of intrapersonal conflict.

Intervention – the experimental group of women (with functional infertility) underwent a course of six psychotherapy sessions using the EMDR method. No psychological intervention was provided to the control group.

Post-testing – repeated assessments using the same instruments to evaluate the dynamics of psychological states, the level of intrapersonal conflict, and to analyze the effectiveness of EMDR application.

Additionally, reproductive indicators were recorded over a period of 3–6 months, which allowed evaluation of the outcome (occurrence of pregnancy) during the follow-up period and its possible association with psychological changes.

The selected design enables:

– comparison of psychological characteristics of women with functional infertility and women without reproductive impairments;

– identification of associations between intrapersonal conflict, anxiety, depression, and stress;

– tracing the dynamics of changes in psychological state following completion of the EMDR course.

The research design combines comparative analysis (experimental and control groups) and evaluation of psychotherapeutic intervention effectiveness according to a "pre–post" structure, presented schematically in Figure 2.1.

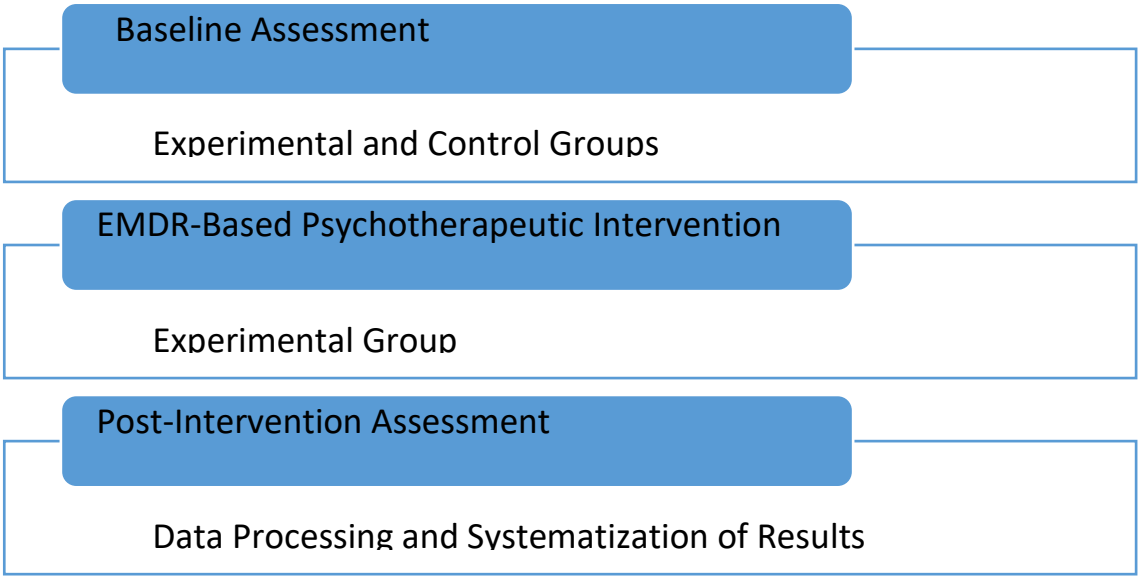


Figure 2.1 – Research Design

The presented scheme illustrates the general logic of the experimental study: from initial interpretation of tests to evaluation of dynamics following psychotherapeutic intervention. The design enables both identification of intergroup differences and tracing changes in the psychological state of women with functional infertility under the influence of psychological intervention, which ensures internal validity and reliability of the obtained results.

2.2 Sample Characteristics

A total of 119 women of reproductive age (25–40 years) were included in the study and assigned to the experimental and control groups.

All participants in the experimental group had a medical diagnosis of functional infertility, defined as the absence of pregnancy for at least one year of regular sexual activity without contraceptive use, in the absence of identified organic, hormonal, or genetic causes.

For analysis, two groups were formed:

Experimental group (n = 61) — women with functional infertility who were offered participation in a psychotherapy course using the EMDR method.

Control group (n = 58) — women with experience of motherhood and no history of

reproductive impairments.

The mean age of participants in the experimental group was 32.4 years (SD = 3.7), and in the control group — 31.8 years (SD = 4.1). Age differences between groups were not statistically significant, ensuring sample comparability on this parameter.

Inclusion criteria

– for the experimental group — diagnosis of "functional infertility" (N97.9 according to ICD-11), reproductive age, voluntary informed consent to participate in the study and undergo the psychotherapeutic program;

– for the control group — at least one pregnancy resulting in childbirth, no complaints of reproductive impairments.

Exclusion criteria

– presence of organic pathologies of the reproductive system;

– pronounced psychiatric disorders requiring pharmacological treatment;

– refusal to participate at any stage of the study.

All women provided informed consent to participate in the study. Formation of the control group was conducted with consideration of socio-demographic parameters (age, education level, marital status), which allowed minimizing the influence of external factors. Summary data are presented in Table 2.1.

Table 2.1 – Participant Characteristics

Parameter	**Experimental (n=61)**	**Control (n=58)**	**Statistics**
Age, M±SD	32.4 ± 3.7	31.8 ± 4.1	t-test, $p > 0.05$
Education: secondary, %	11.5	10.3	χ^2, $p > 0.05$
Education: secondary vocational, %	21.3	31.0	χ^2, $p > 0.05$
Education: higher (bachelor/specialist), %	44.3	43.1	χ^2, $p > 0.05$
Education: higher (master's+), %	23.0	15.5	χ^2, $p > 0.05$
Marital status: married, %	77.0	77.6	χ^2, $p > 0.05$
Marital status: in a relationship, %	21.3	17.2	χ^2, $p > 0.05$
Marital status: unmarried, %	1.6	5.2	χ^2, $p > 0.05$

Based on the table data, the sample consists of two groups comparable on key socio-demographic characteristics, with the distinguishing factor being the presence or absence of a

diagnosis of functional infertility.

Research hypotheses were formulated in the study, each based on a specific battery of instruments, as presented in Table 2.2. This approach enabled linking theoretical propositions with specific measurement tools and test results, thereby ensuring coherence of the research design.

Table 2.2 – Hypotheses, Research Methods, and Measured Indicators

Hypothesis	**Research Methods**	**Measured Indicators**
1. Women with functional infertility exhibit higher levels of anxiety manifestations, depressive symptomatology, and neuropsychic tension compared to women in the control group.	• Freiburg Personality Inventory, Revised (FPI-R) • Clinical Questionnaire for Neurotic States (Mendelevich–Yakhin) • PHQ-9 (depression) • PSS-10 (stress)	• Reactive anxiety, neuroticism, depressiveness (FPI-R) • Scales: anxiety, depression, vegetative disturbances, stress (Mendelevich–Yakhin) • Level of depressive symptomatology (PHQ-9) • Level of subjective stress (PSS-10)
2. Intrapersonal conflict is a significant factor in maintaining functional infertility.	• Intrapersonal Conflict Test (Shipilov) • Actual Conflict Domains Method (Karvasarsky)	• Conflict index • Main types of conflicts (value-based, emotional, motivational) • Severity level of conflict
3. Traumatic experience (losses, family scenarios, negative attitudes) intensifies intrapersonal conflict and distress.	• Semi-structured interview • "Conscious Parenthood" Questionnaire • Pregnant Woman's Attitude Test	• Qualitative data on traumatic experience • Level of parental awareness • Emotional-cognitive attitude toward pregnancy
4. Women with functional infertility differ from women in the control group in personality characteristics, conflict	• All aforementioned instruments (FPI-R, Mendelevich–Yakhin, PHQ-9, PSS-10, Shipilov, Karvasarsky, interview,	• Comparative indicators across all scales • Identified intergroup differences • Correlations between conflictuality, anxiety, stress, and

Hypothesis	Research Methods	Measured Indicators
levels, and stress resilience.	questionnaires)	depression
5. Following the EMDR course, women in the experimental group show statistically significant reductions in intrapersonal conflict and psychoemotional distress compared to baseline levels.	• Intrapersonal Conflict Test (Shipilov) • Actual Conflict Domains Method (Karvasarsky) • FPI-R • Mendelevich–Yakhin Questionnaire • PHQ-9 • PSS-10	• Conflict index (Shipilov; Karvasarsky) • Anxiety (FPI-R) • Anxiety and depression scales (Mendelevich–Yakhin) • Depression level (PHQ-9) • Stress level (PSS-10)
6. Within 3–6 months following completion of the EMDR course, pregnancy may be recorded in a subset of participants from the experimental group.	• Recording of reproductive outcome during the 3–6 month follow-up period	• Reproductive outcome — pregnancy

2.3 List of Instruments Used

To assess personality characteristics and emotional state of women with functional infertility, validated psychodiagnostic instruments were used, aimed at measuring anxiety, depressiveness, emotional reactivity, and level of stress load. The study employed:

Freiburg Personality Inventory, Revised Form (FPI-R) (Jochen Fahrenberg, Rainer Hampel, Herbert Selg), enabling characterization of key personality parameters;

Clinical Questionnaire for Detection and Assessment of Neurotic States (K.K. Yakhin, D.M. Mendelevich) for identifying neuropsychological tension and analyzing the spectrum of stress-related and neurotic manifestations;

Perceived Stress Scale PSS-10 (S. Cohen, T. Kamarck, R. Mermelstein);

Patient Health Questionnaire PHQ-9 (Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke), capturing differences in the severity of somatic and cognitive-affective components of depressive state.

The combined use of these instruments was conducted to understand participants' emotional vulnerability and its association with functional infertility.

It is important to emphasize that psychiatric diagnoses of "anxiety disorder" or "depressive disorder" were not assigned in the present study. The terms "anxiety," "depressiveness," and "depressive symptomatology" were used in a psychodiagnostic sense—as indicators identified through validated psychological instruments corresponding to the aims and objectives of the study. Obtained values were considered as signs of emotional maladjustment and as grounds for psychological or psychological work, but not as clinical diagnoses. Assignment of psychiatric diagnoses was not within the scope of the study and falls under the competence of a psychiatrist.

To study factors associated with reproductive history, family scripts, and attitudes toward motherhood, the following were applied:

"Conscious Parenthood" Questionnaire (R.V. Ovcharova & M.O. Ermikhina);

Pregnant Woman's Attitude Test (I.V. Dobryakov);

Semi-structured interview.

These instruments help identify significant components of biographical and emotional experience, including experienced losses, features of parental models, ambivalence regarding motherhood, and other elements potentially influencing the maintenance of intrapersonal conflict and formation of stress responses.

The structure and severity of intrapersonal conflict were assessed using two complementary instruments — A.I. Shipilov's Intrapersonal Conflict Scale and B.D. Karvasarsky's Actual Conflict Domains Method. These enabled identification of specific conflict zones—value-based, interpersonal, professional, and personally significant—and determination of internal tension intensity. All listed instruments were administered at the pre-testing stage and repeated following EMDR intervention, which allowed tracing indicator dynamics and determining the influence of psychotherapeutic intervention on emotional state and the conflict sphere.

Table 2.3 – Psychodiagnostic Instruments Used in the Study

Instrument	Authors	Assessed Indicators
Freiburg Personality Inventory, Revised Form	J. Fahrenberg, H. Selg, R. Hampel	Anxiety, depressiveness, rigidity, sensitivity, and other personality

Instrument	Authors	Assessed Indicators
(FPI-R)		characteristics
Clinical Questionnaire for Detection and Assessment of Neurotic States	K.K. Yakhin, D.M. Mendelevich	Anxiety, depressive manifestations, asthenia, irritability, vegetative disturbances, stress-related tension
Perceived Stress Scale PSS-10	S. Cohen, T. Kamarck, R. Mermelstein; Russian-language adaptation: V.A. Ababkov et al.	Subjectively perceived stress, negative experiences, coping responses
Patient Health Questionnaire PHQ-9	K. Kroenke, R.L. Spitzer, J.B.W. Williams; Russian-language version: N.V. Pogosova et al.	Severity of depressive symptomatology
Intrapersonal Conflict Test	A.I. Shipilov	General level and domains of intrapersonal conflict
Actual Conflict Domains Method	B.D. Karvasarsky	Conflictuality in family-domestic, professional, interpersonal, and personal-value spheres
"Conscious Parenthood" Questionnaire	R.V. Ovcharova, M.O. Ermikhina	Awareness of parental attitudes, sense of responsibility, perception of partner support
Pregnant Woman's Attitude Test	I.V. Dobryakov	Attitude toward pregnancy, anxiety for the child, acceptance of pregnancy, somatization
Semi-structured Interview	Author-developed interview guide designed for the present study	Family scenarios, losses, negative attitudes, subjectively significant experiences

2.3.1 Psychotherapeutic Method: EMDR

As the method of psychotherapeutic intervention in the present study, Eye Movement Desensitization and Reprocessing (EMDR), developed by F. Shapiro, was employed.

EMDR belongs to contemporary evidence-based approaches in psychotherapy of psychological trauma and stress-associated disorders and is used to reduce the intensity of traumatic memories, associated bodily reactions, and dysfunctional beliefs.

The theoretical foundation of the method is the Adaptive Information Processing (AIP) model, according to which, in psychological trauma, part of experience becomes fixed in a maladaptive form and may maintain persistent emotional and somatic reactions. In EMDR, processing is achieved through focused attention on a target memory combined with bilateral stimulation (most often rhythmic eye movements; tactile or auditory stimulation is also possible), which facilitates reduction of image vividness and affective saturation and subsequent cognitive integration of experience.

As shown by data from a retrospective clinical study in Janssen et al. (2023), EMDR proved effective even in patients with severe traumatic brain injuries and comorbid cognitive impairments. Statistically and clinically significant positive dynamics were recorded in 81% of participants, while complete desensitization of the key traumatic image was achieved in 88% of patients [58].

Work was conducted in accordance with the standard eight-phase EMDR protocol and included:

1. history-taking and therapy planning;
2. preparation and training in stabilization techniques;
3. assessment of target memory (negative/positive cognitions, emotions, bodily sensations; SUD and VoC scales);
4. desensitization with bilateral stimulation;
5. installation of positive cognition;
6. body scan;
7. session closure (stabilization);
8. re-evaluation at the subsequent session.

Within the framework of this study, EMDR therapy was conducted individually as a course of six consecutive sessions lasting 60–90 minutes each. Selection of target memories

and dysfunctional beliefs was based on pre-test diagnostic data and clinical interview; during the work, stabilization techniques were used as needed to prevent excessive emotional reactivity [85].

2.3.2 Body-Oriented Techniques

Within the study, body-oriented techniques were considered not as an independent therapeutic direction but as a stabilizing and regulatory module supporting work with emotional activation and bodily components of experience. The selection of this component was based on concepts of bodily fixation of tension and defenses, as well as the clinical tradition of body-oriented schools, where breathing, muscle tone, and bodily sensations are used as an accessible channel for self-regulation.

Practically, the body-oriented component included training participants in skills for tracking bodily markers of distress and restoring physiological stability—focusing on breathing and its regulation, grounding exercises and shifting attention to the "here-and-now," gentle body scanning, recognition of tension zones and their gradual relaxation, as well as formation of an individualized self-help toolkit for reducing reactive anxiety between sessions. These techniques were used at the preparatory stage to develop basic affect tolerance and maintain a sense of control, as well as in the concluding part of the work to normalize state and integrate results through body scanning and stabilization.

When applying body-oriented exercises, the principle of load dosing was observed—in cases of signs of excessive arousal or dissociative reactions, work intensity was reduced, stabilizing techniques were performed, and a return to neutral bodily sensations ensuring a sense of safety was implemented. This format allows using body-oriented means as tools for regulation and support without emotionally overloading participants or substituting the main therapeutic protocol.

Ethical Aspects of the Study

The study was conducted in compliance with generally accepted ethical principles of psychological research. Prior to commencement, participants were informed about the aims and procedures, as well as possible emotional reactions during psychotherapeutic sessions; thereafter, written informed consent was obtained. Participation was voluntary, with the possibility of withdrawal at any stage without any consequences.

Confidentiality was ensured through data anonymization: personal information was not included in research datasets, and psychodiagnostic results were recorded and analyzed in anonymous form. Materials were stored under restricted access protocols.

Conduct of EMDR sessions complied with standards of professional practice and psychological safety measures: in cases of heightened emotional response, stabilizing techniques and self-regulation procedures provided for in the work protocol were applied.

