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PSYCHOLOGICAL ADJUSTMENT OF WOMEN WITH COSMETIC PROBLEMS OF THE FACIAL SKIN

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CONTENT

INTRODUCTION

Relevance of the research topic.

In recent years, one of the most important tasks of professional interaction between doctors of various specialties and medical psychologists has been the prevention of mental adjustment disorders due to stress factors associated with the disease and treatment. Practical experience in the field of cosmetological correction convinces that facial skin defects, as a rule, do not involve serious health complications or vital threats, but nevertheless, significantly affect the emotional state, social functioning and overall quality of life of the patient (Sats E.A., Slobodchikov I.M., 2015; Maisel A. et al., 2018; Bagnenko E.S., Grinenko A.O., 2022). However, special psychological research in the field of aesthetic medicine is presented only in a few works, such as mental adaptation disorders are indicated in patients of a cosmetology clinic, which is reflected in the incidence of anxiety, depression and personality disorders, exceeding the population indicators (Sarwer D.B., 2019; Özkur E. et al., 2020).

This is mainly due to the importance of a person's appearance for his or her self-esteem (emotional-value attitude towards oneself), self-concept (Burns R., 1986) and self-confidence in social interaction. Thus, the results of a number of studies show that dissatisfaction with one's appearance negatively affects a person's psychological state, self-perception, behaviour and social relationships (Sats E.A., 2015; Rumsey N., Harcourt D., 2005; Sarwer D.B., 2019), is a cause of chronic stress and a risk factor for mental maladjustment (Svyatenko L.V., 2012; Carrard I. et al., 2019). Such dissatisfaction is often seen as a consequence of a person's inability to constructively resolve difficult life situations and intrapersonal conflicts. The pathogenetic concept of neuroses and psychotherapy accepted in our country (Illness and health, psychotherapy..., 2019) convincingly proves that the basis for a global violation of the system of significant relations of the individual, as the most important etiological factor of neurotic disorders, lies precisely in an inadequate attitude to oneself. It has been established that patients with neuroses

are characterised by the presence of not just one conflict, but a wide range of them, '... among which an emotionally unfavourable, inadequate attitude towards oneself acts as the most pathogenic, causing many subjectively unresolvable contradictions' (ib., p. 158). Under these conditions, identifying the risk of mental disadaptation in healthy people who are dissatisfied with their appearance, manifested by subclinical forms of mental and psychosomatic disorders, can be considered one of the clinical tasks of a dermatologist-cosmetologist.

It is also obvious that a person's psychological reaction to a cosmetic defect is determined not only by his character, but also by his individual psychological characteristics. Therefore, it is of special importance to analyse the structure and dynamics of psychological adaptation, which, together with physiological and social adaptation, is the most important structural component in the general system of human mental adaptation (Aleksandrovsky Yu.A., 1976, 2021; Wasserman L.I. et al., 2011). This analysis involves the use of psychological diagnostic methods to identify the current emotional state, personality structure, its value-motivational sphere, individual methods and resources of stress management behaviour, a system of significant relationships that act either as factors of increased risk of maladjustment or, on the contrary, as protective factors (Shchelkova O.Yu., 2008; Basic methods of psychological..., 2021).The analysis of the components of psychological adaptation is particularly important for patients with facial skin defects due to its critical role in the dynamics of interpersonal interaction (Human Face: Cognition..., 2019).

Programmed revitalisation of facial skin is one of the modern comprehensive treatment approaches, highly individual in nature, including in each specific case various combinations of hardware methods of influence, injection methods, external agents, methods of dermatological and cosmetological home care, per os preparations, etc.

Elimination (minimisation) of facial skin problems using complex methods of therapeutic correction and with the help of plastic surgery can significantly contribute to the restoration of the optimal psychological state of the individual and

quality of life (Alexandrov A.A., Bagnenko E.S., 2012; Balkrishnan R. et al. , 2006; Sadick N.S., 2008; Dayan S.H., et al., 2019; Asimakopoulou E. et al., 2020; McKeown D.J., 2021; Shah P., Rieder E.A., 2021). Specific studies show that improvement in facial skin and other changes in appearance after therapeutic correction have a positive effect not only on satisfaction with the physical self, but also on psychological state and social functioning (Ribeiro F., Steiner D., 2018; McKeown D.J. 2021; Shah P., Rieder E. A. 2021; Kurtti A. et al. 2022).

It is obvious that such psychological changes and satisfaction with the quality of life, as well as the individual's reaction to a cosmetic defect, do not depend only on the objective effect of treatment, but are determined by many individual and socio-psychological factors, such as a system of value orientations and personal meanings (Leontyev D.A., 2007; Grishina N.V., 2018), deep experiences and psychological problems of the individual (Kryukova T.L., Osminina A.A., 2020; Osminina A.A., 2021), 2018), deep experiences and psychological problems of the individual (Kryukova T.L., Osminina A.A., 2020; Osminina A.A., 2021), their typological characteristics, features of a specific life situation, cognitive attitudes (Varlashkina E.A., 2015) and the degree of internalisation of the standard ‘ideal’ physicality presented in a certain culture (Tkhostov A.Sh., 2002; Tkhostov A.Sh., Nelyubina A.S., 2019; Talley H.L., 2014; Hashim P. et al., 2017). In this regard, consideration of the psychological characteristics of women with cosmetological problems as risk factors for mental adjustment disorders, as well as resources for their optimisation in the process of therapeutic correction, taking into account the nature of the defect itself and the effectiveness of treatment, is relevant and meets the needs of a cosmetological clinic.

From a scientific point of view, such integration of medical and psychological aspects of cosmetological treatment into one study can contribute to the further development of the biopsychosocial approach to understanding human health and disease, the preventive and adaptive (person-oriented) orientation of modern medicine and medical psychology. It is important to bear in mind that the

patient population of a cosmetic clinic, unlike that of a plastic surgery clinic, has not been studied from a sociological or psychological point of view. This study, carried out by a practising dermatologist-cosmetologist who is daily convinced of the importance of the psychosocial aspects of treatment, aims to draw the attention of the medical and psychological community to this problem, in order to optimise treatment and increase the psychological well-being of patients. This is all the more important as almost all the publications available in the literature do not include the results of detailed psychometric studies and only a few studies reflect the influence of the cosmetological correction of skin problems on the psychological status of patients.

Research purpose

The purpose of the research is to analyse the clinical, socio-demographic, social and individual psychological characteristics of women with cosmetic problems. It was necessary to develop, on the basis of literature data and empirical research, a theoretical concept of the psychological adjustment of women with cosmetic problems and to present it in the form of a structural-functional model that integrates the clinical, social and psychological characteristics of patients in their systemic unity and interaction.

Research objectives

1. To study the socio-demographic and socio-psychological characteristics, to analyse the main clinical characteristics of women with facial skin problems seeking cosmetological help.

2. To determine the general level of neuroticism, the level of everyday stress and the level of social frustration of women seeking cosmetological help; in the same group of women, to determine the level of psychological well-being and satisfaction with the quality of life.

3. To study the individual psychological characteristics of personality, motivational sphere and system of significant relationships, including the attitude to oneself, a cosmetological defect and its treatment, and the time perspective of women seeking cosmetological help.

4. To study the psychological mechanisms (cognitive-behavioural strategies and personal resources) of overcoming the stress caused by a cosmetic defect in the facial skin of women seeking cosmetic help.

5. To carry out a comparative analysis of the psychological characteristics of patients in a beauty clinic with normative psychodiagnostic data from the country.

6. To carry out a comparative analysis of psychological characteristics in groups of patients identified on the basis of objective (degree of severity of the cosmetic problem) and subjective (level of neuropsychic adaptation determined on the basis of data from a symptomatic self-assessment test) indicators. To identify from the set of psychological characteristics studied (psychodiagnostic indicators) those with the most prognostic value with regard to the risk of mental adaptation disorders (emotional-affective disorders).

7. To study the relationship between the psychological characteristics of patients in a beauty clinic and their clinical and socio-demographic characteristics; to study the relationship between psychological characteristics and various aspects of attitudes towards one's own appearance and subjective satisfaction with the treatment of patients in a beauty clinic.

8. To identify the main 'psychological profiles' (clusters) of women with cosmetic facial skin problems using the methods of mathematical statistics.

9. To identify the dynamics of the general level of neuroticism, other psychological characteristics and states of women with cosmetic problems during treatment; to conduct a comparative analysis of the dynamics of psychological characteristics in groups of patients with different risks of mental adjustment disorders (emotional and affective disorders).

10. In accordance with the methodology of a systematic approach accepted in Russian psychology, using data from literature analysis and the results of empirical research, to develop a theoretical concept of psychological adaptation of women with cosmetic problems of the facial skin, presenting it as a dynamic system that integrates clinical, social and psychological characteristics.

11. Based on the results of the dissertation research and clinical experience in the field of medical cosmetology, to determine the main directions of psychological assistance to women with cosmetic problems of the facial skin, to develop recommendations for dermatologists and cosmetologists aimed at optimising the process of therapeutic correction, taking into account social and psychological factors.

Research object: the system for the psychological adaptation of women with cosmetological problems of the facial skin.

Research subject: clinical (main symptoms, their severity and duration, comorbidities, impact on life activities, treatment efficacy); socio-demographic (age, family, education, occupation); social and individual psychological (significant relationships of the individual - relationships with the reference social environment, attitude towards oneself, towards a cosmetic problem and treatment, towards a time perspective); emotional-affective status - levels of neuroticism, perceived stress and social frustration, psychological well-being and satisfaction with quality of life; structural personality characteristics; cognitive-behavioural coping strategies; value-motivational personality orientation) characteristics that together determine the psychological adaptation of women with cosmetic facial skin problems.

Research hypothesis

1. Patients in a beauty clinic have a number of psychodiagnostic indicators that differ from published average normative test data obtained from national samples. This difference is compensated by the effectiveness of psychological adaptation mechanisms - coping strategies and personal resources.

2. Among the psychodiagnostic indicators of patients in a beauty clinic, the most informative indicators that promote or hinder successful adaptation can be identified.

3. In the process of therapeutic correction, the dynamics of the psychological characteristics of the patients of abeauty clinic are noted; these dynamics differ in groups of patients with different emotional and affective status.

4. There is a natural (psychologically understandable and clinically justified) relationship between the clinical and socio-demographic characteristics of patients at a beauty clinic with their individual psychological characteristics and a system of significant relationships, satisfaction with various aspects of quality of life.

Theoretical and methodological basis of the dissertation

1. Principles of complex (Ananyev B.G., 1980) and systemic (Lomov B.F., 1996) approaches to psychology, understanding of the psyche as a complex system of interrelated functions, processes, states (Karpov A.V., 2005; Merlin V.S., 1986; Platonov K.K., 1986; Karpov A.V., 2005), personality as a system of relationships (Myasishchev V.N.).

2. The doctrine of functional systems and systemogenesis (Anokhin B.G., 1980), the systemic concept of mental adaptation and disadaptation (Berezin F.B., 1988; L.I. Wasserman L.I. et al., 1994; Aleksandrovsky Yu .A., 20-21); biopsychosocial model of human health and disease; integrative theories of somatic medicine, combining three aspects of the study of pathogenesis and therapy of any type of pathology: biological, psychological and social (Gubachev Yu.M., 1981; Kabanov M.M., 1998).

3. Methodology of psychological research in the clinic, modern ideas about principles and norms of conducting medical-psychological research (Bleikher V.M., Burlachuk L.F., 1978; Iovlev B.V., 1999; Solovyova S.L., 2005; Shchelkova O.Yu., 2008; Nikolaeva V.V., 2009; Wasserman L.I. et al., 2014).

The research methods were chosen according to the objectives. For the theoretical analysis, the following specific research methods were used: content analysis of scientific texts, conceptual analysis of knowledge (structuring), modelling with co-authors, generalisation of the experience of specialists and our own scientific and practical experience in the field of dermatology and cosmetology and medical psychology (expert method).

1. In order to develop and verify a structural-functional model of psychological adaptation of women with cosmetological problems during an

empirical study, a complex of clinical and experimental psychological methods was used, which included the following methodological blocks.

2. Methods for studying psychosocial characteristics and a system of significant relationships, including attitudes to oneself, to the social environment, to a cosmetological problem and treatment, to a time perspective: the author's structured interview, the medical-social scale 'Level of Social Frustration' (LSF), Visual Analogue Self-Assessment Scale (VAS), 'Semantic Time Differential' (STD).

3. Methods for assessing the emotional-affective state and the risk of mental maladjustment: screening express diagnostic 'Test of Neuropsychic Adaptation' (NPA), test questionnaires 'Level of Neuroticism' (NL), 'Perceived Stress Scale-10' (PSS-10).

4. Methods for assessing the level of psychological well-being and satisfaction with various aspects of quality of life: 'Well-Being Index' (WHO-V), 'Quality of Life Satisfaction Questionnaire' (QOL).

5. Methods to study the mechanisms of psychological adaptation. The Methods of Coping Behaviour (MCB) questionnaire was used to study coping strategies; the Big Five (BIGV) and Life Orientations (LO) personality test questionnaires were used to study psychological resources for coping.

A total of 12 psychological methods and techniques were used.

Mathematical and statistical processing of sociodemographic, clinical and psychodiagnostic data was performed using SPSS v. 25.0 and Excel.2010 statistical software packages.

The material of the empirical study, carried out in relation to the specific aims of the dissertation, consisted of psychological research data obtained before and after the treatment of 201 women (average age 39.21 years) who came to the Aesthetic Medicine Clinic with various cosmetic problems of the facial skin. These women were selected from a pool of more than 3,000 clinic clients in the period 2018-2022. Due to the dynamic nature of this study, patients who received targeted short-term cosmetic corrections were not included in the study. In total, the

analysis of the dissertation results included material from 402 psychodiagnostic studies.

Scientific novelty of the research

As a result of the first comprehensive non-sampled study, a cross-section of key socio-demographic, clinical and psychological characteristics of women with facial skin defects undergoing minimally invasive cosmetic treatment and the relationships between these characteristics are presented.

For the first time, in an empirical study, the qualitative characteristics of the psychological adjustment of women with cosmetic facial skin problems were determined in comparison with published national average normative data. Typical 'psychological profiles' of patients in a beauty clinic were also identified, as well as the most significant psychological factors in relation to the risk of psychosocial disadaptation, the most important of which were emotional instability and personality externality.

For the first time in domestic medical psychology, significant positive changes in emotional state (indicators of neuroticism, subjectively perceived stress, satisfaction with quality of life, general physical and psychological well-being), self-esteem of appearance, behavioural characteristics associated with volitional personality traits and the desire for self-realisation were objectified using psychometric methods at the end of cosmetic treatment in comparison with the period at the beginning. The most significant dynamics of psychological indicators was observed in the group of patients without the risk of emotional disturbance, which manifested itself primarily in the cognitive and emotional assessment of the current period of life.

For the first time, a theoretical concept of psychological adjustment in women with cosmetic problems has been developed from the perspective of a systems approach to psychology. Psychological adjustment is presented as a dynamic system of interactions between clinical, psychosocial and individual psychological factors.

Based on the theoretical concept, a structural-functional model of psychological adjustment was developed, including blocks of socio-demographic, clinical-biological, psychological characteristics and types of psychological ‘profiles’ of women with cosmetic facial skin problems.

Theoretical relevance of the research

The theoretical analysis of biological, socio-cultural and psychological factors in the perception of another person's appearance carried out in the first chapter of the dissertation can serve as a scientific basis for further research in the fields of general, social and personality psychology, considering appearance as an important factor in a person's psychological state, social functioning and quality of life.

In the field of medical psychology, the presented analysis reveals that the attitude towards one's own appearance is an important risk factor for psychological and social adjustment disorders. In the field of therapeutic cosmetology, the analysis of psychological studies presented shows the importance of individual clinical symptoms in the formation of emotional-affective, personal and behavioural characteristics of patients, which should be taken into account in the treatment process.

The importance of a number of clinical factors, social position and age for the psychological status of patients in a beauty clinic is demonstrated. Generalized ‘psychological profiles’ are identified, as well as individual psychological traits that can be considered key to optimal psychological adaptation, and risk factors for its disorders in this category of patients; it is shown that in the first case, personality and behavioural traits predominate, and in the second - traits of the emotional-affective sphere. The data obtained complement the ideas of modern medical psychology about the mechanisms of psychological adaptation and personality maladjustment.

In accordance with the methodology of systematic approach used in Russian psychology, using data from theoretical analysis of literature and the results of empirical research, a theoretical concept of psychological adaptation of women

with cosmetic problems of the facial skin was developed, which is presented as a dynamic system that integrates clinical, social and psychological characteristics in unity and interaction.

The concept of psychological adaptation of women with cosmetic problems, developed on the basis of the results of this study, complements the concepts of psychological adaptation, psychological support, prevention and rehabilitation of patients developed previously in various clinics, which form the theoretical basis of modern medical psychology.

The theoretical analysis of the existing studies on the influence of appearance on human life, the results of foreign psychological researches in cosmetology and our own empirical researches, the concept and the structural-functional model of psychological adaptation of women with cosmetological problems developed within the framework of this dissertation allow us to draw a conclusion on the formation of a new scientific direction in medical psychology and medical cosmetology - psychocosmetology.

Main scientific findings

1. Based on the analysis of world literature, the role of appearance, especially the face, in the success of interpersonal interaction and psychological well-being of a person is shown, evolutionary-biological and socio-cultural factors of perception of another person's appearance and ideas about beauty are analysed, and the maladaptive role of facial skin defects is shown. The conducted analysis formed a theoretical basis and determined the main directions of this research (Bagnenko E.S. The role of appearance in human social adaptation //Psychology. Psychophysiology. 2021. - Vol.14, No.3. - pp.105-113).

2. Data from foreign studies on the influence of certain types of facial skin defects (acne, scars, rosacea, melasma, etc.) on the psychological adaptation and quality of life of their carriers are analysed. The relevance, theoretical and practical significance of psychological research in a cosmetic clinic is substantiated against the background of almost complete absence of such research in domestic medical psychology and cosmetology (Bagnenko E.S. The influence of cosmetic defects in

women on their psychological state: a review of the literature and an experimental study // Mental Health. -2023. - Vol.18, No.7. - pp.21-29).

3. Based on the results of a continuous (non-sample) study, the main psychosocial characteristics and the system of significant relationships (including attitude to a cosmetological problem and motives for going to the clinic) of female patients of an aesthetic medicine clinic are presented for the first time. It has been shown that the vast majority of patients are young and middle-aged people with higher education, constantly working in such socially significant areas as science and education, private business; most of the women studied have a family and children. A statistical correlation was found between psychosocial characteristics (marital status and number of children, motives for visiting the clinic, subjective assessment of the impact of the cosmetic problem on the quality of life) with the severity of the space defect and the age of the patients (Bagnenko E.S. Psychosocial characteristics of patients at a cosmetology clinic: results of a study on a continuous sample //Review of psychiatry and medical psychology named after V.M.Bekhterev. - 2023. - Vol.57, No.1. - pp.48-60; Bagnenko E.S. Non-surgical correction of appearance: what motivates its consumers? //Psychology. Psychophysiology. 2022a. - Vol.15, No.3. -pp.26-34).

4. Individual psychological characteristics of patients at the cosmetic clinic were compared with normative psychodiagnostic indicators. Statistically significant differences between the patients and the ‘norm’ were found for 19 of the 23 indicators studied. Compared to the ‘norm’, the patients were less emotionally stable, but had a wide range of strategies and resources for coping with stress (mechanisms of psychological adaptation). Among personal characteristics, organisation, purposefulness, responsibility, willingness to cooperate, conservatism of attitudes and interests, pragmatism were identified (Bagnenko E.S., Grinenko A.O. Level of neuroticism in women with cosmetological problems of the facial skin //Bulletin of Psychotherapy. - 2022. - No.84. - pp.31-45; Bagnenko E.S. Psychological characteristics of patients at a

cosmetology clinic: results of comparison with normative data //Psychology. Psychophysiology.– 2023. – Vol.16, No.4. -pp.33-46).

5. The psychometric indicators of patients with reduced (54.1%) and not reduced (45.9%) levels of mental adjustment were compared (according to the NPA screening method). Statistically significant differences between the groups were found for 27 psychodiagnostic indicators characterising both the patients' current emotional state and stable individual psychological characteristics. Using multiple regression analysis, the most prognostic indicators of the risk of maladjustment were identified. They include ‘level of neuroticism’ (LN method), ‘locus of control - self (internality)’ (PIL method), ‘emotional stability’ (BIG V method), ‘support’ (QOL method): the lower the value of these indicators, the higher the risk of maladjustment (Bagnenko E.S., Isaeva E.R. Risk factors for mental maladjustment in women with cosmetic problems //Bulletin of Psychotherapy. – 2024. – No.89. – pp.40-50).

6. Non-standardised psychosocial indicators of patients with reduced and not reduced levels of mental adjustment were compared. As contrasted with well-adapted women, the group of patients with a reduced level of adaptation showed a predominance of emotionally neutral relationships with their own children, living alone, dissatisfaction in significant areas of life, especially in the material and economic sphere, the frequency of traumatic situations in the anamnesis, as well as lower indicators of satisfaction with the quality of life (Bagnenko E.S. Psychosocial factors of disturbance of mental adaptation of patients of a cosmetology clinic // Scientific notes of St. Petersburg State Medical University named after academician I.P.Pavlov. 2023c. - Vol.30, No.1. -pp.62-70).

7. In the system of significant relationships, attitudes towards self and time perspective are examined separately as important developmental factors and diagnostic criteria for neurotic and affective disorders. Women with reduced and not reduced levels of mental adjustment were compared. It was found that the groups differed statistically significantly in all psychological characteristics studied: self-esteem, attitude to oneself as an individual, attitude to the physical

self, confidence in one's external attractiveness, attitude to the present, past and future. (Bagnenko E.S. Attitude towards onself and the time perspective of women with cosmetic problems of facial skin /E.S.Bagnenko // Review of Psychiatry and Medical Psychology named after. V.M.Bekhterev. - 2024. - Vol.58, No.1. - pp.91-102).

8. In groups of patients with different levels of mental adaptation, indicators of coping strategies and personal resources were compared as important mechanisms for coping with stress. In the group of patients with a reduced level of adaptation, indicators for the strategies ‘flight-avoidance’, ‘distancing’, ‘self-control’ and ‘taking responsibility’ predominate. Personal coping resources are life-significance orientations associated with the assessment of one's own past (‘outcome’), present (‘process’) and future (‘goals’), and the level of inwardness is significantly higher in the comparison group. Conclusion: the decrease in the level of mental adjustment of patients in a cosmetic clinic is associated with emotionally oriented coping strategies of care (avoidance) and with strategies caused by fear, guilt or personal inadequacy, as well as with an external locus of control (Bagnenko E.S., 2021b; Bagnenko E.S., Grinenko A.O., 2023).

9. In a group of patients at a beauty clinic, a statistically significant relationship was found between a wide range of clinical indicators (diagnosis, duration, severity of skin defects, concomitant diseases) and psychological characteristics, as well as the age of the patients. Subjective satisfaction and objective treatment outcome correlated with extraversion and self-confidence, satisfaction with social and professional status, internal orientation and willingness to cooperate. The greater the severity of the facial skin defect, the more self-doubt and inability to cooperate are represented in the psychological status, and the lower the expert assessment of the effectiveness of treatment (Bagnenko E.S., Arabian E.R., Bogatenkov A.I., Bagnenko S.S. Interrelation of clinical and psychological characteristics of women seekingcosmetological help // Bulletin of Dermatology and Venereology. 2021. Vol. 97. No. 5. pp. 66-75).

10. Three clusters were identified, bringing together patients from a beauty clinic with similar ‘psychological profiles’. The analysis of variance made it possible to identify the most significant differences between the clusters in 35 psychodiagnostic indicators and, on their basis, to provide a meaningful description of the ‘profiles’, which received the conventional names ‘Optimal psychological adaptation’, ‘Complete psychological well-being, social success and its demonstration’, ‘Psychological illness’ and ‘call for help’ (Bagnenko E.S., Bogatenkov A.I. ‘Psychological profiles’ of patients of a cosmetology clinic // Living Psychology. -2023. - Vol.10, No.2(42). - pp.37-45.).

11. In a group of patients of a beauty clinic a comparative study of psychological characteristics was carried out in the periods before and after medical correction, which lasted on average 3 months. The results showed statistically significant changes in 11 out of 21 psychodiagnostic indicators reflecting positive dynamics of the following characteristics: level of neuropsychic adaptation, level of psychological well-being, evaluation of one's own appearance, individual personality characteristics 'self-awareness' and 'personal resources', general satisfaction with quality of life and its individual components, different nature of such dynamics in groups of patients with different levels of mental adaptation. (Bagnenko E.S. Dynamics of psychological characteristics of patients at a cosmetology clinic during treatment // Scientific notes of St. Petersburg State Medical University named after Academician I.P. Pavlov. 2023. Vol. 30, No. 2. P. 55-60; Bagnenko E.S., Bogatenkov A.I. Dynamics of the emotional state of patients of a cosmetological clinic in the process of non-surgical correction //Living Psychology. - 2023. - Vol. 10, No.5. - pp.16-25).