Conclusions of Chapter 2

The empirical study was organized as a quantitative comparative quasi-experimental design with pre-test and post-test, including three stages (pre-testing — intervention — post-testing) and additional recording of reproductive outcome within 3–6 months following course completion.

A sample of women of reproductive age (25–40 years; N=119) comparable on key socio-demographic parameters was formed: experimental group — women with functional infertility (n=61), control group — women without reproductive impairments and with experience of motherhood (n=58). Inclusion and exclusion criteria were defined, and basic group comparability was ensured.

For comprehensive assessment of emotional state and structure of intrapersonal conflict, a battery of complementary methods was applied: psychodiagnostic scales (FPI-R, Mendelevich–Yakhin Questionnaire, PSS-10, PHQ-9), conflict diagnostics instruments (Shipilov, Karvasarsky), as well as semi-structured interview and instruments reflecting reproductive attitudes and experiences (including "Conscious Parenthood," Pregnant Woman's Attitude Test).

The intervention was standardized—a course of EMDR comprising six individual sessions lasting 60–90 minutes each according to the eight-phase protocol was implemented, with selection of therapeutic targets based on pre-test diagnostics and interview. Body-oriented techniques were used as a stabilizing and regulatory module.

A statistical data processing plan was defined—descriptive statistics (M, SD), t-tests for independent and dependent samples, effect size estimation (Cohen's d), significance threshold $p<0.05$, processing in SPSS. Ethical principles were observed—informed consent, voluntary participation, confidentiality and data anonymization, psychological safety measures during sessions.

Chapter 3. Experimental Study of EMDR Therapy for Intrapersonal Conflict in Women with Functional Infertility

The empirical part of the study aims to obtain objective data on the psychoemotional state and severity of intrapersonal conflict in women with functional infertility. The analysis is based on comparing indicators from the experimental and control groups, as well as comparing results before and after the EMDR therapy course. The presentation of results proceeds from describing the initial psychological profile and intergroup differences to analyzing intragroup changes and subsequently summarizing the obtained data.

3.1 Personality and Emotional Characteristics of Women with Functional Infertility

3.1.1 FPI-R Profile

To examine personality characteristics and emotional state of women with functional infertility, the Freiburg Personality Inventory (FPI-R) was applied. This instrument enables assessment of a broad spectrum of psychological characteristics, including anxiety, depressiveness, rigidity, and sensitivity, which are most significant for analyzing intrapersonal conflict. The use of FPI-R provides a comprehensive representation of participants' personality profiles and enables comparison of experimental and control groups on key indicators of emotional vulnerability. Table 3.1 presents mean values and standard deviations for each scale in the experimental group (women with functional infertility) and the control group (women with experience of motherhood).

Table 3.1 – Mean Values on FPI-R Scales and Results of Statistical Comparison

Scale	Functional Infertility (M ± SD)	Control Group (M ± SD)	t-test	p-value	Cohen's d
Anxiety	6.49 ± 1.13	5.28 ± 1.44	5.11	0.0001	0.94
Depression	6.08 ± 1.42	4.90 ± 1.28	4.79	0.0001	0.88
Rigidity	6.18 ± 1.30	5.21 ± 1.51	3.77	0.0003	0.69
Sensitivity	6.69 ± 1.53	4.78 ± 1.38	7.17	0.0001	1.31

Women with functional infertility demonstrated higher levels of anxiety (M = 6.49; SD = 1.13), depressive manifestations (M = 6.08; SD = 1.42), rigidity (M = 6.18; SD = 1.30), and sensitivity (M = 6.69; SD = 1.53) compared to the control group. A distinct psychological profile is evident among women with functional infertility: they more frequently experience anxiety, are prone to depressed mood, struggle with accepting changes, and react more acutely to interpersonal relationships. This indicates that internal contradictions are accompanied by high levels of tension and emotional vulnerability. Compared to women not facing reproductive difficulties, their personality characteristics appear less resilient and require greater internal resources to cope with everyday stressors.

3.1.2 Data on Neuropsychic Tension Scales (Mendelevich–Yakhin)

To determine the severity of psychoemotional tension, the Clinical Questionnaire for Detection and Assessment of Neurotic States (authors: K.K. Yakhin, D.M. Mendelevich) was used. The instrument comprises a set of scales enabling assessment of the level of vegetative disturbances, stress, anxiety, depression, asthenia, and irritability. In several studies, the questionnaire has demonstrated high informativeness for identifying leading syndromes of neurotic states, as well as acceptable reliability and validity indicators [132].

Analysis of the data (Table 3.2) revealed that women with functional infertility exhibit higher scores across all scales compared to the control group.

Table 3.2 – Data on Neuropsychic Tension Scales

Scale	**Functional Infertility (M ± SD)**	**Control Group (M ± SD)**	**t-test**	**p-value**	**Cohen's d**
Vegetative disturbances	21.75 ± 4.42	18.57 ± 4.89	3.72	0.0003	0.68
Stress	24.00 ± 5.65	18.64 ± 5.36	5.31	0.0001	0.97
Anxiety	23.08 ± 5.06	18.62 ± 5.20	4.74	0.0001	0.87
Depression	19.87 ± 5.13	17.41 ± 3.94	2.94	0.004	0.54
Asthenia	15.83 ± 5.44	14.76 ± 5.35	1.54	>0.05	0.14
Irritability	22.05 ± 5.25	17.83 ± 5.28	4.37	0.0001	

Thus, women with functional infertility exhibit a higher level of neuropsychological tension, manifested in both physiological (vegetative disturbances) and emotional components (stress, anxiety, depression, irritability). However, the difference in asthenia was not statistically significant, which may be interpreted as insufficient impact on physiological processes; women in this group may possess a certain stress-resilience resource. Nevertheless, for most indicators, the experimental group demonstrates a persistent state of elevated internal tension, which may contribute to the consolidation of intrapersonal conflict and hinder successful realization of reproductive function.

3.1.3 Subjective Stress Level (PSS-10)

To assess the subjective level of perceived stress, the Perceived Stress Scale – 10 (PSS-10), developed by S. Cohen et al. (1983) and adapted for Russian samples by V.A. Ababkov and colleagues (2016), was administered. This questionnaire is a compact instrument comprising 10 statements aimed at identifying subjective feelings of tension and degree of control over life situations over the past month.

Analysis of data on the subjective stress scale (PSS-10) showed that women with functional infertility on average demonstrated a somewhat higher level of perceived stress compared to the control group ($M = 21.59$; $SD = 6.82$ vs. $M = 19.81$; $SD = 6.43$). However, the observed differences did not reach statistical significance ($t = 1.47$; $p = 0.146$; $d = 0.27$), indicating only a tendency toward an elevated stress background. A more detailed analysis of subscales revealed that on the "Negative experiences" indicator, women with functional infertility had higher values ($M = 14.85$; $SD = 3.75$) compared to the control group ($M = 13.45$; $SD = 4.26$). The differences were at the borderline of statistical significance ($t = 1.91$; $p = 0.059$; $d = 0.35$), suggesting a moderate effect and allowing this result to be considered an indicator of concealed emotional tension (Table 3.3). At the same time, on the "Positive reactions" scale, reflecting subjective coping ability, the groups did not differ ($M = 7.28$; $SD = 2.32$ vs. $M = 7.17$; $SD = 2.68$, respectively; $t = 0.23$; $p = 0.818$; $d = 0.04$).

Table 3.3 – Subjective Stress Level (PSS-10)

Scale	Functional Infertility (M ± SD)	Control Group (M ± SD)	t-test	p-value	Cohen's d
General stress	21.59 ± 6.82	19.81 ± 6.43	1.47	0.1456	0.27
Negative experiences	14.85 ± 3.75	13.45 ± 4.26	1.91	0.0591	0.35
Positive reactions	7.28 ± 2.32	7.17 ± 2.68	0.23	0.8179	0.04

Thus, although women with functional infertility generally show a tendency toward higher levels of subjective stress and negative experiences, statistically significant differences between groups were not found. The obtained data suggest that subjective stress perception may be a less stable marker of intrapersonal conflict than indicators of anxiety, depression, or neuropsychological tension, and requires more comprehensive analysis in combination with other psychodiagnostic tools.

3.1.4 Depression Symptomatology (PHQ-9)

The severity of depressive symptomatology among participants was measured using the Patient Health Questionnaire-9 (PHQ-9), developed by K. Kroenke, R. Spitzer, and J. Williams (1999) and widely used worldwide for screening and assessing depression severity. The study utilized the Russian-language adaptation of PHQ-9 presented by N.V. Pogosova et al. (2014), which was validated on a sample of primary care patients.

Analysis of PHQ-9 results showed that women with functional infertility had a higher overall level of depressive symptomatology compared to the control group (M = 12.34; SD = 5.35 vs. M = 10.03; SD = 4.75). The differences were statistically significant (t = 2.49; p = 0.014; d = 0.46), corresponding to a medium effect size (Table 3.4). However, when examining individual components of the PHQ-9 scale, the picture was less clear-cut. On the somatic symptoms scale, differences between groups were not statistically significant (M = 3.80; SD = 1.67 vs. M = 3.45; SD = 2.13; t = 1.01; p = 0.316). Similarly, on the cognitive-affective symptoms scale (M = 7.21; SD = 3.07 vs. M = 6.43; SD = 3.57), no significant differences were found (t = 1.28; p = 0.204).

Table 3.4 – PHQ-9 Questionnaire Results

Scale	Functional Infertility (M ± SD)	Control Group (M ± SD)	t-test	p-value	Cohen's d
PHQ-9 total score	12.34 ± 5.35	10.03 ± 4.75	2.49	0.0141	0.46
Somatic symptoms	3.80 ± 1.67	3.45 ± 2.13	1.01	0.3155	0.19
Cognitive-affective symptoms	7.21 ± 3.07	6.43 ± 3.57	1.28	0.2038	0.24

Overall, women with functional infertility demonstrate a higher level of depressive symptomatology; however, when analyzing specific manifestations of depression, the differences are partial. This may indicate that emotional difficulties in this group of women are expressed more as a general subjective feeling of low mood and loss of life energy rather than as distinct cognitive or somatic symptoms.

3.1.5 Results of Semi-Structured Interviews

Analysis of semi-structured interviews revealed that the experience of childhood psychotrauma (harsh upbringing, violence) occurred with comparable frequency among women with functional infertility (34.4%) and women in the control group (37.9%). This indicates that childhood traumatic experience per se is not a unique risk factor, but may acquire different significance depending on individual characteristics and subsequent life circumstances.

At the same time, more pronounced differences were found regarding the topic of family conflicts: over half of women with functional infertility (57.4%) reported conflicts in their family of origin, whereas this was significantly less common among women in the control group (36.2%). This suggests that interpersonal tension in the family environment may exert a long-term impact on the formation of intrapersonal conflict and attitudes related to motherhood (Table 3.5).

Differences were also identified regarding negative parental attitudes toward motherhood: among women with functional infertility, this factor was noted by 34.4% of respondents, compared to 24.1% in the control group. Although the difference is not stark, it indicates a certain predominance of limiting and critical scenarios in the families of women

who have encountered conception difficulties.

Regarding the experience of losses (death of close relatives, miscarriages), the data also show a slight shift toward the functional infertility group (32.8% vs. 25.9% in the control). This result indicates that experiencing significant losses may heighten emotional vulnerability but is not the sole determining factor.

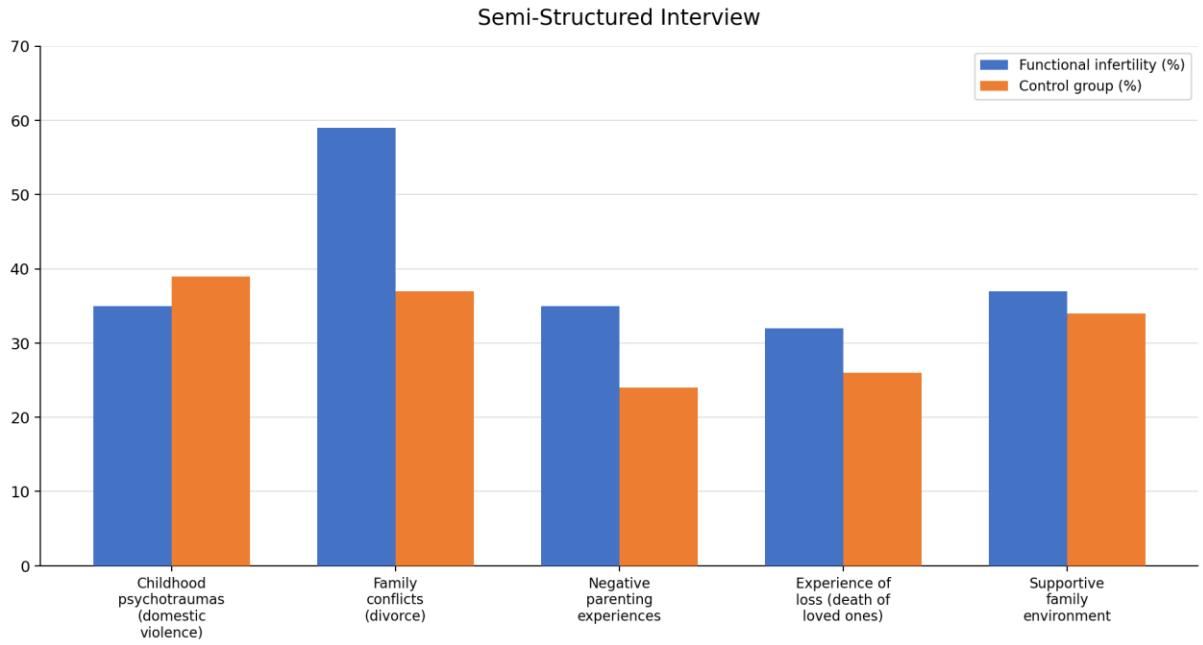
Table 3.5 – Results of Semi-Structured Interviews

Theme	**Functional Infertility (n)**	**Functional Infertility (%)**	**Control Group (n)**	**Control Group (%)**
Childhood psychotraumas (harsh upbringing, violence)	21	34.4	22	37.9
Family conflicts (parental conflicts, divorces)	35	57.4	21	36.2
Negative parental attitudes regarding motherhood	21	34.4	14	24.1
Experience of loss (death of close relatives, miscarriage)	20	32.8	15	25.9
Supportive family scenarios (resource-based)	22	36.1	20	34.5

Interestingly, indicators regarding supportive family scripts were nearly identical (36.1% and 34.5%). This may suggest that the presence of positive memories and resourceful family models does not preclude the emergence of intrapersonal conflict but may, to some extent, mitigate its manifestations.

Overall, the interview data confirm that women with functional infertility more frequently report past experiences of family conflicts and negative attitudes related to motherhood, as well as slightly more frequent reports of losses. At the same time, factors such as childhood psychotraumas and resourceful family scripts occur with equal frequency in both the experimental and control groups. The results are visually presented in Figure 3.1.

Figure 3.1 Semi-structured Interview Data



Based on the interview results, it can be concluded that the role of traumatic and family experience in the formation of intrapersonal conflict is probabilistic in nature and manifests primarily through a combination of negative scenarios and a deficit in adaptive responses for their processing.

3.1.6 Data from the "Conscious Parenthood" Questionnaire

To assess attitudes toward parenthood, the "Conscious Parenthood" Questionnaire, developed by R.V. Ovcharova and M.O. Ermikhina in 2003, was applied. The instrument is aimed at identifying the level of awareness and responsibility regarding a future child, readiness to perform parental functions, and perception of partner support. In several Russian-language studies, this questionnaire has been validated and demonstrated its diagnostic value for analyzing cognitive, emotional, and behavioral components of parenthood [1].

Analysis of data from the "Conscious Parenthood" Questionnaire showed that indicators in both groups were approximately at the same level; no statistically significant differences were found.

Thus, the level of awareness of parental attitudes was virtually identical among women with functional infertility (M = 29.79; SD = 4.77) and in the control group (M = 29.48; SD =

4.55; t = 0.36; p = 0.723). This indicates that basic representations of parenthood and its value are formed in a similar manner, regardless of the presence or absence of reproductive difficulties.

No significant differences were found on the responsibility for child scale either (M = 30.67; SD = 4.61 vs. M = 31.14; SD = 4.02, respectively; t = –0.59; p = 0.558). This result indicates similarity in the level of readiness to assume responsibility for a future child in both samples (Table 3.6).

A slight tendency toward differences is observed only on the partner support scale, where women with functional infertility demonstrated slightly lower scores (M = 28.38; SD = 4.51 vs. M = 29.50; SD = 5.14; t = –1.26; p = 0.209).

Table 3.6 – Conscious Parenthood

Scale	**Functional Infertility (M ± SD)**	**Control Group (M ± SD)**	**t-test**	**p-value**	**Cohen's d**
Awareness of parental attitudes	29.79 ± 4.77	29.48 ± 4.55	0.36	0.7226	0.07
Responsibility for child	30.67 ± 4.61	31.14 ± 4.02	–0.59	0.5577	–0.11
Partner support	28.38 ± 4.51	29.50 ± 5.14	–1.26	0.2091	–0.23

Although the differences did not reach statistical significance, it can be assumed that a subset of women with reproductive difficulties subjectively perceives partner support as less pronounced, which may reflect peculiarities of interpersonal relationships and the experienced intrapersonal conflict.

Overall, the obtained results indicate that women with functional infertility possess the same level of awareness and responsibility in the sphere of parenthood as women who already have experience of motherhood. At the same time, possible nuanced differences in the perception of partner support deserve additional attention, as it is precisely the quality of emotional relationships within the couple that may play a role in the formation and maintenance of intrapersonal conflict related to infertility.

3.1.7 Indicators from the Pregnant Woman's Attitude Test

To examine the peculiarities of experiencing pregnancy and to test the psychological component of the gestational dominant, the "Pregnant Woman's Attitude Test" (TOB-b), authored by I.V. Dobryakov, was used. The instrument is aimed at identifying the character of a woman's emotional attitude toward herself as pregnant, toward the future child, and toward her immediate social environment. The test enables identification of several types of attitude toward pregnancy (optimal, euphoric, anxious, depressive, hypogestognostic) [93].

Results of the Pregnant Woman's Attitude Test revealed significant differences between women with functional infertility and the control group. It should be taken into account that in the experimental group, the test was administered under conditions of abstractness regarding the state of pregnancy.

On the "Pregnancy acceptance" scale, women with functional infertility demonstrated lower values ($M = 18.97$; $SD = 4.40$) than women in the control group ($M = 22.12$; $SD = 4.03$; $t = –4.08$; $p < 0.001$; $d = –0.75$). This indicates difficulties in emotional acceptance of the prospect of pregnancy and possible ambivalent feelings toward motherhood.

Conversely, on the "Anxiety for the child" scale, indicators among women with functional infertility were significantly higher ($M = 20.69$; $SD = 4.28$ vs. $M = 16.90$; $SD = 4.41$; $t = 4.76$; $p < 0.001$; $d = 0.87$). It can be assumed that conception difficulties intensify anxious expectations related to pregnancy and form a high level of anticipated risk.

On the "Relationship satisfaction" scale, women in the experimental group had lower values ($M = 18.48$; $SD = 3.72$) than women in the control group ($M = 20.12$; $SD = 3.48$; $t = –2.49$; $p = 0.014$; $d = –0.46$). Although the difference is moderate, it indicates that experiencing reproductive difficulties may negatively affect the perception of partner relationship quality.

On the "Somatization" scale, women with functional infertility also exhibited higher indicators ($M = 16.84$; $SD = 3.54$ vs. $M = 13.48$; $SD = 4.31$; $t = 4.62$; $p < 0.001$; $d = 0.85$), which reflects a tendency toward bodily expression of emotional tension and psychosomatic manifestations. Test results are presented in Table 3.7.

Table 3.7 – Pregnant Woman's Attitude Test

Scale	Functional Infertility (M ± SD)	Control Group (M ± SD)	t-test	p-value	Cohen's d
Pregnancy acceptance	18.97 ± 4.40	22.12 ± 4.03	–4.08	0.0001	–0.75
Anxiety for the child	20.69 ± 4.28	16.90 ± 4.41	4.76	0.0001	0.87
Relationship satisfaction	18.48 ± 3.72	20.12 ± 3.48	–2.49	0.0140	–0.46
Somatization	16.84 ± 3.54	13.48 ± 4.31	4.62	0.0001	0.85

Overall, the test results confirm that women with functional infertility are characterized by lower readiness for emotional acceptance of pregnancy, heightened anxiety for the child, lower relationship satisfaction, and more pronounced somatization. This indicates that traumatic experience and features of family scripts are reflected not only in cognitive attitudes but also in the emotional sphere, creating additional conditions for the formation of intrapersonal conflict.

3.1.8 Results of Shipilov's Intrapersonal Conflict Scale

To examine the level and structure of intrapersonal conflict, A.I. Shipilov's Intrapersonal Conflict Scale was applied. The instrument is aimed at identifying the severity of intrapersonal conflicts and enables their differentiation into main types: motivational, moral, role, adaptive, inadequate self-esteem conflicts, and unfulfilled desire conflicts. The test allows determination of both the general level of personality conflict and the dominant spheres of its manifestation, making it an effective tool for analyzing personality factors associated with experiencing functional infertility [35].

Analysis of data obtained using Shipilov's Intrapersonal Conflict Scale showed that women with functional infertility generally exhibit a somewhat higher level of intrapersonal conflict compared to women in the control group, as presented in Table 3.8.

Table 3.8 – Shipilov's Intrapersonal Conflict Scale Results

Scale	**Functional Infertility (M ± SD)**	**Control Group (M ± SD)**	**t-test**	**p-value**	**Cohen's d**
General conflict level	63.30 ± 11.98	58.74 ± 11.00	2.16	0.0327	0.40
Conflicts in "I–I" sphere (self-relation)	65.11 ± 10.57	60.57 ± 10.73	2.33	0.0217	0.43
Conflicts in "I–Others" sphere (interpersonal)	61.18 ± 10.89	55.66 ± 10.13	2.87	0.0049	0.52
Conflicts in "I–Activity" sphere (self-efficacy)	63.77 ± 10.22	58.41 ± 12.43	2.56	0.0118	0.47

On the indicator of general conflict level, mean values in the experimental group were significantly higher (M = 63.30; SD = 11.98) compared to the control (M = 58.74; SD = 11.00; t = 2.16; p = 0.033; d = 0.40). Although the differences are moderate, they reflect a tendency toward greater psychological tension and internal inconsistency among women with functional infertility.

When examining the structure of intrapersonal conflict, it was revealed that the most pronounced differences are observed in the "I–Others" sphere (M = 61.18; SD = 10.89 vs. M = 55.66; SD = 10.13; t = 2.87; p = 0.005; d = 0.52). This indicates more frequent contradictions and difficulties in relationships with others among women facing reproductive issues.

Significant differences were also recorded in the "I–I" sphere (self-attitude): M = 65.11; SD = 10.57 among women with functional infertility vs. M = 60.57; SD = 10.73 in the control group (t = 2.33; p = 0.022; d = 0.43). This result indicates a higher level of internal ambivalence and contradictory self-esteem.

On the "I–Activity" scale, reliable differences were also identified (M = 63.77; SD = 10.22 vs. M = 58.41; SD = 12.43; t = 2.56; p = 0.012; d = 0.47), which reflects a greater tendency among women with functional infertility toward doubts and internal contradictions regarding their activity and efficacy.

Shipilov's Intrapersonal Conflict Scale results indicate that women with functional infertility have a higher level of intrapersonal conflict, particularly in the spheres of self-attitude and interpersonal connections. However, differences compared to the control group are not radical, allowing us to speak of a tendency toward increased conflict severity rather than its

universal character. The obtained data indicate the presence of chronic internal tension in this category of women, which may exacerbate emotional difficulties and hinder successful realization of reproductive function.

3.1.9 Data from Karvasarsky's Method

To assess the severity of intrapersonal contradictions across various life domains, the "Actual Conflict Domains" method (B.D. Karvasarsky) was applied. This test enables identification of a conflict profile reflecting the degree of tension in areas such as family-domestic, professional, interpersonal, and personal-value spheres. Interpretation is based not on a cumulative score but on comparing the severity of conflicts across individual domains, which allows identification of leading zones of intrapersonal tension and their potential impact on participants' psychological state [28].

Analysis of data obtained using Karvasarsky's method, presented in Table 3.9, revealed statistically significant differences between women with functional infertility and the control group across all main domains of actual conflict.

Table 3.9 – Karvasarsky's Method Data

Scale	**Functional Infertility (M ± SD)**	**Control Group (M ± SD)**	**t-test**	**p-value**	**Cohen's d**
Family-domestic sphere	12.84 ± 3.43	10.83 ± 3.17	3.32	0.0012	0.61
Professional sphere	11.70 ± 3.28	10.00 ± 3.40	2.78	0.0063	0.51
Interpersonal sphere	13.66 ± 3.09	10.59 ± 3.16	5.36	0.0001	0.98
Personal-value sphere	13.72 ± 3.19	11.29 ± 3.94	3.68	0.0004	0.68

In the family-domestic sphere, the conflict level among women with functional infertility proved higher (M = 12.84; SD = 3.43) compared to the control group (M = 10.83; SD = 3.17; t = 3.32; p = 0.001; d = 0.61). This may indicate that difficulties in realizing the maternal function intensify tension in everyday family life, increasing the risk of dissatisfaction or domestic conflicts.

In the professional sphere, a significant difference was also identified: M = 11.70; SD =

3.28 in the experimental group vs. M = 10.00; SD = 3.40 in the control ($t = 2.78$; $p = 0.006$; $d = 0.51$). Although the difference is moderate, it reflects a greater tendency among women with functional infertility to experience difficulties related to work and professional self-realization, which may be associated with transference of emotional tension into the sphere of activity.

The most pronounced differences are observed in the interpersonal sphere: M = 13.66; SD = 3.09 vs. M = 10.59; SD = 3.16 ($t = 5.36$; $p < 0.001$; $d = 0.98$). This indicates that women with functional infertility more frequently encounter internal contradictions in interpersonal relationships, confirming the significance of social factors and interpersonal support in experiencing reproductive difficulties.

In the personal-value sphere, differences were also identified toward higher conflict severity among women with functional infertility (M = 13.72; SD = 3.19 vs. M = 11.29; SD = 3.94; $t = 3.68$; $p < 0.001$; $d = 0.68$). This indicates that this category of women more frequently experiences internal contradictions related to their system of personal values and life goals, which may intensify the sense of inconsistency and exacerbate intrapersonal conflict.

Thus, Karvasarsky's method demonstrated that among women with functional infertility, difficulties are most pronounced in the interpersonal and personal-value spheres, whereas the family-domestic and professional spheres show moderate but stable differences. Collectively, these data confirm the assumption that intrapersonal conflict in women with functional infertility has a multidimensional structure and manifests both in interpersonal relationships and in internal personal-value attitudes.

3.2 Comparative Analysis of Women with Functional Infertility and the Control Group

Comparison of psychodiagnostic assessment results from both groups enabled identification of clear differences in the spectrum of personality, emotional, and conflict characteristics.

According to FPI-R data, women with functional infertility demonstrated higher levels of anxiety, depressiveness, rigidity, and sensitivity. These indicators form a specific profile of heightened vulnerability, whereas values among women in the control group were closer to normative ranges. Such a difference indicates that reproductive difficulties are accompanied by general emotional instability and interpersonal sensitivity.

PHQ-9 questionnaire results confirmed the presence of more pronounced depressive

symptomatology in the experimental group. Although not all subscales revealed significant differences, the overall depression level was significantly higher. This indicates that the subjective experience of reduced emotional tone and energy is a characteristic feature for women with functional infertility.

According to PSS-10, differences proved less pronounced: the overall stress background in both samples was similar, however, women with functional infertility more frequently reported negative experiences and difficulties in coping with the situation. These nuanced differences indicate the presence of concealed tension, not always captured by general indicators.

In the domain of intrapersonal conflict, statistically significant differences were identified both according to Shipilov's Intrapersonal Conflict Scale and Karvasarsky's method. Women with functional infertility more frequently encounter contradictions in the sphere of self-attitude and interpersonal connections, as well as in the personal-value sphere. The control group demonstrated less pronounced expression of such contradictions, allowing us to speak of greater coherence in their inner world and life goals.

Comparison of attitudes toward parenthood showed that the baseline level of awareness and responsibility for a child is equally high in both groups. Nevertheless, women with functional infertility exhibited less positive indicators on the pregnancy acceptance and relationship satisfaction scales, as well as higher anxiety for the child. These results reflect an ambivalent perception of parenthood, whereas women in the control group held more harmonious attitudes.

Of particular significance for analysis were the interview data regarding postpartum experiences in the control group. Women who had successfully realized motherhood more frequently noted an increase in emotional stability, strengthening of partner relationships, and a sense of personal efficacy. These statements contrast with the profile of women with functional infertility, for whom parenthood remains in the sphere of the unrealized and is accompanied by tense expectations, anxieties, and internal contradictions.

Overall, the comparative analysis demonstrated that women with functional infertility differ in a higher level of emotional lability, conflict severity, and ambivalence in the sphere of parenthood. Whereas the control group is characterized by greater internal integrity, resilience, and positive experience in realizing the maternal function.

3.2.1 Methods of Statistical Data Processing

Processing of research results was carried out using mathematical statistics methods, ensuring assessment of intergroup differences and indicator dynamics during psychotherapeutic assistance. Descriptive statistics were applied for data description: mean value (M), standard deviation (SD), and 95% confidence interval.

To test the statistical significance of differences between independent samples (women with functional infertility and the control group), Student's t-test for independent samples was used. To assess changes in indicators within the experimental group before and after EMDR therapy, Student's t-test for dependent samples was applied, enabling determination of dynamics in emotional states and severity of intrapersonal conflict.

The effect size of psychotherapeutic intervention was estimated using Cohen's d coefficient, which allows quantitative characterization of the degree of differences regardless of sample size. Interpretation of d was conducted according to classical criteria: 0.2 = small effect, 0.5 = medium, 0.8 and above = large effect. The indicator was used both for intergroup differences and for analyzing EMDR therapy effectiveness in the "pre–post" dynamics.

To check distribution normality, visual assessment of histograms and symmetry criteria were used; where necessary, corrections for variance heterogeneity were applied. Statistical data processing was conducted using specialized SPSS software.

The threshold for statistical significance was set at $p < 0.05$. Values of p, t, and d for all instruments are presented in tables of the corresponding empirical analysis sections.

3.3. Experimental Study of Psychotherapeutic Intervention Using the EMDR Method

The effectiveness of psychotherapeutic intervention using Eye Movement Desensitization and Reprocessing was evaluated by comparing indicators of psychological state among women in the experimental group before and after completing the therapy course, as well as through intergroup comparison with the control sample in the post-test. The analysis encompassed dynamics in personality characteristics, emotional state, subjective stress level, depressive symptomatology, and severity of intrapersonal conflict.

3.3.1. Comparative Analysis on the FPI-R Scale

The effectiveness of EMDR therapy was evaluated through comparative assessment of personality and emotional characteristics of women in the experimental and control groups using the Freiburg Personality Inventory scales. The analysis included comparison of indicators "before" and "after" intervention within each group, as well as intergroup comparison in the post-test.

Among women with functional infertility prior to EMDR therapy, higher values of anxiety, depressiveness, rigidity, and sensitivity were observed compared to the control group, indicating pronounced emotional vulnerability and intrapersonal tension.

Following six EMDR sessions, distinct positive dynamics were obtained across all four FPI-R scales among women in the experimental group, whereas no significant changes were identified in the control group.

Analysis of FPI-R results demonstrated pronounced positive dynamics among women in the experimental group. Following EMDR therapy, indicators of anxiety, depression, rigidity, and sensitivity decreased, reflecting reduction in emotional tension, attenuation of dysphoric experiences, and improved response flexibility. In all cases, changes were statistically significant and accompanied by substantial effect sizes.