Practical relevance of the research

General ‘psychological profiles’ have been identified, as well as individual psychological characteristics that can be considered key to optimal psychological adjustment of patients in a beauty clinic - emotional stability, organisation and determination, cooperation, internality, the ability to flexibly use a wide range of

cognitive and behavioural coping strategies, satisfaction with self-realisation in the past period of life, and a positive attitude towards the future.

The most unfavourable factors are a high level of neuroticism (emotional excitability and instability, low frustration tolerance, egocentric personality orientation) and an external locus of control. Both favourable and unfavourable psychological factors can serve as a basis for the development of differentiated programmes for psychological support of the treatment process and psychological assistance to individual patients with difficulties in psychological and social adaptation.

An optimal (meaningful and sufficient) set of psychodiagnostic methods was identified to determine the most unfavourable prognostic factors for adjustment disorders in patients of a beauty clinic - test questionnaires ‘Level of Neuroticism’, ‘Meaning and Life Orientations’, ‘Big Five’ and ‘Quality of Life Satisfaction Questionnaire’.

An original structured interview (Appendix 1) has been developed for more in-depth psychological work with the patients of the beauty clinic, covering not only the individual psychological characteristics of the patients, but also their social relationships and satisfaction with them.

The main directions of psychological support for women with facial cosmetic problems and recommendations for dermatologists and cosmetologists, developed in accordance with the objectives of the study, can help to optimise the process of therapeutic correction, taking into account not only clinical, but also social and psychological factors, including compliance.

The main provisions submitted for defence

1. Patients who came to the clinic with cosmetic problems of the facial skin are characterised by a more intense subjective experience of stress, internal tension and a higher rate of emotional instability compared to the normative sample. At the same time, in comparison with the average ‘norm’, the patients are characterised by a lower level of neuroticism, which is a risk factor for mental maladjustment, and a lower intensity of efforts aimed at counteracting stress, which demonstrates

the effectiveness of mechanisms for coping with stress (mechanisms of psychological adaptation).

2. Patients at the beauty clinic use a wide range of strategies to cope with stress. Both constructive coping strategies (the use of social support, awareness of one's role and the opportunity to see the positive aspects of a problem situation, an analytical approach to its solution) and non-constructive strategies (the possibility of conflict-generating affective behaviour in a problem situation, cognitive or physical distancing from its solution) are more represented in a group of patients at a beauty clinic than in the average 'norm'.

3. The implementation of stress coping behaviour is facilitated by such personal coping resources as satisfaction with the lived period of life and self-realisation, as well as the general level of meaningfulness of life. At the same time, patients of a cosmetic clinic are less satisfied with their current life period than the normative group of women, but they have a more positive attitude towards the future.

4. Among the individual-typological personality traits of the group of patients, compared to the women who made up the normative sample, the traits of organisation, purposefulness, responsibility, cooperation and good will predominate; at the same time, they are more pragmatic, more conservative and more attached to stereotypes, and less inclined to search for something new, original and creative.

5. There is a close relationship between the psychological characteristics of patients in a beauty clinic and clinical characteristics - duration, severity, type of cosmetic defect, underlying diseases and effectiveness of treatment of facial skin defects. The most significant relationship with clinical symptoms is the patient's subjective assessment of the degree of influence of the cosmetic defect on life activity. At the same time, clinical and psychological characteristics are associated with a number of socio-demographic indicators, the most important of which are age, marital status (having one's own family), and the way in which patients live - alone or with relatives.

6. Using the methods of mathematical statistics, it is possible to identify groups (clusters) of patients of a cosmetic clinic with similar psychological characteristics - 'psychological profiles', called 'optimal psychological adaptation', 'complete psychological well-being, social success and its demonstration', 'psychological illness and the need for help'. Each of these 'profiles' presupposes a certain type of interaction between the attending dermatologist-cosmetologist and the patient, in some cases - counselling psychological assistance, the main directions of which are presented in the section 'Practical recommendations'.

7. Objectification of changes in psychological characteristics of patients in a beauty clinic during medical correction shows a significant change in emotional state of women at the end of minimally invasive cosmetic treatment in comparison with the period of its beginning. This includes a decrease in the level of neuroticism, the level of subjectively perceived stress, an increase in satisfaction with various aspects of quality of life, as well as an increase in the indicators 'self-awareness' and 'personal resources', which together characterise the maturity of the individual (its volitional component and creativity). The effectiveness of cosmetic treatment is associated with the representation in the personality structure of patients of characteristics that determine their compliance (adherence to treatment) - 'self-awareness' (organisation) and 'cooperation'.

8. According to the methodology of systematic approach used in Russian psychology, the psychological adaptation of women with cosmetological problems is a complex dynamic system aimed at the optimisation of the psychological state and quality of life of patients.It can be presented in the form of a structural-functional model that combines medical-biological (and clinical), demographic, social and individual psychological factors in their systemic unity and interaction.

Structure of the dissertation

The dissertation consists of an introduction, three chapters, a conclusion with the conclusions of the study, a bibliographical index according to GOST with 364 sources (160 in Russian and 204 in foreign languages), 5 appendices and a list of abbreviations; contains 51 tables, 3 figures.

Publication of materials

The results and main provisions of the dissertation research were published in 20 scientific papers, including 11 articles published in scientific journals from the list of publications recommended by the Higher Attestation Commission of the Russian Federation for the publication of the results of dissertation research, of which 1 paper was indexed in the scientometric database Scopus and also reported on the:

1. International Scientific Conference 'Ananyev Readings' (St. Petersburg, 2021; 2022).

2. Conference dedicated to the 90th anniversary of the birth of B.D. Karvasarsky: 'The Alliance of Psychology, Psychotherapy and Pharmacotherapy. Science and the real world in the treatment of mental disorders' (St. Petersburg, 2021).

3. Scientific and practical conference ‘Dzhanelidze Readings’ (St. Petersburg, 2023).

4. Scientific and Practical Conference ‘Galactic Intensive’ (St. Petersburg, 2021, 2022).

5. Baltic Congress of Plastic Surgery and Cosmetology (Kaliningrad, 2023).

6. International Summer Congress ‘Plastic, Reconstructive Surgery and Cosmetology’ (St. Petersburg, 2022, 2023).

7. National Congress with international participation ‘Plastic Surgery, Aesthetic Medicine and Cosmetology’ (M., 2023).

CHAPTER 1. APPEARANCE, PSYCHOLOGICAL ADJUSTMENT AND MEDICAL COSMETOLOGY: ANALYSIS OF MODERN RESEARCH

The chapter presents an analysis of domestic and foreign literature that reflects the importance of a person's appearance for his social functioning and psychological well-being, as well as a number of factors that determine the perception of another person's appearance. It reflects the modern understanding of the phenomenon of psychological adjustment and the results of studies on the risk of its disorders in patients of a beauty clinic.

1.1. A person's appearance as a factor of biological, social and psychological adaptation

The paragraph discusses the biological basis of the perception of another person's appearance, the role of this perception in an individual's social success, and the influence of appearance on women's psychological state.

1.1.1. The role of biological factors in the perception of another person's appearance

One of the trends in modern society is a growing concern with one's appearance, as evidenced by global statistics. Huge amounts of money are spent on cosmetic products worldwide every year. The number of visits to plastic surgeons and cosmetologists is increasing every year (Sadick N.S., 2008; Sadick N.S., Krueger N., 2014; Alam M. et al., 2015), and the latter has become a boom since 2015 (Galadari H.et. al., 2020; Pang R. et al., 2020; Ma Y. et al., 2021; Sezgin B. et al., 2021; Wang, J.V. et al., 2022), partly due to increased public awareness of these types of opportunities (Walker C.E. et al., 2021).At the same time, as members of society, we not only participate to one degree or another in shaping the rules of human coexistence, but we are also participants in role-playing according to those rules. Some, misunderstanding freedom, try to ignore these rules, but it is impossible not to react to them, also because some of these ‘rules’ are involuntary and determined by the biological nature of man.

One of these involuntary 'rules' is a person's assessment of, and reaction to, another person's appearance. It would be unfair to belittle the role and importance

of a person's inner spiritual beauty, which writers glorify, in the formation of interpersonal relationships, but it is no secret that in everyday life it is believed that people with a beautiful appearance have a lucky lottery ticket in life, and the owner of an ugly or non-standard appearance has a bad lottery ticket. creates a lot of difficulties similar to those experienced by the Ugly Duckling in the fairy tale of the same name by H.H.Andersen. How true are these ideas?

A number of works show that the loss of external attractiveness, especially as a result of gross scar changes after injuries and burns (Brown B.C. et al., 2008; Marshall C.D. et al., 2018), dissatisfaction with one's own appearance negatively affects a person's psychological state, behaviour and social relationships (Rumsey N., Harcourt D., 2005; Sarwer D.B., 2019), is a cause of chronic stress (Kulikov L.V., 2008) and a risk factor for mental maladjustment (Carrard I. et al., 2019; Streltsova M.A., Verbina G.G., 2020; Bagnenko E.S., 2021; Dobosz M. et al., 2022). This is particularly important for facial skin defects - the most important element of human communication (Libina A., 2003; Izard K., 2006; Human face: cognition..., 2019; Todorov A. et al., 2014; Milutinovic J. et al., 2014; Agrawal H., Agrawal S., 2021). The same thing happens in relation to patients with severe skin diseases, especially severe ichthyosis, psoriasis, acne, chronic eczema, rhinophyma and the like (Šitum M., 2016), and the adjective ‘leper’ is generally used as a synonym for an outcast of society.

According to I.M. Aderka et al. (2014), ugly appearance, real or perceived, can seriously interfere with a person's social functioning, causing anxiety and even panic or obsessive-compulsive disorders, and ‘in cultures where appearance is given special importance, its loss is tantamount to social death’ (Talley H.L., 2014).

According to S.N.Yaremenko (1997), ideas about the external beauty of human appearance depend on cultural, historical and national traditions, which may be connected with the way of dressing, hairstyles and make-up. M. Skov and M. Nadal (2021) claim the same thing, saying that an individual forms a judgement about the beauty of a particular person by comparing it with his internal idea of

beauty, but in our opinion these statements cannot be considered as an axiom.

The work of E.J.Cogsdill et al. (2014) shows that children's judgements of people's appearance between the ages of 3 and 10 are statistically significantly consistent with those of adults, leading the authors to conclude that judgements of beautiful or ugly appearance are formed in early childhood and do not require sufficient life experience.

The statement by S.N.Yaremenko (1997) also contradicts the result of a later work by D.Singh (2004), in which young women and men from the Azores, Guinea (Bissau), Indonesia and the United States were asked to rate the appearance of women using photographs. They unanimously agreed that women with a low waist-to-hip ratio were more attractive, leading the author to conclude that the assessment of appearance does not depend on certain national stereotypes, but is genetically programmed. The same results were obtained by V.Coetzee et al. (2014) in their cross-cultural study.

The results of modern research, without denying the role of a person's aesthetic preferences in the evaluation of another person's appearance, once again emphasize the validity of the philosophical statement that man is a biosocial being (Petlenko V.P., 1982). They indicate the important, if not leading, role of the biological basis of such an evaluation, in which the person being evaluated is instinctively viewed as a potential sexual partner or competitor.

From a biological and evolutionary perspective, the key conditions for the survival of a population are self-reproduction and an adequate food supply. At the instinctive level, both in animals (Espinas A.V., 2012) and in humans, beauty is associated with health (Samson N. et al., 2010; Brierley M.E. et al., 2016). Such an association is characteristic mainly for the evaluation of women's appearance; a man's handsome appearance is, to a small extent, associated by evaluators with his health (Weeden J., Foo Y.Z. et al. (2017) demonstrated the existence of a positive correlation between attractive facial features in women and masculine facial features and sperm quality in men.

Although one of the criteria for external attractiveness is its ‘statistical

average’ (Little A.C. et al., 2011; Bueller H., 2018), it has been found that female faces have a smaller chin, smaller nose and higher forehead, which is determined in the female body by the ratio of estrogen to testosterone levels. This in turn determines high reproductive potential (Cellerino A., 2003). Just like shiny, thick hair in animals, beautiful hair and skin are determinants of beauty in humans (Samson N., 2010), the quality of which depends on a number of factors, but primarily on the level of sex steroids in the blood (Lephart E.D., 2018; Lephart E.D., 2019). It has been established that the skin colour of Caucasians, caused by carotenoids in people with a rich diet of vegetables and fruit, makes a person more attractive to a greater extent than that associated with the melanin content in it, i.e. at an unconscious level, preference is given to healthier potential sexual partners (Whitehead R.D., 2012).

The same or similar features underlie the evaluation of the beauty of a person of the opposite sex (Bueller H., 2018), who is unconsciously evaluated as healthy or unhealthy (Rhodes G., 2006). According to J. Milutinovic et al. (2014), both men and women rate a symmetrical and proportional face as beautiful, but it loses its attractiveness with age precisely because of changes in proportions. Due to atrophy and expansion of the skeletal structure, the face becomes less tall but wider. Atrophy of adipose tissue makes the face more pronounced with the formation of depressions at the temples, recession of the cheeks and eyes. Loss of skin elasticity and atrophy of the ligamentous apparatus causes the soft tissues of the face to sag with the formation of wrinkles and folds, especially pronounced in the nasolabial area.

It is the symmetry of the face that is unconsciously associated with external attractiveness, even in 4-month-olds, while it turns out that it is not the top or the bottom of the face that is more important for the perception of a face as beautiful, but the right and the left (Liu C.H. et al., 2022). The importance of this symmetry is also confirmed by the results of studies by other authors (Yarosh D.B., 2019; Zheng R. et al., 2021).

An unexpected confirmation of this fact was the forced compliance of the

population with the mask regime due to the COVID-19 pandemic. In a study by V. Patel et al (2020), subjects were asked to rate on a 10-point scale the attractiveness of 60 male and female faces photographed with and without a medical mask. It was found that the mask made the faces more attractive, and for male and female faces initially rated as unattractive, this effect was found in 100% of responses, while for those initially rated as indifferent, it was found in only 70% of responses, and beautiful faces did not look more beautiful (Figure 1).

Figure 1 - A medical mask makes the face more attractive by masking the asymmetry of the face, which turns out to be most pronounced in the lower part. Photo by V.Patel et al., 2020.

Figure 1 - A medical mask makes the face more attractive by masking the asymmetry of the face, which is most pronounced in the lower part. Photo by V.Patel et al., 2020.

In line with this, the explanation for drunk men expanding the circle of women they find attractive in the study by L. G. Halsey et al. (2010) turned out to be a less clear assessment of facial symmetry under the influence of alcohol.

Research by neurophysiologists has identified specific areas of the brain responsible for judging the beauty of another person's face (Cela-Conde C.J. et al.,

2004; Gobbini M.I., Haxby J.V., 2006; Dural S. et al., 2015; Ferrari C. et al., 2017; Yarosh D.B., 2019; Cheng Q. et al., 2021), which is evidence (Kanwisher N., Yovel G., 2006) that ‘face perception is an important information-gathering and survival mechanism inherited from our primate ancestors’. This is confirmed by a study by C.K. Lutz et al. (1998), in which infant macaques were shown photographs of normal and artificially distorted adult faces; the infants looked at the normal faces with interest and quickly turned away from the distorted images. Previously (Maurer D., Barrera M., 1981) a similar result had been obtained in a study with 2-month-old human infants. In another study (Damon F. et al., 2019), humans and rhesus monkeys were shown photographs of humans and macaques, and the macaques paid attention to the images that humans rated as more attractive. When looking at photos of attractive people and macaques, the monkeys paid more attention to photos of their relatives, suggesting a species-specific perception of appearance.

Moreover, it has been shown (Nakamura K., Kawabata H., 2015) that transcranial electrical stimulation of different parts of the cerebral cortex influences the evaluation of the degree of attractiveness of a person's appearance, while the evaluation of the degree of attractiveness and the degree of unattractiveness are carried out by different parts of the brain. It has also been shown that the same areas of the brain are involved in the perception of the beauty of the body and face and in the perception of works of art (Cattaneo Z., 2020), and that their electrical stimulation makes the participants in the experiment rate the paintings presented to them as more beautiful.

According to O. Chelnokova et al. (2016), passive viewing of beautiful faces was found to increase activity in the brain's opioid reward system. The reward system is involved in creating a feeling of pleasure when, for example, we enjoy delicious food. The same system is involved in creating a feeling of pleasure when we see a beautiful face.

The biological importance of appearance is also confirmed by the results of an experiment (Krems J.A. et al., 2016) in which it was found that women can

distinguish between those who were photographed during the ovulatory phase and those who were not, based on photographs of other women. At the same time, the participants in the experiment who had a constant sexual partner felt more attracted to him, reflecting an evolutionarily fixed mechanism of protection against the threat of a potential home invader. In an experiment by U.M. Marcinkowska (2018) and co-authors, in which 3,720 women at different stages of the menstrual cycle, lactating or infertile (pregnant or postmenopausal) rated the attractiveness of masculine or feminine male faces, it was found that representatives of the first group significantly more often preferred masculine faces than lactating or postmenopausal respondents. Experiments (Probst F. et al., 2016; Passakova N. et al., 2019) also found that the appearance of women with high levels of estradiol in their saliva was rated as more attractive by men.

It has been shown (Swami V. et al., 2018) that women rate the appearance of the same people more critically than men. Men under stress (Swami V., Tovée M.J., 2012) and after drinking alcohol (Halsey L.G., 2010) rate a wider range of women as attractive, including the previously ignored ‘body positive’ (Bowdring M.A., Sayette M.A., 2018). Women rate men's attractiveness differently at different stages of their own menstrual cycle (DeBrune L.M. et al., 2005; Jones B.C. et al, 2019). People with physical disabilities, unlike other people, rate the appearance of people with such disabilities differently (Streltsova M.A., Verbinina G.G., 2020). People rate the appearance of other people differently as beautiful or ugly depending on their own emotional state (Zhu Q. et al., 2019). Pregnant women in the late stages of pregnancy consider themselves more beautiful and graceful than before pregnancy (Belogai K.N., Morozova I.S., 2019; Belogai K.N., 2021).

With regard to the determinants of female beauty, men's preferences during the survey are unconsciously given to women with a relatively low waist-to-hip ratio, a higher body mass index and curvaceous figures approaching the contours of an ‘hourglass’ profile, i.e. those with high reproductive potential (Fisher M.L., Voracek M., 2006). The same preferences have been observed in men under stress

(Swami V., Tovée M.J., 2012). From a biological point of view, under unfavourable conditions, females with these characteristics are more likely to ensure the survival of the population. In men's magazines, fashion models tend to be more curvaceous than in women's magazines (Fisher M.L., Voracek M., 2006), who probably unconsciously see these models as potential competitors for the right to own a man.

From the point of view of evolutionary psychology (Zaidel D.W., 2015), beauty is everything that contributes to the survival of a population. In this respect, external attractiveness is more important as a factor of sexual selection, according to Charles Darwin, than just a source of positive emotions: beautiful and therefore healthy, well-developed individuals can efficiently obtain food and produce healthy offspring (Ryan M.J., 2021; Rosenthal G.G., Ryan M.J., 2022). Proof to the contrary: in two studies, respondents rated the appearance of 188 and 377 asexual residents of the UK, i.e. those who said they were not attracted to either male or female representatives, while their appearance was rated as less attractive compared to people of heterosexual orientation (Swami V. et al., 2019). The work of J.V. Valentova and co-authors (2014) revealed statistically significant differences in the geometry of the faces of men who declared their homosexual orientation compared to heterosexuals, which may be one of the factors in women's choice of a sexual partner.

It has been shown (Anderson U.S. et al., 2010; Swami V., Tovée M.J., 2012; Jones B.C. et al., 2019) that women in different phases of their menstrual cycle evaluate the appearance of men similar to themselves differently, which makes it possible to avoid consanguineous marriages during the follicular phase of the cycle, when the probability of pregnancy is highest. This proves the influence of sex hormones on the evaluation of the appearance of a potential sexual partner.

H.C. Lie et al. (2008) showed in an experiment that the evaluation of the attractiveness of a person of the opposite sex is evolutionarily linked to a characteristic of the individual in question, such as the main histocompatibility complex, which is fixed by the process of natural selection and reflects the high

biological quality of a potential sexual partner.

In direct contact, the olfactory sense plays an equally, if not more important role than we realise when assessing the appearance of people of the opposite sex (Capparuccini O. et al., 2010; Sorokowska A., 2013), on the basis of which a comparison is made with one's own major histocompatibility complex HLA/MHC, which helps to avoid possible consanguineous marriages (Lundström J.N., Olsson M.J., 2010; Sergeant M.J., 2010), and for men also the timbre of a woman's voice (Valentova J.V., 2017).

In general, speaking about external attractiveness from a biological point of view, we can agree with the statement of M. Tadinac (2010) that 'beauty is not a cultural construct, the idea of which a person acquires through social functioning, but a biological characteristic, part of universal human nature. The presence of certain physical characteristics that allow the identification of a reproductively high-quality partner, ensuring natural selection'.

1.1.2. The influence of appearance on a person's social success

In addition to the proven role of biological factors in the perception of another person's appearance, numerous studies clearly show that people's appearance itself has a significant impact on their social functioning (Suemy V., Furnham A., 2009), and its correction helps to improve quality of life. This has been proven by specific studies.

According to M. Benzeval and co-authors (2013), existing ideas that beautiful appearance is a gift of fate that is associated with success in later life are usually based on limited studies of rather specific populations, with appearance judgments based on photographs. The authors conducted a longitudinal study in which the appearance of 1,515 young people from the west of Scotland was recorded at the age of 15 and their social success was tracked 20 years later. It was found that those who were more beautiful at the age of 15 had higher employment status, home ownership, higher income and were more likely to be married by the age of 36. Even after adjusting for the socio-economic status of their parents at age 15, the trend remained the same. In terms of higher education, beautiful girls had

an advantage, but not boys.

In the work of S. Dayan et al. (2019), 2000 men and women rated the faces of patients in a cosmetology clinic online before and after non-surgical correction of their appearance and were unanimous in their more positive assessment of their character traits, such as sociability, degree of social adaptation, greater attractiveness to others and higher social position.

An analysis by R. D. Peterson and C. L. Palmer (2017) found that among politicians, physical attractiveness appears to be a factor in their success and influence with the public, including voters, compared to their less attractive competitors. The same can be seen in election results in the US (White A.E. et al., 2013) and Germany, where people with an attractive appearance and those who look healthy and happy dominate (Masch L. et al., 2021).

People with a beautiful appearance tend to be more successful (Cash T.F., Kilcullen R.N., 1985) because it is believed that their beauty, especially in women, is unconsciously associated with their positive personal characteristics: intelligence, reliability, professional competence and high performance (Langlois J.H. et al., 2000; Maestripieri D. et al., 2017). Beautiful employees are more qualified. They are more sociable in their communication with the employer and therefore receive a higher salary (Mobius M.M., Rosenblat T.S., 2006). On the contrary, in recruitment agencies, people with mediocre appearance receive less favourable job offers (Senior C., 2007; Gouda-Vossos A. et al., 2019), bald men turn out to be outsiders in the competition for attractive jobs (Kranz D. et al., 2019). It's hard to believe, but according to S. L. Campbell (2005), it turns out that physically attractive nursing home residents receive better care.

Appearance also affects educational success. For example, it was found (Huber S., Fieder M., 2014) that among German university graduates, there were fewer men and women with ugly faces (with retrognathic and prognathic profiles) than among those without higher education.

When respondents evaluate photographs, beautiful people are primarily seen as trustworthy by them (Zaidel D.W. et al., 2003), but not always: A.I. Gheorghiu

et al. (2017), based on photographs of scientists, asked respondents to assess the likelihood of interest in their work and to rate how good a scientist he was. Interest in the work was positively correlated with attractive appearance, but researchers with attractive appearance were less likely to be rated as ‘good scientists’.We think this points to the existence of certain stereotypes in people's minds, according to which good-looking people are unlikely to be serious and thorough, while real scientists must be, as the saying goes, 'out of this world'.

It turns out that the attractiveness of a teacher has an impact on students' learning of the material. For example, in a study by R. Westfall et al. (2016), students listened to an audio recording of a lecture while looking at a photograph of the teacher: the more attractive the teacher, the better they learned the material.

Children with ugly faces are involuntarily endowed with negative character traits in the minds of adults (Schein S.S., Langlois J.H., 2015; Gheorghiu A.I. et al., 2017). The same is true for children themselves. Of the 2,973 South Korean students aged 15-18 surveyed, 1.5% of boys and 4% of girls had experienced repeated discrimination because of their appearance (Lee H. et al., 2017).

Currently, the term 'lookism' has appeared, reflecting the problem of limiting the ability of people with pronounced defects of appearance to realise their personal potential due to prejudiced attitudes of others towards them (Goncharova D.A., Matyushkova D., 2021; Kononov A.N., Shaklein A.A., 2021; DuMont J., ForteT., 2016; Labunskaya V., Pogontseva D., 2018).

According to social psychologist and philosopher E. Fromm (2007), a person shapes and strives to improve his or her appearance in accordance with the requirements of social status. His appearance, the way he dresses and the way he speaks serve as a kind of code for others about his belonging to a certain social group, to representatives of a certain profession.

External appearance plays a special role in the lives of women, as their social status depends on it to a much greater extent than that of men (Guest E. et al., 2019), while correction of this appearance using cosmetic methods (Alexandrov A.A., Bagnenko E.S., 2012; Balkrishnan R. et al., 2006; Sadick N.S.,

2008). With the help of plastic surgery (Asimakopoulou E. et al., 2020) it can significantly contribute to restoring the optimal psychological state of personality and quality of life.