Table 3.10 – Changes on FPI-R Scales Following EMDR Therapy

Scale	**Group**	**Before, M ± SD**	**After, M ± SD**	**t**	**p**	**Cohen's d**
Anxiety	Functional Infertility	6.49 ± 1.13	4.56 ± 1.27	29.50	<0.0001	2.78
	Control	5.28 ± 1.44	5.19 ± 1.57	0.44	0.66	0.06
Depression	Functional Infertility	6.08 ± 1.42	4.46 ± 1.60	18.45	<0.0001	2.36
	Control	4.90 ± 1.28	4.91 ± 1.30	–0.02	0.98	0.00
Rigidity	Functional Infertility	6.18 ± 1.30	5.28 ± 1.39	14.99	<0.0001	1.92
	Control	5.21 ± 1.51	5.19 ± 1.57	0.33	0.74	0.04
Sensitivity	Functional Infertility	6.69 ± 1.53	4.82 ± 1.44	20.34	<0.0001	2.61

Scale	Group	Before, M ± SD	After, M ± SD	t	p	Cohen's d
	Control	4.78 ± 1.38	4.72 ± 1.39	1.35	0.18	0.18

Additional comparison of post-test values showed that following therapy, anxiety indicators in the experimental group were significantly lower than in the control group ($t = -2.43$; $p = 0.017$; $d = 0.42$).

For the remaining scales, intergroup differences did not reach the threshold of statistical significance, which is likely attributable to the lower baseline level of these characteristics in the control group.

Table 3.11 – FPI-R Indicators in Post-Test by Group

Scale	Functional Infertility (after), M ± SD	Control (after), M ± SD	t-test (independent)	p-value	Cohen's d
Anxiety	4.56 ± 1.27	5.19 ± 1.57	–2.43	0.02	0.42
Depression	4.46 ± 1.60	4.91 ± 1.30	–1.63	0.11	0.27
Rigidity	5.28 ± 1.39	5.19 ± 1.57	0.33	0.74	0.04
Sensitivity	4.82 ± 1.44	4.72 ± 1.39	1.35	0.18	0.18

The obtained results demonstrate positive dynamics across key emotional-personality indicators constituting the structure of intrapersonal conflict among women with functional infertility.

3.3.2 Changes in Indicators on the Mendelevich–Yakhin Questionnaire

The Mendelevich–Yakhin Questionnaire was used to record changes in key components of emotional tension. Prior to EMDR therapy, the experimental group was characterized by more pronounced stress-related, anxious, depressive, asthenic, and vegetative manifestations. Following completion of EMDR, a pronounced reduction in all indicators was recorded in the experimental group. Improvements affected the somatovegetative level, emotional tension, anxiety-depressive manifestations, asthenia, and irritability. Effect sizes according to Cohen's d indicate strong dynamics across each scale. In the control group, indicators remained, as expected, stable.

Table 3.12 – Changes in Indicators on the Mendelevich–Yakhin Questionnaire

Scale	Group	Before, M ± SD	After, M ± SD	t	Cohen's d
Vegetative disturbances	Functional Infertility	21.75 ± 4.42	17.69 ± 4.50	23.06	2.95
	Control Group	18.57 ± 4.89	18.72 ± 5.05	–1.38	–0.18
Stress	Functional Infertility	24.00 ± 5.65	18.90 ± 5.88	15.07	1.21
	Control Group	18.64 ± 5.36	18.67 ± 5.45	–0.10	–0.01
Anxiety	Functional Infertility	23.08 ± 5.06	18.13 ± 5.00	20.65	2.66
	Control Group	19.98 ± 4.94	18.41 ± 5.35	1.62	0.21
Depression	Functional Infertility	19.00 ± 6.69	14.75 ± 5.30	21.73	2.80
	Control Group	16.76 ± 4.70	17.26 ± 4.20	–1.59	–0.21
Asthenia	Functional Infertility	21.23 ± 5.44	15.97 ± 5.46	17.73	1.55
	Control Group	14.76 ± 5.35	14.91 ± 5.29	–1.27	–0.17
Irritability	Functional Infertility	22.05 ± 5.25	18.08 ± 5.27	19.60	2.51
	Control Group	17.83 ± 5.28	18.00 ± 5.64	–1.46	–0.19

The obtained results demonstrate a comprehensive reduction in psychological tension among women with functional infertility following EMDR: anxiety and stress reactivity decrease, depressive and asthenic manifestations attenuate, and the severity of vegetative symptoms and episodes of irritability diminishes. However, the high values of Cohen's d warrant attention, as they may be attributable to the relatively small sample size.

Additional assessment enabled determination of the extent to which indicators of the two groups differed following completion of EMDR therapy. A statistically significant difference was retained only on the depression scale, reflecting a more profound reduction in depressive manifestations among women who received EMDR. For the remaining scales, indicators of the two groups converged.

Table 3.13 – Intergroup Comparison of Indicators on the Mendelevich–Yakhin Questionnaire

Scale	Functional Infertility, After (M ± SD)	Control Group, After (M ± SD)	t	p-value	Cohen's d
Vegetative	17.69 ± 4.50	18.72 ± 5.05	–1.18	0.24	–0.22

Scale	Functional Infertility, After (M ± SD)	Control Group, After (M ± SD)	t	p-value	Cohen's d
disturbances					
Stress	18.90 ± 5.88	18.67 ± 5.45	0.22	0.83	0.04
Anxiety	18.13 ± 5.00	18.41 ± 5.35	–0.30	0.77	–0.05
Depression	14.75 ± 5.30	17.26 ± 4.20	–2.86	0.01	–0.52
Asthenia	15.97 ± 5.46	14.91 ± 5.29	1.07	0.29	0.20
Irritability	18.08 ± 5.27	18.00 ± 5.64	0.08	0.94	0.02

The Mendelevich–Yakhin Questionnaire records a comprehensive reduction in emotional and somatovegetative tension following EMDR therapy. The reduction of most indicators to the level of the control group indicates restoration of emotional regulation, while the retention of intergroup differences on the depression scale underscores the pronounced effect specifically in this domain.

3.3.3 Changes in Indicators on the PSS-10 Scale

Subjective stress and its experiential manifestations were measured using the PSS-10 scale. In the pre-test, women with functional infertility demonstrated more pronounced stress load and a greater volume of negative experiences.

Following EMDR in the experimental group, a reduction in general stress and negative experiences was recorded, alongside an increase in positive reactions. These changes demonstrate a decrease in subjective tension and an enhancement of the sense of manageability of ongoing events.

Table 3.14 – Changes in Indicators on the PSS-10 Scale Among Women in Experimental and Control Groups

Indicator	Group	Before, M ± SD	After, M ± SD	t	Cohen's d
General stress	Functional Infertility	21.59 ± 6.82	16.61 ± 6.78	25.57	3.27
	Control Group	19.81 ± 6.43	19.76 ± 6.71	0.40	0.05
Negative experiences	Functional Infertility	14.85 ± 3.75	10.52 ± 3.96	31.42	1.52

Indicator	Group	Before, M ± SD	After, M ± SD	t	Cohen's d
	Control Group	13.45 ± 4.26	13.45 ± 4.41	0.00	0.00
Positive reactions	Functional Infertility	7.28 ± 2.32	9.54 ± 2.31	–21.45	–2.77
	Control Group	7.17 ± 2.68	7.31 ± 2.75	–1.43	–0.19

The obtained profile indicates reduced susceptibility to stressors and decreased frequency of negative appraisals of ongoing events. The parallel increase in positive reactions indicates restoration of the capacity for constructive control and processing of stressful situations.

Table 3.15 – Intergroup Comparison of PSS-10 Indicators

Indicator	Functional Infertility, After (M ± SD)	Control Group, After (M ± SD)	t	p-value	Cohen's d
General stress	16.61 ± 6.78	19.76 ± 6.68	–2.55	0.01	–0.47
Negative experiences	10.52 ± 3.96	13.45 ± 4.41	–3.80	0.0001	–0.70
Positive reactions	7.54 ± 2.31	7.31 ± 2.75	0.478	0.001	0.88

Following completion of EMDR therapy, the experimental group demonstrates a more favorable stress profile: levels of general stress and negative experiences are lower, while indicators of positive reactions have improved. The PSS-10 scale records a reduction in perceived stress and negative experiences, as well as an increase in constructive reactions following EMDR therapy.

3.3.4 Changes in Depressive Symptomatology on the PHQ-9 Questionnaire

The PHQ-9 was used to record the severity of depressive manifestations, including somatic and cognitive-affective components. Prior to EMDR therapy, women with functional infertility demonstrated higher aggregate scores on depression compared to the control group,

reflecting differences in overall emotional state.

Following EMDR in the experimental group, a clear reduction in all components of depression was noted. Both somatic manifestations and cognitive-affective signs of depressed state decreased. The magnitude of changes, as recorded by effect sizes, indicates pronounced dynamics.

Table 3.16 – Changes in Indicators of Depressive Symptomatology on the PHQ-9 Scale

Indicator	**Group**	**Before, M ± SD**	**After, M ± SD**	**t**	**Cohen's d**
PHQ-9 total score	Functional Infertility	12.34 ± 5.35	7.30 ± 4.45	23.89	1.07
	Control	10.03 ± 4.75	10.03 ± 4.77	0.001	0.00
Somatic symptoms	Functional Infertility	3.80 ± 1.67	1.85 ± 1.72	16.46	2.11
	Control	3.45 ± 2.13	3.48 ± 2.18	–0.35	–0.05
Cognitive-affective symptoms	Functional Infertility	7.21 ± 3.07	3.72 ± 3.13	17.90	2.29
	Control	6.17 ± 3.47	6.53 ± 3.73	–2.03	–0.27

The obtained profile shows alleviation of depressive state across multiple dimensions simultaneously—somatic tension decreases, emotional load diminishes, and manifestations of motivational loss and negative appraisals are reduced. Following completion of the program, the experimental group exhibited lower scores across all PHQ-9 components, including somatic and cognitive-affective. Differences between groups were statistically significant.

Table 3.17 – Intergroup Comparison of PHQ-9 Indicators

Indicator	**Functional Infertility, After (M ± SD)**	**Control Group, After (M ± SD)**	**t**	**p-value**	**Cohen's d**
PHQ-9 total score	7.30 ± 4.45	10.03 ± 4.77	–4.37	0.001	–0.81
Somatic symptoms	1.85 ± 1.72	3.48 ± 2.18	–4.52	0.001	–0.83
Cognitive-affective	3.72 ± 3.13	6.53 ± 3.73	–	0.001	–0.82

Indicator	Functional Infertility, After (M ± SD)	Control Group, After (M ± SD)	t	p-value	Cohen's d
symptoms			4.44		

The PHQ-9 demonstrates a reduction in depressive symptomatology in the experimental group across all scales. The control group remains at baseline values.

3.3.5 Changes in Assessment of Intrapersonal Conflicts on Shipilov's Scale

Shipilov's scale was used to measure the severity of intrapersonal conflicts. In the pre-test, women with functional infertility showed higher scores across all subscales compared to the control group, reflecting pronounced internal tension and instability in emotional regulation.

The scale captures three key forms of intrapersonal contradictions — "I–I," "I –Others," and "I–Activity"— each reflecting a specific level of personality organization. Conflicts of the "I–I" type characterize the degree of coherence in self-relation, the intensity of internal ambivalence, tension between values and actual experiences, as well as the level of self-criticism and vulnerability. A reduction in the severity of this conflict indicates greater integration of the self-concept and a decrease in internal self-blaming tension. Conflicts of the "I–Others" type reflect features of interpersonal relationship perception, sensitivity to external criticism, a tendency to anticipate negative evaluation, and difficulties in establishing trust. Their reduction indicates the formation of a more stable and less reactive interpersonal stance. Finally, conflicts of the "I–Activity" type reflect the individual's attitude toward their own efficacy, the level of perfectionism, a tendency to doubt one's capabilities, and fear of making mistakes. A decrease in this indicator reflects growth in internal control, reduced contradiction between motivation and action, and enhanced capacity for self-realization.

Following EMDR therapy in the experimental group, a reduction in all measured types of conflict was observed. Discrepancies within the "I–I" system diminished, conflictuality in relationships with others decreased, and contradictions related to activity were reduced. These changes affected both the general level of conflict and each subscale; the results are presented in Table 3.18.

Table 3.18 – Changes in Indicators on Shipilov's Intrapersonal Conflict Scale

Indicator	Group	Before, M ± SD	After, M ± SD	t	p	Cohen's d
General conflict level	Functional Infertility (FI)	63.30 ± 11.98	53.84 ± 12.60	21.31	<0.000001	2.73
	Control Group (CG)	59.41 ± 10.94	59.26 ± 11.19	0.52	0.60	0.07
Conflicts "I–I" (self-relation)	FI	65.11 ± 10.57	53.05 ± 11.47	25.59	<0.000001	3.28
	CG	59.36 ± 11.32	59.64 ± 11.53	–1.32	0.19	–0.18
Conflicts "I–Others" (interpersonal)	FI	61.18 ± 10.89	50.23 ± 10.71	12.42	<0.05	0.78
	CG	55.93 ± 10.66	56.31 ± 10.80	–1.20	0.24	–0.16
Conflicts "I–Activity" (self-efficacy)	FI	62.67 ± 11.54	52.72 ± 10.55	19.17	<0.000001	2.45
	CG	59.12 ± 12.07	59.38 ± 12.42	–1.03	0.30	–0.14

The nature of the dynamics indicates a weakening of internal contradictions, improvement in self-relation, and greater coherence between self-perception, perception of others, and perception of one's own activity. The obtained changes are comparable with the results of other instruments, confirming the restoration of emotional stability.

This method is particularly relevant for the study of women with functional infertility, since in this group intrapersonal conflicts often serve as a connecting link between emotional disturbances, stress-related experiences, and somatic manifestations. At the "I–I" level, such women initially exhibit pronounced internal fragmentation concerning motherhood, bodily experience, and self-worth. On one hand, the need for motherhood is actualized; on the other hand, fears, distrust of one's own body, experiences of personal inadequacy, and heightened self-criticism are present. At the "I–Others" level, characteristic expectations of condemning evaluation from partners, family, and the social environment are initially identified, often reinforced by prolonged experiences of pressure and repeated inquiries about pregnancy. This

intensifies socially mediated tension and forms chronic vigilance in interpersonal contacts. Conflicts of the "I–Activity" type in the baseline state manifest as pronounced perfectionism, a striving for excessive control, and doubts about one's own ability to cope with both pregnancy and the lifestyle changes it entails. Such a combination gives functional infertility a complex psychosomatic character, where internal contradictions are directly linked to the level of emotional tension.

Following the application of EMDR, positive changes were observed across all three conflict domains, which may indicate favorable psychological dynamics (reduction of tension) within the observation period. At the "I–I" level, internal ambivalence decreases, self-relation becomes more integrated, which is manifested in a reduction of self-blaming reactions and an increase in the sense of inner competence. Women begin to perceive their bodies and their own experiences less critically; greater trust in their own resources emerges, along with greater coherence between what they feel and what they consider important for themselves. At the "I–Others" level, the dynamics are expressed in reduced expectations of external criticism, decreased interpersonal tension, and the formation of a calmer, more stable mode of interaction with partners and significant others. Participants in the study noted that communication became more open and less avoidant, and interpersonal relationships became less saturated with anxiety. Finally, in the "I–Activity" domain following EMDR therapy, an increase in the sense of control and a reduction in the internal contradiction between the desire to act and the fear of making mistakes were recorded. Instead of a rigid perfectionist approach, a more realistic attitude toward tasks emerged, along with an enhanced sense of self-efficacy and the ability to make decisions without excessive internal pressure. Comparison between groups in the post-test is reflected in Table 3.19.

Table 3.19 – Intergroup Comparison on Shipilov's Scale

Indicator	**Functional Infertility, After (M ± SD)**	**Control Group, After (M ± SD)**	**t**	**p**	**Cohen's d**
General conflict level	53.84 ± 12.60	54.26 ± 11.19	–0.19	> 0.05	–0.18
Conflicts "I–I"	53.05 ± 11.47	59.64 ± 11.53	–2.59	0.01	–0.47
Conflicts "I–	58.23 ± 10.71	56.31 ± 10.80	–2.10	0.04	–0.38

Indicator	Functional Infertility, After (M ± SD)	Control Group, After (M ± SD)	t	p	Cohen's d
Others"					
Conflicts "I–Activity"	52.72 ± 10.55	59.38 ± 12.42	–2.65	0.01	–0.49

Changes in indicators on Shipilov's scale reflect not merely a statistical reduction in conflictuality, but a qualitative transformation in the structure of self-regulation, affecting emotional, cognitive, and behavioral components. The obtained data may indicate that processing of maladaptive emotional experience via EMDR leads to substantial integration of the inner world, enhanced psychological resilience, and reduced conflict-related tension.

3.3.6 Changes in Assessment of Psychological Maladjustment on Karvasarsky's Method

Karvasarsky's method was used to diagnose maladjustment across four life domains. In the pre-test, women with functional infertility exhibited higher scores on all scales, reflecting differences in emotional and socio-behavioral functioning compared to the control group.

Following EMDR in the experimental group, a reduction in maladjustment was recorded across all domains. Improvements affected family-domestic relationships, professional functioning, interpersonal interaction, and the personal-value sphere. The dynamics were pronounced for each scale.

Table 3.20 – Changes in Indicators on Karvasarsky's Method

Indicator	Group	Before, M ± SD	After, M ± SD	t	p	Cohen's d
Family-domestic sphere	FI	12.84 ± 3.43	9.16 ± 3.80	25.24	< 0.05	1.23
	CG	10.43 ± 3.33	10.33 ± 3.52	0.36	0.72	0.05
Professional sphere	FI	11.70 ± 3.28	7.92 ± 3.38	26.59	< 0.001	0.97
	CG	9.95 ± 3.26	9.90 ± 3.40	0.28	0.78	0.04

Indicator	Group	Before, M ± SD	After, M ± SD	t	p	Cohen's d
Interpersonal sphere	FI	13.66 ± 3.09	9.41 ± 3.54	26.47	< 0.00001	1.39
	CG	10.82 ± 3.42	10.57 ± 3.67	0.84	0.41	0.11
Personal-value sphere	FI	14.02 ± 3.13	10.28 ± 3.45	26.16	< 0.00001	1.35
	CG	11.70 ± 3.59	11.33 ± 4.08	0.99	0.33	0.14

The nature of the changes indicates a reduction in domestic and professional tension, decreased interpersonal difficulties, and restoration of internal coherence. These shifts correspond to the profile of emotional improvements reflected in other instruments.

Following completion of EMDR therapy, indicators in the experimental group were lower across all domains compared to the control group. Differences were statistically significant and recorded for each assessment direction.

Table 3.21 – Intergroup Comparison (Post-Test)

Indicator	FI, After (M ± SD)	CG, After (M ± SD)	t	p	Cohen's d
Family-domestic sphere	9.16 ± 3.80	10.33 ± 3.52	–2.72	0.01	–0.61
Professional sphere	7.92 ± 3.38	9.90 ± 3.40	–3.23	0.00	–0.72
Interpersonal sphere	9.41 ± 3.54	10.57 ± 3.15	–2.98	0.00	–0.55
Personal-value sphere	10.28 ± 3.45	11.33 ± 4.08	–2.46	0.02	–0.45

Karvasarsky's method demonstrates a reduction in maladjustment in the experimental group across all scales, reflecting restoration of emotional and behavioral regulation.

3.3.7 Analysis of Results Across All Instruments

Analysis across all instruments indicates a reduction in emotional and psychological tension among women with functional infertility following EMDR. High values of Cohen's d were recorded for all scales, which is indicative of significant changes in emotional, cognitive, and behavioral domains (Table 3.22).

Table 3.22 – Summary Table of EMDR Effects Across All Instruments

Instrument / Indicator	Before, M ± SD	After, M ± SD	t	p	Cohen's d
FPI-R					
Anxiety	6.49 ± 1.13	4.56 ± 1.27	29.50	<0.0001	2.78
Depression	6.08 ± 1.42	4.46 ± 1.60	18.45	<0.0001	2.36
Rigidity	6.18 ± 1.30	5.28 ± 1.39	14.99	<0.0001	1.92
Sensitivity	6.69 ± 1.53	4.82 ± 1.44	20.34	<0.0001	2.61
Mendelevich–Yakhin					
Vegetative disturbances	21.75 ± 4.42	17.69 ± 4.50	23.06	<0.0001	2.95
Stress	24.00 ± 5.65	18.90 ± 5.88	15.07	<0.001	1.21
Anxiety	23.08 ± 5.06	18.13 ± 5.00	20.65	<0.0001	2.66
Depression	19.00 ± 6.69	14.75 ± 5.30	21.73	<0.0001	2.80
Asthenia	21.23 ± 5.44	15.97 ± 5.46	17.73	<0.001	1.55
Irritability	22.05 ± 5.25	18.08 ± 5.27	19.60	<0.0001	2.51
PSS-10					
General stress	20.77 ± 5.84	16.61 ± 6.78	33.14	<0.0001	3.27
Negative experiences	14.85 ± 3.75	10.52 ± 3.96	31.42	<0.001	1.52
Positive reactions	7.28 ± 2.32	9.54 ± 2.31	–21.45	<0.0001	2.77
PHQ-9					
Total depression score	12.34 ± 5.35	7.30 ± 4.45	23.89	<0.001	1.07
Somatic symptoms	3.80 ± 1.67	1.85 ± 1.72	16.46	<0.0001	2.11
Cognitive-affective symptoms	7.21 ± 3.07	3.72 ± 3.13	17.90	<0.0001	2.29

Instrument / Indicator	Before, M ± SD	After, M ± SD	t	p	Cohen's d
Shipilov (Intrapersonal Conflict)					
General conflict level	63.30 ± 11.98	53.84 ± 12.60	21.31	<0.000001	2.73
Conflicts "I–I"	65.11 ± 10.57	53.05 ± 11.47	25.59	<0.000001	3.28
Conflicts "I–Others"	61.18 ± 10.89	50.23 ± 10.71	18.42	<0.000001	2.36
Conflicts "I–Activity"	62.67 ± 11.54	52.72 ± 10.55	19.17	<0.000001	2.45
Karvasarsky (Actual Conflicts)					
Family-domestic sphere	12.84 ± 3.43	9.16 ± 3.80	25.24	<0.0001	1.23
Professional sphere	11.70 ± 3.28	7.92 ± 3.38	26.59	<0.05	0.97
Interpersonal sphere	13.66 ± 3.09	9.41 ± 3.54	26.47	<0.001	1.39
Personal-value sphere	14.02 ± 3.13	10.28 ± 3.45	26.16	<0.00001	1.35

Summary data demonstrate homogeneous positive dynamics across all applied scales. The most substantial effects were observed in domains related to stress reactivity, asthenia, negative experiences, as well as in the professional, interpersonal, and personal-value spheres. Values of d exceeding 3.2 indicate a pronounced reduction in emotional tension and restoration of stress-regulation responses.

For most other scales—anxiety, depression, vegetative manifestations, cognitive-affective symptoms, and intrapersonal conflicts—effects fall within the pronounced range (d approximately 2.0–3.0). This corresponds to a reduction in anxiety-depressive symptomatology, decreased internal tension, and improved self-regulation.

Indicators with somewhat smaller effect sizes (d approximately 1.8–2.0) were observed for rigidity, somatic signs, and a range of secondary emotional reactions, which is acceptable for characteristics that are less malleable within the framework of short-term EMDR therapy.

The Cohen's d values obtained in the study fall into the large to very large effect categories. Such pronounced dynamics can be explained, on one hand, by the combination of high baseline levels of anxiety, stress, and intrapersonal conflict recorded during pre-testing, and the specificity of the EMDR method, which is oriented toward processing emotionally saturated experiences. On the other hand, the small sample size of the study may have

contributed to these high values. It is known that with samples smaller than 50, Cohen's d values may be inflated. However, even with somewhat inflated indicators, we can state that the intensity of the intervention and its focus on traumatically charged material leads to significant changes in the measured indicators.

Collectively, the data indicate a multi-level influence of EMDR—from reduction of stress and affective load to improvement in intrapersonal and interpersonal characteristics. In the control group, the absence of changes contrastively underscores the identified dynamics. Results of repeated testing show improvement in emotional state, alongside reduced intrapersonal and interpersonal conflictuality and restoration of adaptive behavioral patterns in key life domains.

Conclusions of Chapter 3

The obtained data demonstrate improvement in the emotional, personality-related, and psychosocial state of women with functional infertility following EMDR therapy. Positive dynamics were observed across all applied instruments, covering stress, anxiety, depression, somatovegetative manifestations, intrapersonal conflicts, and daily functioning. The changes are systemic in nature and manifest simultaneously at multiple levels—cognitive, emotional, bodily, and interpersonal.

The most pronounced shifts were observed in the reduction of negative experiences and asthenic symptoms, as well as in the decrease of intrapersonal conflict and restoration of coherence in personality structure. These indicators reflect the processing of emotionally significant experiences and a reduction in overall psychophysiological tension, which corresponds to theoretical models of EMDR action that propose desensitization and integration of traumatic or maladaptive experience.

Data on depressive symptomatology and the anxiety-stress spectrum demonstrate restoration of affective regulation and a reduction in the severity of psychological distress. The reduction in conflictuality according to Shipilov's method and improvement in indicators on Karvasarsky's scale characterize changes in the spheres of self-relation, interpersonal connections, and everyday behavior. These results indicate progress beyond symptomatic improvement and reflect structural changes in psychological regulation.

The fact of pregnancy occurrence in a subset of participants from the experimental group may indicate the method's capacity to create favorable conditions for the restoration of reproductive function in functional infertility. The combination of psychological improvements forms a more adaptive psychophysiological background, which may contribute to the normalization of neuroendocrine and immune processes involved in female fertility.

The effectiveness of EMDR in our study over the short term was demonstrated by the following changes:

- normalization of emotional state,
- reduction of intrapersonal and interpersonal tension,
- improvement in psychosocial functioning.

Nevertheless, the study has several limitations. First, the absence of randomization may reduce the rigor of evidentiary conclusions. Second, the control group was not tasked with

achieving pregnancy; therefore, comparison of reproductive outcomes was not conducted. Third, the assessment of supporting factors (medical treatment, lifestyle, family support) was not included in the study design and could have influenced the results. Additionally, long-term follow-up assessment was not conducted in the study, which limits the ability to analyze the durability of the obtained effects.

Prospects for further research include expanding the sample size, applying a randomized design, incorporating stress biomarkers (cortisol, heart rate variability), investigating neuropsychological features of EMDR action, as well as analyzing the permanence of reproductive, emotional, and behavioral changes in the long term. Additionally, it appears advisable to study combined programs integrating EMDR with other forms of psychotherapeutic or medical support.

The results of the conducted study underscore the role of EMDR in reducing psychoemotional tension and improving psychological functioning among women with functional infertility, while also demonstrating its potential as a significant component of comprehensive reproductive support.

Chapter 4. Discussion

4.1 Theoretical Foundations of EMDR and Expected Therapeutic Effects

Eye Movement Desensitization and Reprocessing is a psychotherapeutic method originally developed by American psychologist Francine Shapiro in late 1987. Its primary purpose is to assist individuals in overcoming the consequences of psychological trauma and stressful experiences. The creation of the method was initiated by the author's own traumatic experience, and its further development was grounded in both empirical observations and scientific research. By 1989, it was demonstrated that EMDR led to a substantial reduction in PTSD symptomatology in 90% of participants after just three sessions, confirming the high efficacy of this novel approach [9].

Initially perceived as a simple desensitization technique, EMDR soon acquired the status of an independent psychotherapeutic model, integrating elements of cognitive, behavioral, body-oriented, and psychodynamic therapies, alongside its unique form of bilateral stimulation [25].

The EMDR method represents an eclectic psychotherapeutic model that combines components from various directions. Thus, its emphasis on the significance of early memories correlates with the psychodynamic approach; the use of traumatic imagery aligns with exposure techniques in cognitive-behavioral therapy; and work with positive self-perception resonates with humanistic and phenomenological traditions. Owing to this integrative nature, EMDR can be incorporated into any therapeutic system while remaining an empirically grounded, client-centered method.

The central concept explaining the effectiveness of EMDR is the Adaptive Information Processing (AIP) model. According to this model, traumatic memories remain fixed in neural structures in a maladaptive form, failing to undergo natural integration into the cognitive and emotional system. The combination of focused attention on the traumatic image and rhythmic bilateral stimulation (most often eye movements) initiates neurophysiological processes that facilitate the processing and integration of this information.

One of the main therapeutic components of EMDR is considered to be bilateral stimulation. Several hypotheses exist to explain its mechanisms of action:

Interhemispheric Interaction Hypothesis: It is assumed that rhythmic eye movements

activate both brain hemispheres, enhancing neural connectivity and facilitating access to fragmented traumatic information. This, in turn, promotes memory processing and its integration into autobiographical memory. However, several neurophysiological studies question the universality of this model, proposing more complex responses, including changes in functional brain connectivity.

REM Sleep Analogy Hypothesis: According to this view, eye movements in EMDR activate reactions analogous to those occurring during rapid eye movement sleep, when memory consolidation takes place. Bilateral stimulation triggers the orienting response and promotes a reduction in physiological arousal, creating conditions for safer and deeper processing of traumatic material.

Working Memory Dual-Task Hypothesis: Simultaneous concentration on a traumatic image and performance of a motor task places a load on the limited resources of working memory. This leads to a reduction in the vividness and emotional intensity of the memory, facilitating its cognitive processing and reappraisal [48, 108].

Thus, the key point in EMDR therapy remains the transition from maladaptive information storage to its functional integration. It is precisely this process that is regarded as central to achieving therapeutic effects, including in the treatment of psychosomatic conditions such as functional infertility.

In the context of functional infertility, significant psychological factors include chronic stress tension, anxiety of expectation, and repeated experiences of failure, which form a stable state of hyperarousal and reduce the subjective sense of control. These states are often maintained by intrapersonal conflict, encompassing contradictory attitudes and emotional reactions (e.g., simultaneous striving for motherhood and fear of consequences, bodily changes, external evaluation, or repeated loss). At the behavioral and somatic level, conflict manifests through heightened bodily vigilance, tension, and avoidance, which may reinforce maladaptive coping strategies and maintain symptomatology. Under these conditions, the application of EMDR appears justified, as the method targets the processing of trauma-laden experiential fragments, reduces emotional reactivity, and transforms associated dysfunctional beliefs, while the protocol’s focus on bodily sensations allows addressing the somatic component of experiences and reducing persistent tension.

The core assumption of the method is that during a traumatic event, the human psyche may fail to cope with the volume of emotional and sensory input, resulting in information about

the event becoming "stuck" in neural networks in an unprocessed, maladaptive form. Such memory fragments remain detached from general experience, lacking connections to logic, temporal context, and emotional processing. They can be repeatedly activated by specific triggers, eliciting intense emotional reactions, anxiety, somatic symptoms, and adaptation impairments [12, 15]. The essence of EMDR lies in the deliberate activation of these traumatic memories under controlled and safe therapeutic conditions, followed by their processing using specific bilateral stimulation techniques (most commonly rhythmic eye movements, less frequently auditory or tactile stimulation). This allows weakening the emotional charge, altering maladaptive beliefs associated with the traumatic experience, and integrating it into the overall memory system as neutral or resource material [11, 78, 127].

The theoretical foundation of the method incorporates elements of neuropsychology, psychodynamic, and cognitive theory. The central concept is the Adaptive Information Processing (AIP) model, according to which the psyche strives toward experience integration, but this process is blocked under trauma. Traumatic memory remains "frozen" in an unaltered state, continuing to influence emotional reactions, behavior, and bodily well-being. EMDR enables activation of this memory and stimulates its processing through bilateral stimulation—most often eye movements, as well as tactile or auditory stimulation occurring in rhythmic alternating form [130].

In our view, the primary task of EMDR is the processing of traumatic information fixed in neural structures in a maladaptive form, with the aim of its integration into autobiographical memory.

The classical EMDR protocol includes the following phases:

History-taking – significant psychotraumatic events, attachment structure, and the relationship between past experience and current symptoms are analyzed.

Preparation – the client is trained in stabilization techniques, introduced to the therapeutic process, and a therapeutic alliance is formed.

Assessment – target memories associated with dysfunctional beliefs, emotions, and bodily sensations are identified. The validity of positive cognitions (VoC) and the degree of distress (SUD) are assessed.