Thus, the results of many studies indicate that a person's appearance plays an important role in their social relationships. More research is needed to understand the significance of this role.

1.1.3. The influence of appearance on the psychological state of women

As a number of studies discussed above have shown, interpersonal contacts are largely dependent on how individuals perceive each other at a biological level.

Thanks to the second signalling system, man has created science, culture, religion, philosophy, art, accumulated enormous amounts of information, created artificial information and communication systems, and this process continues. However, according to I.P. Pavlov, the first signalling system, which is common to humans and animals, is phylogenetically more ancient and therefore more stable and genetically fixed, ensuring the existence of a biological species. ‘For an animal, reality is signalled mainly by stimuli (and their traces in the hemispheres) directly perceived by the cells of the visual, auditory and other receptors of the body. This is what we have in ourselves as impressions, sensations and ideas from the surrounding external environment, both natural and our social, excluding the word, audible and visible’ (Pavlov I.P., 1951-1952. - T.3 , Book 2. - pp. 335-336). Therefore, it would be wrong to deny the role of ideas about the beauty of a certain person, which are brought into a person's consciousness by upbringing and life in society, but it would also be wrong to underestimate the role of the reflexive, unconscious perception of another person through his or her appearance.

In society, attractive appearance is a commodity (Fromm E., 2007), while the individual is both a seller and a buyer. Just as a seller tries to make a product more attractive, a socially active individual strives, not always consciously, to improve his or her appearance through make-up, clothing, hairstyle, jewellery, behaviour, in order to present himself or herself in the best possible way. At the

same time, it indicates one's status in society and one's membership of a particular social, professional or other community. The design of appearance, acting as a characteristic of appearance, is a form of objectification of the inner world of the individual (Bodalev A.A., 1994), determined by the need for self-expression and self-realisation (Kiloshenko M.I., 1994).

Meanwhile, Brazilian authors (Macêdo Uchôa F.N. et al., 2020), who studied the attitudes of 1011 students of both sexes towards their appearance using a questionnaire and the Rosenberg self-esteem scale, found that 33.8% of boys and girls were not satisfied with their appearance, 27.8% were slightly dissatisfied (i.e. one in three, even among young people! - E.B.), and 5.8% were deeply dissatisfied.

External appearance is particularly important in the lives of women (Sats E.A., 2015), since their social status depends on it to a much greater extent than that of men (Guest E. et al., 2019). While correcting this appearance with cosmetic methods (Bagnenko E.S., 2012; Balkrishnan R., et al., 2006; Sadick N.S., 2008) and with the help of plastic surgery (Asimakopoulou E. et al., 2020) it can significantly contribute to restoring an optimal psychological state personality and quality of life.

Modern women are aware that external attractiveness is an equally important component of human capital - a concept that previously included only knowledge, skills and competences acquired in the formal education system and used directly to generate income in the field of paid employment (Boikova I.A. et al., 2014).

External attractiveness is the most important factor influencing both a woman's self-esteem and her attitude towards others (Puzyrevich N.L., 2013). Loss of external attractiveness automatically leads to loss of social position. If in men such loss occurs after injuries disfiguring mainly the face, or as a result of serious skin diseases, then for women, in addition to the mentioned injuries and diseases, it is important in terms of loss of their social position and the occurrence of psychological discomfort. An important role is played by age-related changes in appearance, which is not such an important factor for men (Lapina Yu., 2018).). In our opinion, the basis of this difference in attitudes to one's own appearance, which

is well known in everyday life and is clearly demonstrated by the ratio of women to men among the clients of cosmetic clinics, is again a biological factor in the form of a shorter period for women compared to men for the potential realisation of the reproductive function.

An aging body looks sluggish and unattractive. On the contrary, daily self-care ensures the quality of later life. It works as a ritual (Zheng R., 2021), not only provides a desirable appearance, but means constant control over one's appearance, allowing one to continue to enjoy it, provides high self-esteem and respect from others, as an indicator of a socially approved lifestyle (Vorontsova-Velyaminova S.I., 2021).

Age-related changes in women's appearance generally have a negative impact on both their social status and psychological state. According to a study by R.L.Pearl and I.Percec (2019), in which 50 patients aged 49.4±13.5 years (94% women) at a plastic surgery clinic in Pennsylvania assessed the impact of ageism (age discrimination) on their quality of life, more than 30% identified ageism as the main point of their discrimination. Those who experienced such discrimination had worse self-perceived health, lower self-esteem and higher expectations of age discrimination in interpersonal relationships (36%) and work relationships (20%) compared to those who did not experience such discrimination.

The factor of external attractiveness, as found in a study by S. Barrier (2021), who examined the need for cosmetic services among residents of a nursing home, remains important in social adaptation even in old age.

By altering one's natural body, by adjusting one's physicality, a person fulfils not biological, but social and cultural needs (Bugueva N.A., 2011). Social maladjustment, especially among women, and dissatisfaction with one's own appearance can be associated not only with real flaws in appearance, but also with an inadequately underestimated real and overestimated ideal images of the physical self (Varlashkina E.A., 2015; MacCallum F., Widdows H., 2018).

Dissatisfaction with one's own appearance, worries and anxieties about unattractive appearance contribute to the emergence of a negative perception of life

in general, while the regular use of anti-aging medical procedures by middle-aged women, who are particularly sensitive to age-related changes, is a way of purposefully coping with the stress of ageing. Female clients of the aesthetic medical centre form a kind of subcultural group, united by the common idea of the value of "eternal youth" as an attribute of success in life. Women in this subculture have a more masculine type of gender identity, which is expressed in their willingness to take risks and complications in order to achieve the desired result - a rejuvenated appearance. The use of anti-aging procedures increases subjective self-esteem, satisfaction with appearance, well-being in life, and allows you to manipulate the impressions of others (Osminina A.A., 2021).

At the same time, modern culture provides both the direction of positive personal development and the possibility of realising narcissistic needs, which, materialised in the motivation for appeals to aesthetic surgery, create a psychological threat to the individual who is unable to resist the physical-somatic and sexual-erotic imposed by the consumer society. The main condition for the internalisation of the modern socio-cultural model of a beautiful and healthy body is to endow it with personally significant attributes of superiority over others and additional opportunities for manipulative communication (Baranskaya L.T., 2010), 2010). At the same time, it can create conditions for the formation of a specific psychological and, in some cases, physical dependence on cosmetic procedures (Sats E.A., 2015). It is extremely difficult to come to terms with the fact that a person who is more beautiful than others, without any merit on his part, ends up in a more advantageous position, and an ugly person, without any guilt, ends up in a disadvantageous position.

In a study by E.A. Sats (2015), it was found that women aged 40 and over often turn to a cosmetologist due to their increasing feelings of tension (78%) and fatigue (75%), many of them note: ‘...I'm tired at work...’; ‘...I'm tired of the same lifestyle, of being too busy, of everyday life and of people themselves...’, therefore during cosmetic procedures these women feel a sense of freedom (79%). Since they see going to the beautician as one of the ways of getting rid of a negative

mood (81%), they acquire a positive attitude after the procedure (87%), accompanied by a feeling of lightness (67%), joy (85%) and a feeling of being well-groomed (82%). The use of cosmetic procedures is therefore seen by women as a way of optimising their emotional state, increasing their self-confidence and social success.

1.2. Psychological adjustment as a subject of scientific research

The paragraph presents modern ideas about the phenomenon of psychological adaptation, the mechanisms and factors that determine it, and shows the importance of studying them in patients of a cosmetology clinic.

1.2.1. The concept of psychological adjustment in modern psychology

The concept of psychological adaptation is a structural component of the systemic concept of mental adaptation, within which human adaptation is considered as a holistic, multi-level (including biological, psychological and social levels), self-governing functional system aimed at maintaining sustainable interaction of the individual with the environment (Wasserman L.I. et al., 1994; Aleksandrovsky Yu.A., 2021; Arapova O.I., 2023). In this case, the system of mental adaptation acts as a dynamic system, i.e. as a systemically organised process. According to the definition of F.B.Berezin (1988), this process allows a person to establish optimal relations with the environment and, at the same time, to satisfy his own real needs without violating the adequate correspondence between his mental and physiological characteristics - on the one hand, and the requirements of the environment - on the other. Thus, mental adaptation is understood as a systemic process of active adaptation of the human psyche to the conditions of the surrounding physical and social environment, as well as the result of this process. The system of mental adaptation is a complex dynamic functional system of biopsychosocial adaptation of the individual to changing conditions of the external and internal environment.

Yu.A. Aleksandrovsky (2021) assigns the leading position in the hierarchy of links of mental adaptation to subsystems providing search, perception and processing of information, emotional reaction (creation of ‘personal attitude’ to the received information), socio-psychological contacts, as well as subsystems

providing wakefulness and sleep, endocrine-humoral regulation. Each of these subsystems in turn consists of its own links, which have relatively independent significance in their functional activity. Along with specific activities, their activity is subordinated to the whole - the constant desire to maintain a person's state of mental adaptation.

The above provisions on the systemic organisation and functional purpose of the process of mental adaptation served as a basis for identifying a subsystem of psychological adaptation in the integral system of mental adaptation. At the same time, the mentioned links of the hierarchical organisation of the adaptation process included in it (perception and processing of information, emotional reaction, social interaction) reflect the three-component structure of personality relations, corresponding to the three main spheres of mental activity: perceptual-cognitive, emotional-affective, motivational-behavioural (MyasishchevV.N., 1960; Karpova E.B. et al. 2020).

According to modern concepts, psychological adaptation also includes a complex of protective psychological formations, such as strategies and resources for coping, psychological defence (Kotsyubinsky A.P., 2001; Isaeva E.R., 2009; Mikhailichenko T.G., Shchelkova O.Yu., 2017). In the case of disease, the mechanisms of psychological adaptation include the ‘internal image of the disease’ and the ‘type of attitude to the disease’, since these constructs reveal the systemic reaction of the individual to the disease (Iovlev B.V., Karpova E.B., 1999; Nikolaeva V.V., 2009).

The personal characteristics of the individual have a significant influence on the mechanisms of psychological adaptation. The mechanisms of psychological adaptation, together with the systemic activity of many biological subsystems, form the system of human mental adaptation, which is closely related to the social adaptation of the individual, which is understood as the resulting processes of adaptation of the human psyche to the conditions and requirements of the social environment (Kotsyubinsky A.P., 2001). Thus, it is necessary to emphasize once again that in the literature there is a clear idea that human mental adaptation is a

process and the result of the activity of an integral, self-governing system.

Violation of mental adaptation under the influence of various and multiple stress factors can with high probability lead to neurotic, psychosomatic or behavioural disorders with clinically defined or subclinical symptoms. However, in many cases adaptation disorders act as prenosological conditions with polymorphic mildly anxious, depressive, phobic, hypochondriacal and other symptoms (Vasilieva A.V., Karavaeva T.A., 2020; Aleksandrovsky Yu.A., 2021).

This makes it possible to formulate and implement solutions to pressing problems not only in clinical medicine, but also in the prevention of pre-morbid conditions associated with the influence of crisis and stressful situations, social frustration, the peculiarity of which are weakly structured symptoms that do not have a clear syndromological and nosological affiliation. The frequency of their occurrence in the population varies from 22 to 89.7% and tends to increase (Wasserman L.I. et al., 2021). The field of medical cosmetology is no exception in this sense, where pre-morbid conditions corresponding to section F43.2 - Adaptation disorders of the International Classification of Diseases, 10th revision (ICD-10, WHO, 1994), especially in the form of affective spectrum disorders (Krasnov V.N., 2011), are often found in the practice of a dermatologist-cosmetologist.

Among the psychological factors in the genesis of mental maladjustment, the influence of current intrapsychic personality conflicts associated with individual defence mechanisms and coping behaviour should be highlighted. These mechanisms determine the success of personal-environmental interaction and adaptation in various social environments, while mental maladjustment is largely a consequence of the imbalance between the form and degree of manifestation of personal characteristics on the one hand and the requirements of the social environment on the other (Berezin F.B., 1988). This confirms the ideas of A. Yu. Aleksandrovsky (2021) that first of all there is a violation of the most subtle and complex forms of socially determined mental reaction of a person to the environment. In this regard, an adapted personal response is understood as a

balanced set of manifestations of personal characteristics determined by the requirements of the social environment (Wasserman L.I. et al., 1994).

Thus, the system of mental adaptation is a complex dynamic functional system of biopsychosocial adaptation of the individual to changing conditions of the external and internal environment. One of its most important components is the subsystem of human psychological adaptation.

1.2.2. Coping as a mechanism of psychological adjustment

The leading role in psychological overcoming of the stressful effects of cosmetic defects, as well as other stressful and problematic life situations, is played by the mechanisms of psychological adaptation - subsystems in the general system of human mental adaptation. Such mechanisms include, first of all, coping strategies and personal and social coping resources (Ababkov V.A., Perret M., 2004; Lazarus R., 2008; Kryukova T.L., Gushchina T.V., 2015). It is these mechanisms that determine the success of personal-environmental interaction and adaptation to various conditions of personality functioning, including conditions of illness.

Psychological research into the mechanisms of coping behaviour first appeared abroad in the second half of the twentieth century. According to the most common transactional cognitive theory of stress and coping by R. Lazarus (Lazarus R.S., Folkman S., 1984; Lazarus R.S., 1985), ‘coping’ or ‘overcoming stress’ is considered as an individual's activity to maintain a balance between the demands of the environment and one's own resources to meet these demands. The main task of coping is to ensure and maintain a person's well-being, physical and mental health and satisfaction with social relationships (Weber N., 1992). At the same time, coping mechanisms, to a greater extent than psychological defence mechanisms, are associated with healthy, positive aspects of the personality and are aimed at actively resolving a conflict, a pathogenic situation and eliminating the emotional stress caused by it (Wasserman L.I., E.A. Dubinina E.A., 2019).

It should be noted that R.S. Lazarus's (1985) theory is largely based on the subjective experience of stress and pays particular attention to cognitive processes.

At the same time, stressors and ways of coping with them are not considered from the point of view of the characteristics of the situation. At the same time, domestic research assigns an important role to the parameters of the holistic situation in which the subject finds him/herself. It is the situation that largely determines the nature of a person's behaviour, as well as the degree of responsibility and conscious activity in solving the problem. This point of view can be found in the analysis of domestic works devoted to the issue of psychological coping with life's difficulties. In these works coping is considered as an individual way of dealing with a situation in accordance with its own logic, significance in a person's life and psychological abilities (Antsyferova L.I., 1994; Nartova-Bochaver S.K., 1997). Obviously, such an interpretation of the behaviour of coping with stress is more adequate for understanding the process and the result of psychological adaptation of patients with cosmetic problems of the facial skin.

According to the theory of stress and coping, coping behaviour is implemented through the use of coping strategies based on personal and environmental coping resources. Coping strategies are understood to be primarily conscious and active strategies for overcoming negative experiences and solving related problems (Isurina G.L. et al., 1994). Many studies have shown that deficits in problem-solving behavioural skills significantly reduce the ability to cope effectively with stressful life situations. The predominance of emotional and problem avoidance strategies in coping behaviour exacerbates painful experiences and serves as a factor in further socio-psychological disadaptation of the individual.

For this reason, this research devotes considerable attention to the study of behavioural strategies for coping with stress, as well as their personal and social resources (Bagnenko E.S., 2021b). They are understood as relatively stable characteristics of the individual and the environment in which he functions, providing a psychological background for coping with stress and contributing to the development of coping strategies (Moos R.H., Billings A.G., 1984; Sirota N.A., Yaltonsky V.M., 1994). In the literature, researchers include a number of

stable psychological characteristics as personal, ‘internal’ coping resources, such as psychological endurance (frustration tolerance), self-esteem, personal control, role competence and many other psychological constructs (Brehnm S.S. et al., 2005; Kryukova T.L., Gushchina T.V., 2015). This largely determined the tasks and the choice of psychodiagnostic methods of this study.

1.2.3. Attitude to self and to time in the structure of psychological adjustment

The central place in the system of personality relations is occupied by the attitude to oneself. Its violation is the main link in the development of neurotic and adaptive disorders (Myasishchev V.N., 1960; Isurina G.L. et al., 1994; Varshalovskaya E.B. et al., 2020). In the structure of this relationship, satisfaction with one's own appearance occupies a special place. It has been shown that the dominance of a negative-affective attitude to one's own appearance has a destructive effect on a woman's personality and activity (Ermolaeva A.V., 2004), and the determining factors of women's dissatisfaction with their appearance are insufficiently low self-esteem of the real and inflated self-esteem of the ideal images of the physical 'Self' (Varlashkina E.A., 2015).

This is particularly important for patients with facial skin defects - the most important element of human communication (Izard K.E., 1999; Todorov A. et al., 2014; Ryali C.K. et al., 2020), including in the context of a new social and psychological phenomenon called ‘lookism’, which reflects the dependence of a person's social success on his or her appearance (Goncharova D.A., Matyushkova D., 2021; Kononov A.N., Shaklein A.A., 2021; Du Mont J., Forte T., 2016; Lee H. et al., 2017; Masch L., 2021). Studies have shown that improvement of facial skin and other changes in appearance after therapeutic correction have a positive effect on satisfaction not only with the physical self, but also with other aspects of self-esteem (Bagnenko E.S., 2012; Faustova A.G., 2017; Shah P., Rieder E. A., 2021). In this regard, the study of the attitude to oneself and self-esteem acquires a special significance in psychological work with patients of a cosmetology clinic, the importance of which, unlike a clinic of aesthetic surgery, is only recently

beginning to be realised (Neznanov N.G., Vasilyeva A.V., 2015; Karavaeva T.A., Korolkova T.N., 2018; Bagnenko E.S., 2021).

Decreased self-esteem and self-satisfaction are clear diagnostic signs of mood disorders, including subthreshold affective disorders (Krasnov V.N., 2011; Kotsyubinsky A.P., Mazo G.E., 2015). At the same time, the relationship between depression and attitude to time perspective has been proved (Taverlaur M., 1992; Shustrova G.P., 2006; Mikirtumov B.E., Ilyichev A.B., 2007; Wasserman L.I. et al., 2014), which K. Levin understood as the totality of views of an individual about his psychological past and psychological future existing at a given moment (Mandrikova E.Yu., 2008).

Thus, both the attitude to self and the attitude to time perspective can be considered not only in the context of a violation of significant personal relationships, but also in the context of emotional and affective disorders, which in turn are the most important factor of mental maladjustment (Illness and health, psychotherapy ..., 2019). Under these conditions, the study of patients' attitudes towards themselves and their time perspective in a cosmetic clinic can contribute to the formation of optimal psychotherapeutic tactics during the correction of facial skin defects, thus providing patients with comprehensive (cosmetic and psychological) treatment, in some cases supplemented by specialised psychotherapeutic assistance.

1.2.4. Quality of life as a factor and outcome of psychological adjustment

As mentioned above, modern psychological science identifies in a holistic multi-level (biological, psychological, social) functional system of human mental adaptation a separate subsystem of psychological adaptation, which includes a complex of adaptive psychological formations, including cognitive-behavioural strategies for overcoming stress, external (social) and internal (psychological) coping resources, ‘internal picture of the disease’ and others (Bagnenko E.S., 2022a).

At the same time, the patient's attitude towards his disease (defect) and the socio-psychological situation developed in connection with it constitutes the

essence of the subjective and personal component of the concept of health-related quality of life (HRQL) (Novik A.A., Ionova T.I., 2007; Wasserman L.I., Trifonova E.A., 2014; Eremyan Z.A., Shchelkova O.Yu., 2022; Bush J.W. et al., 1982). Theoretically, both the concept of HRQL and the concept of mental adaptation are based on the biopsychosocial paradigm in medicine and medical psychology (Wasserman L.I., Trifonova E.A., 2014). Practically, the study of HRQL essentially means the study of those objective limitations that a disease (defect) imposes on the life functioning of a person, as well as those subjective personal reactions, emotional states, value-motivational and behavioural characteristics that are formed in the conditions of the disease and provide psychological adaptation of the individual to it.

In this regard, there is a need for a combined study of indicators of a person's quality of life and psychological mechanisms of adaptation to it (Shchelkova O.Yu. et al., 2018). This is especially true for patients of a cosmetological clinic, since facial skin defects are very stressful. It seems that in this group of women it is important to identify not only signs and risk factors for psychological adjustment disorders under the influence of stress, but also factors contributing to its success. This includes the above-mentioned coping strategies, personal and environmental resources for overcoming the stress of the disease, as well as role competence and satisfaction with the quality of life in certain areas.

1.3. Psychological adjustment disorders of patients in a cosmetic clinic

In modern sources one can find a very limited number of psychological studies of patients in a cosmetic clinic. If there are quite a number of publications on the effects of plastic surgery on the psychological state of women, there are only a few works in the literature on the effects of minimally invasive cosmetic procedures on the psychological state and quality of life of women. At the time of publication in 2013, S.Imadojemu and co-authors of a review of works on the psychological effects of plastic surgery and minimally invasive cosmetic treatments found only one study in the literature on non-surgical cosmetic

methods. The following section provides an overview of such studies published in recent years.

1.3.1. Psychological status and its relation to clinical factors

The results of existing studies show that facial skin defects do not usually cause serious health complications, but nevertheless significantly affect the emotional state, social functioning and overall quality of life of patients in a cosmetology clinic (Sats E.A., 2015; Face human: cognition..., 2019; Waldman A. et al., 2019; Özkur E. et al., 2020). As mentioned above, this is primarily due to the importance of a person's appearance for his or her self-esteem (emotional-value attitude towards oneself) and self-confidence in social interaction (Bagnenko E.S., 2021). In one of the most recent studies (Yew Y.W. et al., 2020), which examined the psychological state of 1510 patients with 13 types of skin lesions, it was found that they had a higher frequency of depressive states, social isolation, including loneliness, and a lower quality of life.

The connection between the condition of the skin and the psyche (Dalgard F.J. et al., 2015) is to some extent bidirectional, and dermatologists are also well aware of the adverse effect of some mental illnesses and stressful conditions on the course of a number of chronic diseases, such as psoriasis, eczema and a number of others (Sanclemente G. et al., 2017; Korotkova I. et al., 2021; Langan E.A., Millington G.W.M., 2022).

In contrast to chronic skin diseases, the psychological manifestations of cosmetic defects have been studied to a much lesser extent. However, it has been shown that among the patients at the cosmetology clinic who received minimally invasive treatment, there are many people with mental adjustment disorders, manifested by subthreshold affective disorders, anxiety and narcissistic personality disorders, and other personal and behavioural deviations (Loron A.M. et al., 2018; Husain W. et al., 2021). For example, E. Özkur et al. (2020), when comparing a group of patients at a cosmetology clinic who received botulinum therapy, filler injections, dermabrasion, mesotherapy, platelet-rich plasma injections with people of the same age who had never visited a cosmetologist, found a higher overall

severity index state, anxiety, depression, interpersonal sensitivity and reduced self-esteem of the level of social adaptation.

According to W.Husain et al. (2021), patients in cosmetology clinics tend to have social phobia, anxious personality disorder, depressive disorder, hysteria, reasoning and mannerism, and gerascophobia (fear of one's own ageing). The work of D.B. Sarwer (2019) reports on the incidence of personality disorders in patients of a cosmetology clinic, which significantly exceeds the population indicators. This is in line with the data of foreign researchers, who showed that about half of the patients of the cosmetology clinic consulted a psychiatrist, and 23.6% were prescribed medication by a psychiatrist (Sobanko J.F. et al., 2015). Iranian researchers found that 13.9% of patients in a cosmetology clinic had ever sought psychiatric help and 15.3% had ever received medication for mental disorders (Dadkhahfar S. et al., 2021).

A number of works discuss the issue of the incidence of dysmorphophobic disorders in patients of a cosmetic clinic (Bagnenko E.S., 2011; Scharschmidt D. et al., 2018; Pikoos T.D. et al., 2021; Dobosz M. et al., 2022). Some studies report their high frequency: 14% - according to L.A.Conrado et al. (2010), 14.2% - according to Q. Wang et al. (2016), 5-15% - according to D.B. Sarwer (2019), 13.3% - according to M.R. Pourani and F. Ghalamkarpour (2022), while in the population the number of such individuals does not exceed 1% (Wang Q. et al., 2016).

T.D. Pikoos and co-authors (2021) write that out of 154 women who sought non-surgical cosmetic services, 25% in their opinion could be diagnosed with body dysmorphic disorder, while the level of satisfaction with the care provided to them was the same as that of other patients without dysmorphophobia.This in itself, in our opinion, contradicts the diagnosis of dysmorphophobia, as it is unlikely that they underwent procedures for non-existent cosmetic defects. According to our data (Bagnenko E.S., 2011), such patients make up only a few of the patients of the cosmetology clinic. It is possible that such indicators of foreign authors are connected with the not always justified inclusion in this category of people with

excessive fixation on their own appearance, which, however, does not have the nature of a painful condition that interferes with their normal social functioning. Another explanation may be the fact that between 18% (Orringer J.S. et al., 2006) and 26.8% (Hamilton H.K. et al., 2016) of patients in US beauty clinics use psychotropic drugs.