Desensitization – activation of the traumatic image is carried out alongside parallel bilateral stimulation, facilitating processing of the traumatic material.

Installation – reinforcement of the positive cognition associated with the processed

experience occurs.

Body Scan – attention is directed to residual bodily sensations to facilitate additional processing.

Closure – the session concludes with stabilization of the client's emotional state.

Reevaluation – conducted in the following session to record therapeutic effect and determine further targets [85].

The constant alternation between traumatic memory activation and bilateral stimulation contributes to reduced emotional reactivity, modification of dysfunctional beliefs, and formation of more adaptive cognitive schemas.

In accordance with the logic of the AIP model and the content of the classical EMDR protocol, expected therapeutic effects of psychotherapy may be expressed through the following psychological indicators:

reduction in subjective distress severity upon activation of traumatically significant experiences (SUD) and associated physiological tension;

increase in validity of positive cognitions (VoC) and decrease in stability of dysfunctional beliefs related to the experience of infertility;

reduction in severity of anxiety and depressive symptomatology, as well as overall psychological stress level;

decrease in intensity of intrapersonal conflict and associated bodily reactions (tension, somatized manifestations, bodily vigilance);

growth in subjective sense of control, safety, and resourcefulness.

Literature data confirm the significance of psychological support for women with infertility—in some studies, patients receiving psychological assistance demonstrated more favorable reproductive outcomes compared to women who did not receive such support [128]. While group forms of psychotherapy are primarily aimed at reducing general distress, psychoeducation, developing support, and normalizing emotional reactions, in our study EMDR is considered an individual method oriented toward processing emotionally significant memories, negative cognitions, and bodily reactions that maintain intrapersonal conflict.

The mechanisms of EMDR's action remain a subject of discussion; however, it is assumed that bilateral stimulation activates interhemispheric interaction and facilitates processing of traumatic material, analogous to neurophysiological processes occurring during the REM sleep phase associated with emotional event processing. Additionally, attention to

traumatic memory combined with its sensory desensitization allows reducing emotional reactivity, altering negative beliefs associated with the event, and replacing them with more adaptive interpretations [85].

Today, the method is recognized as one of two priority non-pharmacological directions in post-traumatic stress disorder therapy according to the World Health Organization. Its recognition resulted from both clinical efficacy and the methodological rigor of scientific research conducted over the past three decades [33].

Areas of EMDR application have substantially expanded in recent decades. Initially, the method was used predominantly in PTSD treatment, especially among victims of violence, combat veterans, and those who survived disasters and losses. Subsequently, its efficacy was confirmed in treating anxiety disorders, depression, phobias, panic attacks, complex grief, psychosomatic disorders, and attachment disturbances. EMDR acquires particular significance in the therapy of psychogenic and functional infertility, as it allows targeted intervention into hidden traumatic experiences related to themes of motherhood, bodily experience, identity, as well as processing childhood traumas, perinatal losses, and experiences of unsuccessful conception attempts [24, 53, 59, 86].

Alongside theoretical justification of EMDR's mechanisms, an increasing volume of empirical data confirms its efficacy in clinical settings, including the context of functional infertility. For example, a study by Bal and Uçar (2024) conducted among women with infertility showed that application of EMDR over six sessions led to a pronounced reduction in PTSD symptoms and distress, as well as an increase in cognitive validity and posttraumatic growth indicators [17]. This study is one of the few recent foreign works (within the last 5 years) specifically addressing EMDR application in infertility. The study involved 90 women distributed into three groups—CBT, EMDR, and control. Both experimental groups underwent a six-session therapeutic program over three weeks. Upon completion, participants from CBT and EMDR groups demonstrated statistically significant reductions in post-traumatic stress disorder indicators (IES-R scale), infertility-related distress (IDS scale), and subjective tension levels. Simultaneously, an increase in validity of cognitions (VoC) and posttraumatic growth (PTGI) was observed, indicating development of adaptive resources and positive personality dynamics [17, 80]. In other words, the method reduces the affective charge of traumatic memories associated with infertility experience and restores emotional equilibrium.

These results may indicate the efficacy of CBT and EMDR in the psychotherapy of

functional infertility in cases where a psychotraumatic component is present. Such interventions not only reduce emotional load but also foster internal resources for overcoming the crisis associated with impaired reproductive function.

Emotional stress, conflicts with a partner, and financial difficulties significantly impact treatment adherence. According to one domestic study, only 36% of women diagnosed with "infertility" reach the final stage of treatment, whereas 54% completely abandon it at various stages. The most frequent reasons are emotional burnout and low levels of support [6, 89, 131].

Particular attention in Russian-language literature is given to ethical and cultural-psychological barriers accompanying the use of ART (assisted reproductive technologies). For instance, Tyurina N.A. et al. describe anxiety states arising in women when using donor biomaterial and surrogacy, as well as the phenomenon of "alienated body" during hormonal stimulation and oocyte retrieval procedures. These aspects highlight the necessity of individualized support that accounts for personal boundaries, religious beliefs, and level of acceptance of medical interventions [49, 63, 123].

Donarelli et al. (2020), within a qualitative study conducted in Italy, identified that the primary goals of psychological support in ART clinics are anxiety reduction, support in overcoming failures, and development of emotional resilience among patients. Interventions aimed at restoring a sense of control and internal resource in women with repeated IVF failures acquire particular importance [94].

In a study by Awtani et al. (2019), it was shown that the highest stress level in women during ART occurs at the stages of oocyte retrieval and waiting for embryo transfer results. This indicates the need for targeted psychological support precisely at these moments—both for preventing emotional breakdown and for enhancing treatment adherence [49, 63, 123].

The Adaptive Information Processing model, according to which activation and desensitization of traumatic memory fragments facilitates their integration into the cognitive system of the personality. Applied to functional infertility therapy, this implies not only improvement in subjective well-being but also restoration of an internal sense of safety necessary for activating reproductive function [31, 98, 104, 119].

At the same time, EMDR application requires compliance with safety conditions related to the level of mental stability and the patient’s capacity for self-regulation. In cases of pronounced dissociative symptomatology, high emotional lability, or tendency toward rapid distress escalation, processing traumatic material without prior preparation may be

accompanied by symptom exacerbation and reduced therapy tolerance. Therefore, in practical implementation, the preparatory stage, including psychoeducation, stabilization, and development of resourcefulness skills, holds substantial significance. These procedures create a foundation for controlled work with traumatically significant experiences and enhance the effectiveness of subsequent processing stages.

4.2 Development and Substantiation of the EMDR Psychotherapeutic Program

The development of the EMDR psychotherapeutic program was based on the necessity of targeted intervention into key psychological reactions maintaining functional infertility, as identified in the preceding research stage. The complex of data — elevated anxiety, pronounced neuropsychological tension, depressive symptomatology, high level of intrapersonal conflict, and ambivalent attitudes toward pregnancy — indicates the presence of maladaptive memories and emotional blocks indirectly influencing reproductive function via a psychophysiological pathway. Within the Adaptive Information Processing model, such stable emotional and behavioral reactions are viewed as consequences of unprocessed experience, activated by reproductive situation triggers and maintaining current distress. Consequently, when designing the program, the key principle became targeting episodes characterized by the highest affective load and their substantive connection to symptomatology and intrapersonal conflict.

From this perspective, the EMDR program was designed as a short-term, structured psychotherapeutic program aimed at processing traumatic memories and eliminating maladaptive cognitive-emotional links that hinder the formation of more stable emotional regulation and reduction of stress-reactivity in the reproductive situation. The foundation was the Adaptive Information Processing model, which views symptoms as the result of "fixed" memories retaining a high emotional charge and disrupting regulation of contemporary functioning. The choice of EMDR was conditioned by its capacity to process affectively loaded material within a limited number of sessions and reduce physiological hyperarousal, which is significant in stress-associated forms of functional infertility [14, 46, 74].

The program comprised six consecutive sessions lasting 60–90 minutes each. This format aligns with short-term EMDR therapy protocols. The program structure replicates the classical eight-phase EMDR model and was adapted to account for request specificity [12, 17, 105].

During the preparation stage, particular attention was devoted to stabilization and regulation skill formation. This was required due to elevated reactive anxiety, pronounced irritability, and emotional background instability identified by FPI-R and Mendelevich–Yakhin questionnaire data. Additionally, preliminary interviews revealed the prevalence of conflicting family scripts and ambivalent attitudes toward pregnancy, which necessitated precise determination of therapeutic targets. Target memories became episodes related to traumatic family experience, losses, negative attitudes regarding motherhood, as well as situations forming the belief of personal inadequacy. In all cases, targets were selected based on maximum emotional charge and their current connection to experienced distress. Where processing tolerance was insufficient, the preparatory stage volume was increased through additional stabilizing and resource techniques.

Desensitization was conducted using horizontal eye-movement stimulation. Criteria for transitioning between stages included sustained reduction in subjective tension level and emergence of signs of spontaneous cognitive processing. During the installation phase, an adaptive cognition related to the experienced experience was fixed ("I can cope," "my body is safe," "I can be a mother").

The program was structured so that processing of at least three key memories related to intrapersonal conflict was planned, provided tolerance and therapeutic appropriateness were maintained. It was assumed that processing these elements would reduce overall anxiety, normalize emotional regulation, and diminish internal contradictions, which, according to neuropsychological models and research by Bal Z. and Uçar T. (2024), creates conditions for restoring the adaptive physiological response necessary for realizing reproductive function [18].

The EMDR psychotherapeutic program in this study represents a targeted method aimed at processing maladaptive emotional structures underlying functional infertility and restoring psychological conditions necessary for normalizing the reproductive process.

The obtained data do not allow viewing women with functional infertility as a clinically unfavorable group in a broad sense. Interview data indicated that part of the biographical indicators, including presence of childhood psychotraumas and resourceful family scripts, occurred with comparable frequency in both experimental and control groups. Therefore, the EMDR target in this study was not the fact of adverse life experience per se, but the manner of its emotional fixation and activation in the reproductive situation.

Intrapersonal conflict among participants manifested as a combination of striving for

motherhood with anxious expectations, self-blame, distrust of one's own body, fear of repeating a negative family scenario, or experiencing loss of control. From the AIP model perspective, these reactions may be maintained by incompletely processed emotionally significant memories. Upon activation of the pregnancy theme, such memories trigger a stable linkage "situation – emotion – negative belief – bodily tension."

The mechanism of EMDR action in this study was viewed as reducing the affective saturation of such memories, weakening associated negative cognitions, and diminishing bodily reactivity. As a result, the severity of conflictual tension in the spheres of self-attitude, interpersonal relations, and attitudes toward motherhood decreased. Thus, the therapeutic action of EMDR is explained not by direct influence on reproductive function, but by mediated reduction of chronic psychoemotional tension and restoration of more adaptive self-regulation.

4.3 Description of EMDR Therapy

Psychotherapy using EMDR was conducted individually, in six consecutive sessions, each relying on the standard eight-phase EMDR protocol and adapted to the specificity of the psychological state of women with functional infertility. The substantive content of stages was determined by pre-test diagnostic results, which showed pronounced anxiety, internal conflict, emotional vulnerability, and presence of maladaptive cognitions related to motherhood and family scripts.

Session duration was 60–90 minutes. Sessions were conducted at regular intervals (on average every 5–7 days) in individual counseling conditions with confidentiality maintained. Therapy was conducted by one specialist following a unified protocol, ensuring procedure standardization. Memories were selected that were accompanied by:

- stable negative beliefs ("I cannot cope," "my body is failing me"),
- elevated bodily tension (abdomen, diaphragm, chest),
- pronounced emotional reactivity (SUD ≥ 6).

Targets were recorded in the protocol with specification of:

- visual image,
- negative cognition (NC),
- positive cognition (PC),
- VoC (1–7),

– distress level SUD (0–10),

– localization of bodily sensations.

At the first stage, a refined anamnesis was collected with a focus on identifying episodes defining the structure of intrapersonal conflict. Interview data and test indicators were used to form a list of potential therapeutic targets. Priority was given to memories containing elements of emotional excess, experiences of loss, ambivalence regarding pregnancy, as well as episodes forming beliefs related to personal inadequacy or threat of family system disruption.

During the work, classical visual stimulation was used:

– horizontal movement of the stimulus from left to right,

– frequency 1–2 Hz (60–120 movements per minute),

– length of one set – 24–36 movements.

In cases of fatigue or difficulty maintaining focus, "butterfly" tactile stimulation (self-tapping) was applied. Auditory stimulation was not used.

The preparation phase was aimed at stabilizing the psychoemotional state and reducing the baseline tension level. Training in the "safe place" technique, breathing self-regulation, and short anxiety reduction methods was conducted. This phase was necessary because most participants exhibited high reactivity, as indicated by neuropsychological tension scales. Only after achieving stability and forming the capacity for self-regulation was transition to the assessment phase made.

During assessment, target memories associated with negative beliefs and current triggers were identified; for each target, standard EMDR protocol parameters were recorded, including subjective distress (SUD/SUDS) and validity of positive cognition (VoC) indicators. For most participants, negative cognitions were related to inability to control the situation, fear of repeating the maternal scenario, and doubts about psychological readiness for pregnancy.

During the desensitization phase, processing of the selected memory was conducted using bilateral stimulation (eye movements). Work continued until a marked reduction in SUD level and signs of neurophysiological content processing emerged—changes in image, cognitive reappraisals, and spontaneous associations. Participants often transitioned from experiencing threat or helplessness to neutral or adaptive interpretations of events. In cases of high emotional saturation, material was divided into separate fragments for sequential processing.

At the installation phase, a positive cognition reflecting the new interpretation of the

processed experience was reinforced. Selection of the positive cognition was individualized and often concerned restored sense of safety, trust in one's own body, or ability to cope with difficulties. Installation was conducted until a stable VoC indicator was achieved.

The body scan phase allowed identification of residual somatic reactions that might indicate incomplete material processing. Where tension was detected, additional stimulation sets were conducted until its disappearance. This stage acquired particular significance due to the pronounced somatization characteristic of the experimental group, as confirmed by Pregnant Woman's Attitude Test results.

The session concluded with a stabilizing technique, allowing the participant to exit the therapeutic process while maintaining emotional equilibrium. In subsequent meetings, reevaluation of processed memories was conducted, the degree of achieved changes was determined, and new targets were selected if necessary. The session structure is presented in Table 4.1.

Table 4.1 – Scheme of Key EMDR Session Procedures

Phase	**Content of Work**	**Technical Parameters / Transition Criteria**
1. Assessment	Identification of negative cognition (NC), positive cognition (PC), VoC and SUD indicators; fixation of bodily sensations; target formation	VoC (1–7); SUD (0–10); visual image detailing; specification of bodily reaction localization
2. Desensitization	Conducting series of bilateral stimulation; activation of image, emotions, and bodily sensations; brief state check ("What now?")	24–36 stimuli per set; frequency 1–2 Hz; no verbalization between sets; transition criteria: SUD ≤ 1–2, affect stabilization, absence of high-intensity emerging images
3. Installation of Positive Cognition	Reinforcement of positive cognition associated with the processed experience	2–4 sets to strengthen PC; VoC ≥ 6–7
4. Body Scan	Check for residual bodily tension; if necessary—additional short sets	Absence of localized tension; if present—additional 1–2 sets
5. Closure and	Session completion, emotional	"Safe place"; breathing regulation;

Phase	Content of Work	Technical Parameters / Transition Criteria
Stabilization	state stabilization; use of self-regulation techniques	reorientation technique; approximate duration 5–10 minutes
Techniques for Processing Blockage	Applied when SUD reduction was absent or difficulties arose	"Interweave" (soft cognitive inserts), clarification of image elements, transition to earlier episode (floatback)

On average, each participant processed two to three significant memories directly related to intrapersonal conflict and reproductively significant attitudes. The EMDR therapy structure ensured holistic impact on emotional, cognitive, and somatic components of conflict, creating conditions for overall recovery and subsequent evaluation of changes within post-testing.

The EMDR therapy structure by sessions is presented in Table 4.2.

Table 4.2 – EMDR Therapy Structure by Sessions

Session	Main Content of Work	Technical Elements
1	Target selection; analysis of key memories; formation of NC/PC list; training in stabilizing techniques	Determination of SUD and VoC; identification of bodily sensations; training in "safe place" technique and breathing regulation
2	Processing of the first (primary) target	Bilateral sets of 24–36 movements; tracking SUD/VoC dynamics; transition criterion: SUD ≤ 1–2
3	Work with additional target (family scenarios or negative attitudes)	Selection of NC/PC for new target; desensitization; installation of PC
4	Processing of the next emotionally significant memory	Work with bodily reactions; additional stabilization if necessary
5	Targets related to fears of pregnancy/childbirth or experience of loss	Desensitization; "interweave" techniques for blockages; floatback work if necessary

Session	Main Content of Work	Technical Elements
6	Integration of results; work with residual reactions; program completion	Final reduction of SUD; reinforcement of PC (VoC ≥ 6–7); body scan; concluding stabilization

The presented structure reflects the principle of gradual processing of emotionally significant material—from the primary target associated with maximum distress level to additional memories including family scripts, attitudes, and specific fears characteristic of women with functional infertility. The sequence of sessions ensures both reduction of immediate emotional reactivity and integration of changes at cognitive and bodily levels. The final session is aimed at consolidating the achieved effect and completing the therapeutic cycle, which allows minimizing residual tension and supporting a stable outcome in subsequent functioning.

During EMDR therapy, safety rules were observed, providing for immediate set termination in situations of excessive emotional arousal, emergence of dissociative signs such as perceptual blurring or feeling of detachment, as well as loss of participant focus on therapeutic material. In such cases, grounding techniques were applied to restore orientation and emotional stability, after which work continued in the standard mode. The psychotherapeutic program was considered completed upon achieving a stable, clinically significant reduction in subjective distress for main targets (generally to SUD 0–1 level) and increase in positive cognition validity (VoC to 6–7). In cases where these values were not achieved within the limited number of sessions, the course was concluded upon achieving maximum possible dynamics while maintaining stability and therapy tolerance, with residual reactions recorded for subsequent support.

4.4 Evaluation of Psychological State Dynamics Under the Influence of Therapy

Evaluation of the effectiveness of the EMDR psychotherapeutic program was conducted based on repeated psychodiagnostic examination data. Quantitative results are interpreted as changes in psychological mechanisms maintaining functional infertility—primarily stress-reactivity, anxiety-depressive symptomatology, somatovegetative tension, and severity of intrapersonal conflict.

Following the EMDR course in the experimental group, a reduction in perceived stress and frequency of negative experiences was noted alongside an increase in positive reactions on the PSS-10 scale. This profile indicates not only a decrease in emotional tension but also an enhancement of subjective control over ongoing events—that is, a shift from experiencing "unmanageability" of the reproductive situation toward more stable self-regulation.

A similar direction of changes was recorded on the Mendelevich–Yakhin questionnaire: indicators of stress, anxiety, and irritability decreased, as did somatovegetative manifestations. Importantly, for most scales, post-test values of the experimental group approached the control level, which strengthens the interpretation of dynamics as a result of psychotherapeutic intervention rather than a retesting effect.

Reduction in anxiety and depressiveness was confirmed by both personality scales (FPI-R) and the clinical PHQ-9 questionnaire: dynamics affected both cognitive-affective and somatic components of depression. At the same time, intergroup comparison in the post-test shows that the difference from the control group was preserved primarily for depressive symptomatology, which may reflect the greater "inertia" of precisely the depressive component in experiencing the reproductive crisis.

In AIP terms, such dynamics align with the notion that processing emotionally charged episodes reduces the frequency and intensity of automatic reactions (anticipatory anxiety, helplessness, catastrophizing), and alongside this—the intensity of affective response to reproductive situation triggers.

Particular attention deserves the reduction in somatized and vegetative manifestations (on Mendelevich–Yakhin and the somatic component of PHQ-9). For women with functional infertility, the bodily level often becomes the "site of fixation" for internal contradiction (tension, hypercontrol, sense of threat, bodily vigilance). Against this background, EMDR procedures, including fixation of bodily sensations and their processing (body scan stage), may contribute to reduced bodily reactivity and restoration of a sense of safety within one’s own body.

Additional context for the somatic component is provided by the baseline profile on the Pregnant Woman's Attitude Test — prior to intervention, women with functional infertility exhibited pronounced ambivalence in pregnancy acceptance, anxiety for the child, and somatization. Such a background is logically viewed as psychological processing of reproductive stress and the conflict "I want – it's dangerous – it's forbidden."

Intrapersonal Conflict – From Tension to Integration The most substantive appears the dynamics of the conflict sphere. According to Shipilov's Intrapersonal Conflict Scale, a reduction in overall conflict level and its main components ("I–I," "I–Others," "I–Activity") was recorded, and according to Karvasarsky's method—a decrease in maladjustment in key life spheres (family, professional, interpersonal, and personal-value). Psychologically, this can be interpreted as a weakening of chronic internal tension and an increase in self-regulation coherence—the intensity of competing tendencies related to motherhood, bodily experience, and family scripts decreases, as does the gap between significant needs and limiting beliefs.

In AIP logic, conflictual experiences may be maintained not so much by current circumstances as by repeated activation of unprocessed experience (losses, shame, sense of inadequacy, fear of relationship disruption). In this case, the reduction in conflict severity after EMDR can be viewed as a marker of integration of previously identified emotional nodes, which reduces the psyche's need to maintain contradiction through anxiety, bodily tension, and avoidance.

Process-clinical EMDR indicators (SUD/VoC dynamics by targets, formation and reinforcement of positive cognitions, reduction of bodily tension during body scan) provide a clear mechanism linking "in-session" work to final questionnaire changes. In this sense, the obtained macro-dynamics appears not as fragmented improvement across all scales, but as a sequential effect of processing emotionally significant material that previously maintained stress-reactivity and conflictual structure.

Nevertheless, it should be considered that large and very large effects were noted in the study; with a limited sample size, d values may be inflated. However, the coincidence of change direction across multiple methods and the absence of comparable dynamics in the control group support the conclusion regarding the systemic nature of the identified shifts.

4.5 Pregnancy in the Group of Women with Functional Infertility as an Outcome of Psychotherapeutic Intervention

Evaluation of reproductive outcome following the EMDR therapy course included registration of pregnancy occurrence in the group of women with functional infertility during the subsequent observation period. The observation period was counted from the completion of the therapy course and lasted 3–6 months. The fact of pregnancy was recorded based on

participant report and, where available, confirmed by medical documentation. As a result of observation, pregnancy occurred in 19 out of 61 women who completed the EMDR course, accounting for 31.15%.

The obtained indicator should be considered as an observed value within the framework of natural observation and a limited observation period. It does not allow concluding a causal influence of psychotherapy on pregnancy occurrence, as the reproductive outcome may be influenced by accompanying factors, including medical treatment, lifestyle changes, and features of reproductive anamnesis. In the absence of comparable data for the control group, this outcome should be interpreted as an additional clinically significant indicator requiring verification in a controlled design.

At the same time, the identified dynamics of psychological state following therapy—reduction in perceived stress and anxiety, decrease in depressive and asthenic manifestations, weakening of intrapersonal conflict intensity, and stabilization of self-attitude—may be associated with a more favorable course of adaptation to the reproductive situation. Such changes potentially reduce stress-reactivity and bodily tension, increase adherence to treatment recommendations, which collectively may act as one of the factors accompanying the realization of reproductive function.

Conclusions of Chapter 4

1. Functional infertility represents a psychosomatic state, the formation and maintenance of which are associated with a combination of emotional, cognitive, and motivational factors. The primary role in its psychological structure is occupied by intrapersonal conflict, associated with unintegrated traumatic experience, chronic stress, and ambivalent attitudes in the reproductive sphere.

2. Women with functional infertility are characterized by anxious, depressive, and asthenic manifestations, a high level of neuropsychological tension, subjective stress, and somatovegetative reactions. These features are coupled with heightened emotional vulnerability and reduced stress resilience.

3. The structure of intrapersonal conflict in women with functional infertility combines anxiety, emotional instability, tense experiences related to motherhood, contradictory representations of their own bodily experience and self-worth, and correlates with family scripts.

4. Based on the identified psychological targets, a short-term EMDR psychotherapeutic program (6 individual sessions of 60–90 minutes) was developed and theoretically substantiated, structured according to the eight-phase protocol logic and adapted to the specificity of women with functional infertility. The key principle of program construction was targeting episodes characterized by maximum affective load and direct connection with current distress and conflictual structure.

5. The methodological implementation of the program includes a mandatory preparatory component, target selection based on clinically significant criteria (negative beliefs, bodily tension, high distress level), and process control of processing by subjective distress and positive cognition validity indicators combined with clinical signs of processing. The protocol includes safety measures allowing management of arousal levels and prevention of disorganization when working with emotionally saturated material.

6. According to post-test diagnostic data, EMDR therapy was accompanied by pronounced positive dynamics in psychological state — reduction in anxiety, depressive and asthenic symptomatology, subjective stress, and neuropsychological tension, as well as a decrease in somatovegetative manifestations. Simultaneously, a reduction in intrapersonal conflict intensity was noted, which aligns with AIP mechanisms and may reflect integration of

previously maladaptively preserved experience and weakening of stress-reactivity to reproductive situation triggers.

7. As a clinical outcome during the 3–6 month observation period following course completion, pregnancy was registered in 19 out of 61 participants (31.15%). This indicator should be considered as an observed reproductive outcome accompanying positive psychological dynamics; however, its interpretation requires accounting for external factors and confirmation in a controlled design.

8. The Practical Implications of the developed program lies in its potential application as a short-term structured method of psychological support for women with functional infertility, aimed at reducing emotional dysregulation, decreasing intrapersonal conflict intensity, and enhancing resilience to reproductive situation stressors.

Conclusion

The conducted research enabled a comprehensive description of the features of intrapersonal conflict in women with functional infertility and an evaluation of the possibilities of psychotherapeutic intervention using EMDR. At the theoretical level, contemporary understanding of psychosomatic aspects of reproductive function, the influence of chronic stress, traumatic experience, and ambivalent attitudes on the formation of reproductive impairments was synthesized. The empirical stage provided multidimensional analysis of personality, emotional, and conflict characteristics of women with functional infertility and enabled comparison with indicators from a control group.

Results prior to EMDR therapy demonstrated that functional infertility is accompanied by pronounced emotional and personality impairments: heightened anxiety, depressive manifestations, neuropsychological tension, high levels of subjective stress, and specific conflict patterns related to the theme of motherhood, self-worth, and bodily perception. This structure reflects a combination of vulnerability, internal ambivalence, and unintegrated traumatic experience, which corresponds to the Adaptive Information Processing conceptualization.

The applied psychotherapeutic program based on EMDR demonstrated high effectiveness. Following EMDR therapy, women with functional infertility showed significant reductions in anxiety, depression, stress reactivity, somatovegetative manifestations, and neuropsychological tension, as well as decreased severity of intrapersonal conflict. Effect sizes (Cohen's d) across all key scales were substantial, indicating significant changes in emotional and personality domains. Compared to the control group, indicators in the experimental group aligned post-therapy, and depression levels were even lower, underscoring the depth of therapeutic change.

The obtained data confirmed that EMDR is an effective tool for processing traumatic memories, reducing conflictual tension, and restoring emotional resilience in women with functional infertility. Psychotherapeutic changes correspond to the propositions of the Adaptive Information Processing model: desensitization of traumatic memories leads to their integration, reduces affective charge, forms new cognitive connections, and contributes to restoring an internal sense of safety, which is a significant condition for reproductive health.

Effectiveness evaluation of the program enabled not only documentation of emotional

dynamics but also identification of interrelationships between reduction of intrapersonal conflict and improvement of overall mental state. These results demonstrate that working with conflict structure and emotional consequences of traumatic experience is a promising direction in supporting women facing functional reproductive impairments.

The research hypothesis was confirmed. Intrapersonal conflict indeed constitutes a significant psychological factor in functional infertility, and targeted intervention using EMDR leads to its reduction and normalization of emotional state.

Despite the theoretical and Practical Implications of the obtained results, the study has several limitations: absence of randomization, differences in group objectives, lack of control for medical factors, and absence of data on long-term sustainability of effects. Repeated psychodiagnostic assessment at a 3–6 month follow-up after EMDR course completion was not conducted. Consequently, the obtained data allow evaluation of immediate psychological indicator dynamics following intervention but do not provide grounds for a final conclusion regarding long-term effect stability. These limitations define directions for further research: use of randomized designs, sample expansion, inclusion of stress biomarkers, neuropsychological indicators, and investigation of long-term reproductive and psychological outcomes.

The conducted work expands scientific understanding of the psychological nature of functional infertility, clarifies the role of intrapersonal conflict, and substantiates the application of EMDR therapy as a method that has demonstrated effectiveness in reducing psychoemotional tension and intrapersonal conflict in women with functional infertility. The developed and tested program may be integrated into the practice of reproductive centers and psychological support, enhancing the quality of assistance for women experiencing reproductive difficulties.

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Appendices

Appendix 1. Freiburg Personality Inventory, Revised Form (FPI-R)

Instructions for the Participant You are presented with a series of statements. Please read each statement carefully and indicate whether you agree with it ("Yes") or disagree with it ("No"). Answer quickly, without overthinking; there are no right or wrong answers.

Structure and Statements (Adapted Form)

Scale 1. Neuroticism (N)

Do you often experience inner restlessness without an apparent reason?

Do you tend to become tired quickly during intense work?

Do you ever lose sleep due to anxious thoughts?

Do you easily succumb to despondency?

Do you ever worry intensely about trivial matters?

Do you often experience feelings of self-doubt?

Do you have a sense that life demands too much from you?

Do you find it difficult to relax even in a calm environment?

Do you tend to dwell on unpleasant events for a long time?

Do you ever feel oppressed by uncertainty about the future?

Scale 2. Spontaneous Aggressiveness (S) 11. Do you sometimes react sharply to criticism? 12. Do you easily become irritated during arguments? 13. Do you tend to defend your opinion by any means necessary? 14. Do you ever find it difficult to control your anger? 15. Do you often feel the desire to "put someone in their place"? 16. Do you notice sudden outbursts of sharpness in yourself? 17. Do you ever hurt others with your words? 18. Do you tend to stay angry for a long time? 19. Do you easily forgive offenses? *(reverse-scored)* 20. Do you often feel the urge to express dissatisfaction with those around you?

Scale 3. Depressiveness (D) 21. Do you tend to consider yourself less fortunate than others? 22. Do you often see life in gloomy tones? 23. Do you ever experience feelings of hopelessness? 24. Do you ever feel completely exhausted by life? 25. Do you often experience feelings of loneliness? 26. Do you ever have thoughts that everything has lost its meaning? 27. Do you ever find yourself expecting nothing good from the future? 28. Do you tend to believe that joys pass quickly? 29. Do you feel like an outsider among other people? 30. Do you ever find that nothing brings you joy?

Scale 4. Irritability (I) 31. Do you easily lose your temper? 32. Do you ever raise your voice during arguments? 33. Do you tend to become irritated when someone interferes with your plans? 34. Do you often get angry over trifles? 35. Do you ever respond rudely? 36. Do you feel impatient when things move slowly? 37. Do you easily criticize others? 38. Do you often become irritated with close people? 39. Do you ever regret words spoken in anger? 40. Do you tend to "boil inside" even if you do not show it?

Scale 5. Sociability (E) 41. Do you enjoy being in large company? 42. Do you easily make acquaintances with new people? 43. Do you derive pleasure from conversations? 44. Do you like being the center of attention? 45. Do you often seek out social interaction? 46. Do you ever feel bored when alone? 47. Do you enjoy making new acquaintances? 48. Do you like spending time in a group? 49. Do you feel lively and animated among friends? 50. Do you easily maintain conversation with strangers?

Scale 6. Equanimity (St) 51. Do you remain calm in difficult situations? 52. Do you easily cope with unpleasant events? 53. Are you able to maintain self-control during quarrels? 54. Do you tend to remain optimistic in the face of difficulties? 55. Do you often take control of situations? 56. Do you easily suppress outbursts of irritation? 57. Are you able to keep your emotions under control? 58. Do you often help others while remaining calm? 59. Do you maintain composure when tired? 60. Do you ever find it difficult to upset your equilibrium?