Data on the frequency of occurrence of dysmorphophobia are also discussed in the work of D. Scharschmidt et al. (2018), who conclude that among 145 residents of Berlin who visited a cosmetology clinic, not a single woman had dysmorphophobic disorders. The patients studied are characterised by a higher level of extroversion, goodwill, openness to everything new, as well as a higher level of neuroticism compared to women in the control group.

A special category are the elderly patients of the cosmetic clinic who are trying to improve their own appearance. A study by E. Özkur et al (2020) found a positive correlation between age and indicators of anxiety, depression, interpersonal sensitivity and the level of somatic pathology in patients. A negative correlation was found between self-assessment of the level of social adjustment on the one hand and age and the number of procedures received on the other. A survey carried out by A. Maisel and co-authors (2018) among 440 women aged 45 and over showed that the desire to improve their emotional and psychological mood and their quality of life in general, as well as the prevention of ageing, were the main motives for seeking cosmetic help. In second place came the correction of facial ovalisation and the improvement of skin quality from a professional point of view. Taken together, these data show that older patients have an urgent need not only for cosmetic but also for psychological help and correction.

Given the variety of clinical forms of cosmetic defects, it is particularly interesting to see works that approach the analysis of the psychological status of patients in different ways, taking into account the nature of the defect.

Among the nosological forms with which people go to a cosmetologist, acne is the most common (Mayorova A.V. et al., 2005; Chuh A. et al., 2006). The majority of patients are schoolchildren, in whom, according to B. Barankin and J.

DeKoven (2002), the incidence of this lesion varies from 30% to 100%, and at the age of 16-18 years it occurs in almost everyone - 93.3% (Kilkenny M. et al., 1998). M.R.Durovič et al. (2021), who found acne in 49.8% of Montenegrin schoolchildren, showed a significant decrease in their quality of life compared to healthy peers, and B.Dreno et al. (2019) found that acne in young people more often affects absences from school. Not only does the presence of acne itself act as a stressor, but 74.8% worry that it will leave scars forever (Tan J. et al, 2022). At the same time, a number of researchers believe that, contrary to the common perception that acne is a problem for boys and girls, it is no less a problem for people in adulthood (Stamu-O'Brien C. et al., 2021).

Psychoemotional disorders of various degrees in patients with acne S.A. Monakhov (2005) observed in 41.3% of 223 patients, while, according to the author, characteristic are nosogenic depressions of astheno-anxious (38%), anxious (25%), hypochondriacal (19.6%) and asthenic (17.4%) types. He observed these changes most frequently in II (comedones, papules, up to 10 pustules) and III (comedones, papules, pustules, up to 5 nodules) degrees of severity of the skin process on the face. They are more common in women (53.5%) than in men (25%). According to a number of authors, acne is accompanied by depression and anxiety, changes in personality and emotional status, changes in self-perception and self-esteem, and a feeling of social isolation (Van der Meeren H.L. et al., 1985; Lasek R.J., Chren M.-M., 1998; Mallon E. et al., 1999; Koski J.E. et al., 2015). The latter is particularly evident in the higher percentage of unemployed people with acne (Cunliffe W.J., 1986).

Although it is traditionally believed that boys and girls are more concerned about facial acne, in reality the disease has a greater impact on the psyche of older people and, according to their own assessments, on their quality of life (Lasek R. J., Chren M.-M., 1998; Magin P. et al., 2006). Psychological changes in these patients include a higher incidence of depression and anxiety than in the average population (Samuels D.V. et al., 2020), as well as a higher frequency of suicidal

behaviour and even higher frequency of suicidal statements and thoughts (Xu S. et al., 2021).

I.Yu.Dorozhenok and E.N.Matyushenko (2009), who studied nosogenic mental disorders in patients with acne, distinguish two types of changes: sensitive reactions (‘hypochondria of ugliness’) and hypochondriacal development (‘hypochondria of beauty’), polar both in content and in clinical characteristics. They observed reactions of the first type in 21 patients aged 22 ± 3.6 years. According to their data, these reactions usually disappear completely with improvement of the skin condition, which allows them to be classified as ‘Adaptation disorders F.43.23’ according to the ICD-10 criteria. The peculiarities of the protective measures of these people include strange, sometimes ridiculous rituals to hide skin defects (walking in the street, if possible, in the dark). Such patients do not leave the house for weeks and completely stop communicating with friends.

Reactions of the second type were observed by the same researchers in 18 patients aged 33.7±4.7 years. The picture of the development of hypochondria of beauty is determined by the obsessive desire to eliminate pathological manifestations that violate the flawlessness of the skin, which is inseparable from the dominant ideas in the patient's mind about elastic, smooth skin as the ‘mirror’ of a healthy body that allows one to achieve success in life. Even a single case of acne is seen as a catastrophe, as an obstacle to self-affirmation. Patients make various assumptions about the causes of the disease that led to skin lesions (the presence of a serious somatic or infectious disease, pathology of the immune system). Very valuable ideas are formed on how to eliminate a cosmetic defect in order to achieve a ‘perfect appearance’. Manifestations of acne are perceived as a ‘hostile principle’ that interferes with the functioning of a healthy body, and become the object of a struggle to eliminate them.

A study by M. Sachdeva et al (2021) showed that in addition to depression and anxiety, people with acne are characterised by low self-esteem, negative perceptions of their own appearance, embarrassment when communicating with

others, social alienation and social problems. Y. Zhang et al (2021), who studied 247 patients with acne using the Cardiff Scale of Disability in Patients with Acne, found moderate and severe disability in 97% of patients and varying degrees of anxiety in 37.6% using the Self-Assessment Anxiety Scale. Unfortunately, the authors, who showed a good therapeutic effect at the end of the third month of photodynamic therapy with local application of a 5% solution of aminolevulinic acid, did not carry out any psychometric studies at this stage. It is natural that the degree of anxiety and worry of patients is proportional to the severity of scar changes after acne (Tan J. et al., 2022).

Patients with acne scars are at particular risk of developing depression and suicidal behaviour (Cotterill J. A., Cunliffe W. J., 1997; Hull P. R., D'Arcy C., 2005). According to K. Kundu et al (2021), facial scars after burns have a less traumatic effect than acne scars, unless they cover a large area, while, also unexpectedly, there is no difference in effect between men and women. It can be assumed that this effect is due to the fact that people with burn scars are not perceived as ill by others.

At the same time, generalised data from J. A. G. Gibson et al. (2018) show that of 2394 people with facial scars, 26.1% have increased anxiety and 21.4% have depression. It is possible that the true impact of the presence of facial scars on the psyche is somewhat less, as M. P. Brewin and S. J. Homer (2018) found a higher frequency of psychological abnormalities in victims with burn scars than in the population that preceded the burn injury.

Detailed psychological characteristics of 48 people with normotrophic and 56 people with hypertrophic and keloid facial scars are given in the work of I.G. Shakurov et al. (2009). It was shown that patients with hypertrophic and keloid facial scars differ from healthy people in the indicators of the scales of hypochondria, depression, hysteria, psychopathy, psychasthenia, schizoidism, and patients with normotrophic scars differ in the indicators of the scales of hypochondria, depression, psychopathy, psychasthenia.

Another reason for many requests for cosmetic help is rosacea - a lesion of the facial skin characterised by focal redness and, in some cases, the formation of pustules in these areas (Figure 2), which affects up to 10% of the world's population (Bonsal A., Rajpara S., 2016).

Even at the level of ordinary ideas, it is obvious that such changes can only have a psychotraumatic effect, and numerous psychological studies serve as proof (Bonsal A., Rajpara S., 2016; Heisig M., Reich A, 2018; Oussedik E. et al., 2018; Yang T.T., Lan C.E., 2022; Chernyshov P.V. et al., 2023).

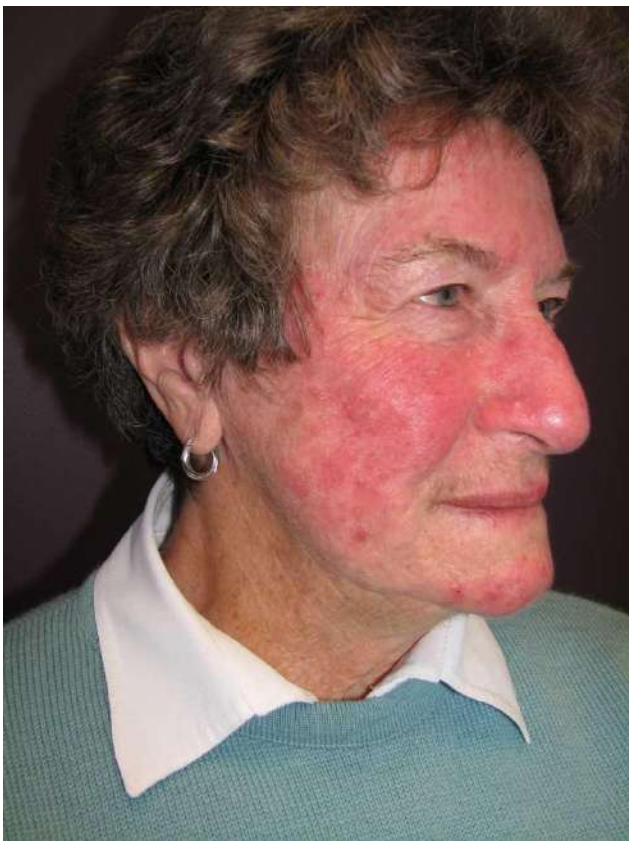

Figure 2 – Rosacea

F.Yang et al. (2022), who studied the psychological state of 469 patients using the Rosacea-Specific Quality of Life Questionnaire, found significant emotional and functional impairment, as well as manifestations of anxiety and depression in 44.8% and 37.5% of the patients studied, respectively, with the severity of psychological changes correlating with the severity of the skin lesions. It should also be borne in mind that, in addition to the external manifestations, the feeling of reddening, burning, tingling and itching of the affected skin, as well as

the financial cost of treatment, are stressful factors. One in three patients is prepared to spend up to 20% of their monthly income to ensure acceptable control of their facial skin condition (Huang Y. et al., 2022).

The appearance of facial wrinkles associated with ageing can also be a factor in depression and anxiety (Alam M. et al., 2008; Lewis M.B., 2018), while their correction with botulinum toxin injections improves not only appearance but also psychological state (Cohen J.L. et al., 2022). In an experiment conducted by staff at Suzhou University (China) (Zhang Q. et al., 2021), 76 women with wrinkles and diagnosed depression received botulinum toxin injections, while other similar patients did not receive local treatment but received injections of the antidepressant sertraline. The psychometric study was carried out using the Hamilton Depression Scale, the Hamilton Anxiety Scale, the Self-Rating Depression Scale and the Self-Rating Anxiety Scale. After 12 weeks of the experiment, the level of depression and anxiety in both groups of women was significantly lower than at baseline, and in the group receiving botulinum toxin it was no different from that in the group receiving an antidepressant (!). Summarising the experience of a number of researchers, M.A. Wollmer and co-authors (2022), based on data from cosmetologists, generally recommend botulinum toxin injections using the appropriate technique as a method of treating depression.

According to M.B.Lewis (2018), this effect occurs not only as a result of an increase in a woman's self-esteem, but also has deeper psychophysiological roots. The elimination of eyebrow wrinkles using botulinum toxin injections reduces depression due to the loss of the ability to frown, as well as due to the lack of the result of this is a negative reaction from other people. M. Alam et al (2008), who observed a similar effect, believe that the temporary paralysis of the corresponding facial muscles associated with the administration of botulinum toxin blocks negative emotions such as anger, fear and sadness using the feedback principle. At the same time, the elimination of ‘crow's feet’ or ‘laugh lines’ at the corners of the eyes using the same method makes a woman younger, but not more attractive by the same mechanism (Etcoff N. et al., 2021) and, according to M.B.Lewis (2018),

worsens her mood. Furthermore, in an experiment with 24 patients with wrinkles and botulinum toxin injections and a control group of 12 women, it was shown that the removal of such wrinkles reduces the expression of emotions caused by sexual arousal and the recognition of this arousal by the partner, which reduces the quality of sexual life.

In another study, the same author (Lewis M.B., 2012) showed that frowning the eyebrows worsened the subjects' mood, raising the eyebrows improved it, and after wrinkling the nose, odours seemed more unpleasant!

In the light of these findings, the results of the only psychophysiological study of this kind, which we found by T.V. Kremneva (2013), seem very interesting, showing that in patients with cosmetic defects who underwent plastic surgery, a medium-weak type of nervous system predominated. The tone of the sympathetic division of the nervous system was characterised by emotional lability, instability of self-esteem and mood, high rates of depression, low stress resistance and pain sensitivity threshold. These data, which once again prove the inseparability of mental and physiological states, convince us of the validity of the idea that there is a feedback relationship between the activity of the facial muscles and the psychological state.