Scale 7. Reactive Aggressiveness (R) 61. Do you easily start arguments? 62. Do you ever respond with sharpness to perceived offense? 63. Do you tend to argue for the sake of principle? 64. Do you ever flare up suddenly? 65. Do you often experience feelings of hostility? 66. Do you easily react to injustice with aggression? 67. Do you ever argue even when you are not sure you are right? 68. Do you tend to make sarcastic comments about others' mistakes? 69. Do you ever hurt close people when irritated? 70. Do you often want to "vent" your anger?

Scale 8. Shyness (Sh) 71. Do you ever feel shy in new company? 72. Do you blush easily? 73. Do you ever feel awkward among strangers? 74. Do you ever find it difficult to start a conversation? 75. Do you tend to fear appearing ridiculous? 76. Do you often feel shy in the presence of authority figures? 77. Do you ever hesitate to say what you think? 78. Do you feel awkward in the presence of others? 79. Do you ever fear expressing your opinion? 80. Do you easily become embarrassed in unfamiliar settings?

Scale 9. Openness (Op) 81. Do you easily talk about your experiences? 82. Do you tend to share your innermost thoughts? 83. Do you ever find yourself telling more about

yourself than you should? 84. Do you often entrust personal secrets to others? 85. Do you easily admit your weaknesses? 86. Do you consider yourself a straightforward and frank person? 87. Do you ever tell things that you later regret? 88. Do you tend to share openly with people you barely know? 89. Do you enjoy discussing personal matters? 90. Do you believe it is better to be completely frank?

Scale 10. Extraversion–Introversion (Ex/In) 91. Do you enjoy noisy events? 92. Do you prefer active leisure in company? 93. Do you easily speak in front of people? 94. Do you ever feel burdened by solitude? 95. Do you enjoy participating in public events? 96. Do you derive pleasure from collective work? 97. Do you ever feel lively and cheerful in company? 98. Do you more often seek out people rather than solitude? 99. Do you ever feel bored without social interaction? 100. Do you enjoy being among people?

Scale 11. Emotional Lability (L) 101. Does your mood change frequently? 102. Do you ever transition quickly from laughter to tears? 103. Are you easily moved emotionally? 104. Does your mood ever depend on trivial matters? 105. Do you often experience sudden shifts in feelings? 106. Do you tend to change your attitude toward people quickly? 107. Do you ever oscillate between joy and sadness? 108. Do your emotions often interfere with you? 109. Do you ever surprise yourself with changes in your feelings? 110. Do you tend to react with excessive emotionality?

Scale 12. Masculinity–Femininity (M-F) 111. Do you enjoy romantic films or books? 112. Do you enjoy doing household chores? 113. Do you tend to show care for others? 114. Do people ever consider you excessively soft or gentle?

Control Scale (F) *(Some items are embedded—for example, socially desirable responses such as "I never lie," "I always get along easily with everyone," etc. These are typically not presented as a separate block in the appendix but are indicated as embedded elements.)*

Appendix 2. Clinical Questionnaire for Detection and Assessment of Neurotic States (K.K. Yakhin, D.M. Mendelevich)

Instructions for the Participant Read each statement and indicate to what extent it corresponds to your state recently.

Rating Scale 0 – Never occurs 1 – Occurs rarely 2 – Occurs sometimes 3 – Occurs often 4 – Occurs almost always

Example Structure of Statements (Adapted Form)

Scale 1. Vegetative Disturbances

I often experience irregularities in heart function.

I sometimes find it difficult to breathe.

I often feel dizzy.

I experience episodes of heat or chills.

I often experience dry mouth.

I experience pain in the heart area.

I often sweat without an apparent reason.

I experience abdominal pain.

I am familiar with the sensation of a "lump" in my throat.

I often wake up at night due to unpleasant sensations.

Scale 2. Stress 11. I find it difficult to relax. 12. I constantly feel tension. 13. An anxious thought often "won't let go" of me. 14. I find it difficult to switch from one activity to another. 15. I feel tired even after rest. 16. I often feel that I am "holding myself back" with difficulty. 17. I find it difficult to disconnect from tasks before sleep. 18. I often "get stuck" on problems. 19. I feel inner tension. 20. It seems to me that I am working at the limit of my abilities.

Scale 3. Anxiety 21. I often anticipate unpleasant events. 22. I sometimes find it difficult to cope with fear. 23. I often experience inner trembling. 24. I am familiar with the feeling of unexplained anxiety. 25. I fear that something might happen to me. 26. I worry without sufficient grounds. 27. I fear unexpected events. 28. I often anxiously await the worst. 29. I experience fear for my health. 30. I experience an unfounded sense of danger.

Scale 4. Depression 31. I often experience hopelessness. 32. I find it difficult to enjoy life. 33. It seems to me that everything around has turned gray. 34. I often think that nothing has meaning. 35. I easily lose interest in activities. 36. I sometimes experience feelings of guilt.

37. I often experience a sense of inner emptiness. 38. I find it difficult to believe that something good lies ahead. 39. I often think about my failures. 40. I feel that life has become burdensome.

Scale 5. Asthenia 41. I become tired quickly. 42. I often lack energy. 43. I find it difficult to concentrate on work. 44. I experience drowsiness during the day. 45. I find it difficult to perform routine tasks. 46. I often experience weakness. 47. I feel a decline in energy. 48. I find it difficult to start new tasks. 49. I quickly lose interest in what is happening. 50. I experience difficulties with memory.

Scale 6. Irritability 51. Trifles irritate me. 52. I easily lose self-control. 53. I often snap at close people. 54. I find it difficult to respond calmly to criticism. 55. The slowness of others gets on my nerves. 56. I often feel dissatisfaction with those around me. 57. I easily enter into arguments. 58. I am sometimes intolerant of others' mistakes. 59. I experience irritation without an apparent reason. 60. I find it difficult to restrain outbursts of anger.

Appendix 3. Perceived Stress Scale (PSS-10)

Instructions for the Participant Below are statements about your thoughts and feelings over the past month. For each statement, indicate how often you felt that way using the following scale:

0 – Never 1 – Almost never 2 – Sometimes 3 – Fairly often 4 – Very often

Statements

In the past month, how often have you been upset because of something that happened unexpectedly?

In the past month, how often have you felt that you were unable to control the important things in your life?

In the past month, how often have you felt nervous or stressed?

In the past month, how often have you felt confident about your ability to handle your personal problems? *(reverse-scored)*

In the past month, how often have you felt that things were going your way? *(reverse-scored)*

In the past month, how often have you found that you could not cope with all the things that you had to do?

In the past month, how often have you been able to control irritations in your life? *(reverse-scored)*

In the past month, how often have you felt that you were on top of things? *(reverse-scored)*

In the past month, how often have you been angered because of things that happened that were outside of your control?

In the past month, how often have you felt difficulties were piling up so high that you could not overcome them?

Appendix 4. Patient Health Questionnaire-9 (PHQ-9) for Assessment of Depressive Symptoms

Instructions for the Participant Below are statements about how you have been feeling over the past two weeks. For each statement, indicate how often you have experienced the corresponding state.

Response Scale 0 – Not at all 1 – Several days 2 – More than half the days 3 – Nearly every day

Questions

Little interest or pleasure in doing things?

Feeling down, depressed, or hopeless?

Trouble falling or staying asleep, or sleeping too much?

Feeling tired or having little energy?

Poor appetite or overeating?

Feeling bad about yourself—or that you are a failure or have let yourself or your family down?

Trouble concentrating on things, such as reading the newspaper or watching television?

Moving or speaking so slowly that other people could have noticed? Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual?

Thoughts that you would be better off dead or of hurting yourself in some way?

Scoring Total scores range from 0 to 27.

5–9 points: Mild depression

10–14 points: Moderate depression

15–19 points: Moderately severe depression

20–27 points: Severe depression

Appendix 5. Semi-Structured Interview Guide

Instructions for Conducting the Interview Purpose: To identify personal and family factors associated with the experience of functional infertility, features of reproductive attitudes, experience of traumatic events, and intrapersonal conflict.

For the Interviewer: The interview should be conducted in a trusting atmosphere; duration: 30–45 minutes. Questions are open-ended and allow for clarifications and additional comments. The interviewer should follow the structure but may vary wording to maintain dialogue.

Block 1. General Information

Tell me a little about yourself (age, education, marital status).

What are your main life priorities at the moment?

Block 2. Family of Origin Experience

What do you remember about your childhood?

What were the relationships between your parents like?

What did you learn about the roles of women and men in the family?

Were there examples in your family of caring or, conversely, difficult parenting?

Block 3. Traumatic Experience

Have there been events in your life that you consider difficult or traumatic (e.g., loss of loved ones, violence, parental divorce)?

How do you think these events have affected you and your relationships?

Block 4. Attitudes Toward Motherhood and Parenthood

How do you feel about the idea of motherhood in general?

What does having a child mean to you?

With what feelings do you perceive your difficulties with conception?

How, in your opinion, would a child change your life?

Block 5. Relationship with Partner

How would you describe your relationship with your partner?

Do you feel supported in the situation of difficulties with conception?

Do conflicts arise related to the topic of reproduction?

Block 6. Personal Experiences and Internal Conflicts

Do you experience internal contradictions related to motherhood and infertility?

Do you have expectations or demands of yourself that are difficult to fulfill?

What feelings most often arise when you think about your situation?

Block 7. Resources and Support

What helps you cope with difficulties?

Are there people or activities that bring you relief?

What, in your opinion, could help you in this situation?

Appendix 6. "Conscious Parenthood" Questionnaire

Instructions for the Participant Below are statements concerning your views on parenthood. Please read each carefully and indicate the extent to which you agree or disagree using the following scale:

1 – Strongly disagree 2 – Somewhat disagree 3 – Undecided / Neutral 4 – Somewhat agree 5 – Strongly agree

Statements

Subscale: Awareness of Parental Attitudes

It is important for me to understand why I want to have a child.

I realize that motherhood (fatherhood) involves not only joy but also difficulties.

I consider it necessary to prepare for parenthood in advance.

I understand that a child is a separate individual, not merely an extension of the parents.

It is important for me to think about the child's future.

Subscale: Responsibility for the Child 6. I feel ready to take full responsibility for the child's health and upbringing. 7. I believe that parents should place the child's interests above their own. 8. I realize that the arrival of a child will change the usual way of life. 9. I am ready to care for a child even if it requires giving up personal plans. 10. Raising a child requires constant attention and effort from parents.

Subscale: Partner Support 11. I am confident that I can count on my partner's support in matters of child-rearing. 12. It is important for me to discuss views on child-rearing with my partner. 13. Shared parenting strengthens family relationships. 14. I feel that my partner shares responsibility for the child's future with me. 15. I trust my partner in matters of upbringing.

Appendix 7. Pregnant Woman's Attitude Test (I.V. Dobryakov)

Purpose of the Instrument: To diagnose the emotional-cognitive attitude of a woman toward pregnancy and expected motherhood, and to identify the severity of the main components of the psychological component of the gestational dominant (PCGD).

Instructions Read each group of statements and select the one that most accurately reflects your feelings and experiences.

Example Content of Scales (Adapted Form)

Pregnancy Acceptance

I perceive pregnancy as a natural state for a woman.

Pregnancy is a source of joy for me.

I find it difficult to accept the changes associated with pregnancy.

Anxiety for the Child

I often worry about the child's health.

I think about possible complications.

I experience worry related to the future child.

Satisfaction with Relationships

My husband supports me and is happy about the future child.

Close people treat my pregnancy with understanding.

Sometimes it seems to me that my partner does not share my experiences.

Somatization

I perceive pregnancy as a physically burdensome condition.

I often experience physical discomfort.

Psychological tension manifests in my body.

Scoring Each selected option is scored (0–4). Scores are summed separately for each scale. The higher the score, the more pronounced the corresponding component of attitude toward pregnancy.

Interpretation

High scores on the "Pregnancy Acceptance" scale reflect a harmonious and positive attitude.

High values on "Anxiety for the Child" indicate heightened concern and risk of an anxious type of PCGD.

Low scores on "Satisfaction with Relationships" are associated with a perceived deficit of support.

High scores on "Somatization" indicate a tendency toward bodily expression of emotional tension.

Appendix 8. A.I. Shipilov's Intrapersonal Conflict Scale "Level of Intrapersonal Conflict"

Purpose of the Instrument: To diagnose the level and structure of intrapersonal conflicts, as well as to identify the leading spheres of their manifestation.

Instructions You are presented with a series of statements. Please read each carefully and indicate to what extent it corresponds to your inner state.

Rating Scale 0 – Completely disagree 1 – Somewhat disagree 2 – Undecided 3 – Somewhat agree 4 – Completely agree

Example Statements (Adapted Form)

Sphere "I–I" (Self-Relation)

"I often feel contradictions in my self-evaluation."

"I find it difficult to accept my own mistakes."

Sphere "I–Others" (Interpersonal Relations)

"I experience internal contradictions in communication with people."

"I often simultaneously want to get closer to and distance myself from close people."

Sphere "I–Activity"

"I doubt the correctness of my choice of profession or occupation."

"I experience dissatisfaction with my own effectiveness."

Additionally, separate types of conflicts are assessed (motivational, moral, role-related, adaptive, self-esteem conflicts, unfulfilled desire conflicts).

Scoring

For each sphere ("I–I," "I–Others," "I–Activity"), scores are summed for the corresponding statements.

The total score across all items gives the overall level of intrapersonal conflict (low, medium, high).

If necessary, specific types of conflicts (motivational, moral, etc.) are analyzed to clarify the specificity of the conflict.

Interpretation

High scores in the "I–I" sphere indicate pronounced inner ambivalence and contradictory self-esteem.

High values in the "I–Others" sphere reflect difficulties in relationships and internal

conflicts in contacts with others.

Elevated scores in the "I–Activity" sphere indicate doubts and contradictions related to activity and self-realization.

A generally high level of conflict characterizes a personality as tense and prone to internal contradictions, which may be a significant factor in the development and maintenance of psychological difficulties.

Appendix 9. B.D. Karvasarsky's Method "Spheres of Actual Conflict"

Purpose of the Instrument: To identify the severity of intrapersonal conflicts in key spheres of life activity.

Instructions for Participants Assess to what extent internal contradictions and difficulties are characteristic for you in the listed spheres of life. For each sphere, assign a rating from 0 to 4:

0 – No contradictions 1 – Mild severity 2 – Moderate severity 3 – Significant severity 4 – Extremely pronounced contradictions

List of Spheres

Family-Domestic Sphere: Relationships within the family, distribution of roles, household management, care for close ones.

Professional Sphere: Work or studies, career aspirations, self-realization in one's profession.

Interpersonal Sphere: Contacts with others, communication, interaction with friends and colleagues.

Personal-Value Sphere: Value system, life goals, self-esteem, meaning-of-life orientations.

Scoring For each sphere, the selected score is recorded. The final profile represents a set of values across the four spheres. The higher the score, the more pronounced the conflict severity in the corresponding sphere. Comparison of profiles allows identification of the leading zones of intrapersonal tension.

Appendix 10. Statements of Program Participants

Phrases are anonymized; participant codes are provided.

Table A10.1 – Statements of Program Participants

Code	Theme	Statement Prior to EMDR	Negative Cognition	SUD	Positive Cognition After Processing	SUD After
U-04	Unsuccessful conception attempts	"Every month I expect that nothing will work out again, and I feel guilty in advance"	"I cannot cope"	8	"I can stop blaming myself"	2
U-11	Attitude toward body	"It seems to me that my body is letting me down"	"Something is wrong with me"	9	"My body is not an enemy; I can relate to it more calmly"	2
U-19	Family scenario	"Mom always said that a child ruins a woman's life"	"Motherhood is dangerous"	7	"I can build my own experience differently"	1
U-26	Social pressure	"When people ask about children, I feel like I'm falling through and want to disappear"	"I am inadequate"	8	"My worth is not defined by pregnancy"	2
U-37	Fear of pregnancy	"I want a child, but at the same time I am afraid I won't be able to handle the pregnancy"	"I won't be able to handle it"	7	"I am coping gradually and receiving support"	2
U-43	Relationship with partner	"It seems to me that he will be disappointed in me if pregnancy does not occur"	"I will be rejected"	8	"I can talk about my feelings and rely on the relationship"	3