Reasons for consulting a beautician include facial pigmentation disorders in the form of pigment spots (melasma) or, less commonly, vitiligo - focal disappearance of pigment. J.K. Ikino et al. (2015), who studied the quality of life of 51 Brazilian women with melasma using a special questionnaire ‘MelasQol’, found that 94.1% of them experienced anxiety related to spots on their face, 64.71% - frustration and embarrassment, 52.94% - depression due to the appearance of their skin, 78.43 - loss of attractiveness, although this did not significantly affect social relationships. K. Kagha and co-authors (2020) also found a decrease in the quality of life of people with melasma in their study, while S. Paudel and co-authors (2022) did not find any influence of the severity of facial hyperpigmentation and its duration on the quality of life. The negative psychological impact of melasma on quality of life also includes reduced self-

esteem in sexual partners (Leidger A. et al., 2022).

Skin depigmentation is also associated with poorer quality of life indicators in its carriers in the form of embarrassment, reduced social activity and maladaptation (Sangma L.N. et al., 2015), although this is likely to be more common in people with dark skin colour.

At the same time, vitiligo has less impact on the psyche than melasma: in a study by G. Dabas et al (2019), anxiety disorders were found in 30.3% of people with hyperpigmentation, compared to 21% with vitiligo, 36% with depression, 9% with melasma and 27% with depression, while the authors found a positive correlation with the severity of pigment disorders. Data from B. Amatya and D. B. Pokhrel (2019) also suggest a lower impact on quality of life in vitiligo compared to melasma. In our opinion, this difference may be related to the popular perception of age spots on the skin as a kind of stigmata (‘God marks the villain’), which is not the case with depigmentation. According to a survey of women using the Rosenberg Self-Esteem Scale, the removal of pathological pigmentation with chemical peels significantly increases their self-esteem (Kouris A. et al., 2018). Somewhat contrary to this trend, T.T.Yang and C.E.Lan (2022) reported that patients with vitiligo are willing to pay the highest financial costs for treatment, more than 40% of their monthly income, compared to patients with facial hyperpigmentation, which may reflect certain characteristics of the national mentality.

This judgement can be supported by the results of a study conducted among residents of Riyadh (Saudi Arabia) (Al-Otaibi H.M. et al, 2021), which showed that in 79.7% of patients with acne, 79.3% with vitiligo, 76.9% with trichological problems and 71.5% with rosacea. Existing cosmetic problems had no or only a slight effect on their quality of life, whereas in 62% of patients with more serious chronic skin diseases they had no or only a slight effect on their quality of life. 5% of those who completed the ‘Dermatological Quality of Life Questionnaire’ (!) and the fact that 91% of the respondents were women does not mean anything in our opinion: they walk around at home with their faces open.

There are few publications on the impact of other cosmetic defects on the psyche. It has been shown (Weinstein J.M., Chamlin S.L., 2005) that facial haemangiomas and vascular malformations are perceived by others as a kind of stigma, which causes social alienation, constant stress due to the negative reactions of others, and low mood and self-esteem.

Summarising the analysis of the influence of specific cosmetological problems on the psychological state of their owners, it should be emphasised that the publications of such studies in the literature are extremely few. Almost all of them do not contain the results of detailed psychometric studies, while only a few works reflect the influence of cosmetological correction of skin problems on the psychological state of patients.

1.3.2. Dynamics of psychological characteristics in the process of cosmetic correction

Most of the works available for analysis in the field of psychological aspects of cosmetological treatment do not limit themselves to describing the current psychological state of the patients, but try to show the positive effect of the treatment on the emotional state, the associated attitude to life and to oneself, and the social functioning of the patients.

For example, M. Khademi et al (2021) report a significant decrease in depression in 121 patients following Botox injections; D. J. McKeown (2021) quantified an improvement in psychological well-being and a reduction in appearance-related distress in 32 patients 2 weeks after botulinum therapy or hyaluronic acid injections.

The positive dynamics of self-esteem as a function of mood are demonstrated by the results of S.H. Weinkle et al. (2021), who showed that four months after treatment, 100 patients rated themselves on average 4.6 years younger than before treatment.

An interesting, previously undescribed treatment effect was reported by P. Shah and E. A. Rieder (2021): in addition to the psychological effect in the form of increased self-esteem and improved social functioning, a third effect was noted - a

more favourable attitude towards other people. At the same time, in a study by J.F. Sobanko et al (2018) of 75 patients who assessed their psychological state before and six weeks after using fillers and neuromodulators, dissatisfaction with their own body image was significantly levelled out, while self-esteem remained at the same level.

Therefore, the dynamics of self-esteem in the process of cosmetic treatment requires further investigation and this was one of the aims of this study.

A number of papers have focused on improving patients' social functioning and quality of life after cosmetic treatment. D.J. McKeown (2021) found improvements in psychological well-being, social functioning, and a reduction in appearance-related psychological distress in 32 women who completed questionnaires before and 2 weeks after botulinum toxin therapy or hyaluronic acid injections. According to F. Ribeiro and B. Steiner (2018), even after a single use of minimally invasive cosmetic procedures, patients rated their quality of life as improved one month later. M.S. de Aquino et al (2013) found that patients' QoL scores were significantly higher within three months of cosmetic procedures and remained above baseline at six months.

Among skin rejuvenation procedures, the most popular and widely used are botulinum toxin injections to remove wrinkles and the use of dermal fillers to change skin texture. A study of the psychological effects of these procedures 2 months after the procedure showed higher patient satisfaction with psychological and social functioning, as well as the perception of being younger, which was consistent with a blinded objective assessment by cosmetologists (Kurtti A. et al., 2022). An increase in self-esteem after the introduction of dermal fillers in women is also shown in the work of S.H. Dayan and co-authors (2019).

The impact of cosmetic procedures on psychological state and quality of life is also assessed by women themselves. Thus, A. Waldman et al. (2019), who used interviews to study the motives for visiting a cosmetologist among 30 women, found that the main motive for all was to improve psychological well-being and social functioning. In particular, the work of G.V. Serikov (2018) shows that even

for young female students aged 18-22, an attractive appearance contributes primarily to the achievement of such values as: 'self-confidence', 'love', 'interesting work', 'social recognition', 'health', 'financially secure life', 'productive life' and 'happy family life'. This corresponds to the result of our earlier analysis of motives of women seeking help in cosmetology, according to which the motive 'increasing success in professional activities' was found in 27.3% of cases, the motive 'increasing success in personal life' - in 21.8% (Bagnenko E .S., 2012).

In conclusion, the analysis of the literature on this topic leads to the fact that modern research convincingly shows that appearance plays a much greater role in people's social position and functioning in society than is commonly believed in modern philosophy, anthropology and psychology, with the role of education, cultural and social influences proving to be overestimated and the role of biological factors unjustifiably to be downplayed.

Another conclusion is that the ageing processes that affect appearance play a significant role in the psychology of women, including those who seek cosmetological help. The psychological peculiarities of these patients are still underestimated in the practice of cosmetologists and insufficiently studied scientifically, as well as the influence of cosmetic methods of appearance correction on them, which determines the relevance of our research.

Insufficient study of the psychological characteristics of patients in beauty clinics and the impact of minimally invasive procedures on their psychological and social functioning is related, on the one hand, to the lack of involvement of psychologists in this topic and, on the other hand, to the low interest of cosmetologists in the psychological characteristics of their patients, which is clearly demonstrated by L. Hoffman and S. Fabi (2022), who reviewed 43 publications on the effect of non-surgical cosmetic procedures, of which only 13 evaluated psychological outcomes along with cosmetic ones, and then without using psychometric research methods.

From a methodological point of view, most of the analysed studies were conducted without the use of strict psychometric procedures, but with the use of

short questionnaires and other non-standardised methods of psychological express diagnostics. V.R. Hibler and co-authors (2016) came to the same conclusion, showing that most studies indicate a moderate improvement in psychological functioning, self-esteem and image, and these conclusions are made practically without the use of psychometric research methods, with the exception of the assessment of quality of life.

The analysis of the literature reveals the need for a specially organised psychological study of patients in a cosmetology clinic, using validated, tested methods of psychological diagnostics, in order to obtain reliable scientific data for optimising the process of therapeutic correction, increasing its psychotherapeutic potential and the compliance of patients, improving their general mental state and psychological well-being.

CHAPTER 2. ORGANISATION OF THE RESEARCH

This chapter describes the organisation of the dissertation research: the main stages; methods of clinical, clinical-psychological and psychodiagnostic research; methods of mathematical and statistical data processing; socio-demographic and clinical characteristics of the women who made up the study sample. Only women were included in the study because they represent more than 70% of patients in beauty clinics and because the scientific publications on the subject in question almost exclusively concern women.

2.1. Main stages of the research

According to the general plan, in the first stage of the research, the attending cosmetologist performed a clinical evaluation of the cosmetic defect of the face and an analysis of the subjective complaints of the patients. A cosmetic treatment plan was outlined, the roles and methods of psychological research were explained, written informed consent for the research was obtained and socio-demographic information was collected.

The second stage was represented by the techniques of the clinical-psychological method (a specially designed structured interview and a medical-sociological scale) aimed at identifying interpersonal and intrapersonal problems, disturbances in the system of significant relationships, areas of greatest social frustration and other psychological risk factors for a decrease in the social and psychological adjustment of women - patients of a beauty clinic.

The third stage consisted of a psychodiagnostic (psychometric, test) study of a wide range of emotional-affective, individual and socio-psychological characteristics, which collectively reflect the level and characteristics of psychological adaptation of women seeking help from a cosmetologist, as well as the dynamics of these characteristics in the process of programme revitalisation of facial skin.

In accordance with the objectives of the study, a comparative analysis was carried out on independent samples of women - patients of a beauty clinic, identified according to the severity of the cosmetic problem (determined by the

attending cosmetologist during the initial examination) and the level of neuropsychic adaptation (determined on the basis of data from the screening symptomatic ‘Nervousness Test’ (NPA)). Subsequently, using mathematical statistical methods, the most prognostically informative psychological characteristics of the patients with regard to the risk of mental adaptation disorders were identified. The combined influence of two factors (the severity of the cosmetic problem and the level of mental adjustment) on the psychological characteristics of the patients was studied. A comparative study was also carried out to analyse the psychological indicators of the women studied with normative indicators obtained by the authors of the test (standardised) psychological methods used on a healthy population.

The dynamics of psychometric indicators reflecting the level and qualitative characteristics of psychological adaptation of women in the process of facial skin revitalisation programme are analysed. The general level of neuropsychic adaptation, the level of neuroticism, the level of perceived stress and frustration in various significant areas, including attitude to oneself and time perspective, satisfaction with quality of life in general, index of subjective well-being. These indicators were measured twice: before the start and at the end of the cosmetic treatment in those women whose course of cosmetic treatment lasted at least three months.

The fourth (final) stage included a mathematical-statistical and qualitative analysis of the results of the psychological study, the development of a theoretical concept and a structural-functional model of psychological adaptation of women with cosmetic problems of the facial skin, and scientifically based recommendations for cosmetologists aimed at optimising the treatment process and increasing the level of psychological adaptation of patients.

2.2. Research methods

A set of clinical, clinical-psychological and psychometric research methods has been developed in accordance with the objectives.

2.2.1. Clinical method

At the patient's first visit to the clinic, the reason for seeking cosmetic help, the patient's main complaints and whether the cosmetic problem corresponded to the patient's registered age were recorded; skin type, facial isotype, ageing morphotype, skin phototype and severity of facial skin changes were determined.

A visual assessment of the cosmetic problem made it possible to draw up a corrective treatment programme, which included the use of hardware methods, injection methods, external agents, methods of dermatological and cosmetological home care and per os medications.

The revitalisation programme consisted of both a series of procedures, for which an individual visit plan was drawn up, and a single visit to a cosmetologist. In order to draw up a corrective treatment plan, taking into account the severity of the cosmetic problem, the following indicators were evaluated

- ✓ Skin turgor. Evaluated by pinch test.
- ✓ Skin hydration. They were assessed according to skin type, appearance and presence of rosacea.
- ✓ Wrinkles. They were assessed at rest and in motion, taking into account skin type and type of muscle activity.
- ✓ Furrows, folds and their localisation. They were assessed visually, taking into account skin type and ageing morphotype.
- ✓ Scar deformities. Scar type, duration, location and cause of appearance were assessed.
- ✓ Inflammatory elements. The type of spill elements and their location were determined.
- ✓ Presence of dermatological conditions.
- ✓ Skin vascular pathology. The prevalence, localisation and duration of existing pathology were assessed.
- ✓ Skin pigmentation. The type of pigmentation, its localisation, the prevalence and the duration of the presence of the pathology were determined.

- ✓ Hypertrichosis. The presence and location of non-vellus facial hair was assessed.
- ✓ Condition of subcutaneous fat. The uniformity of the location of fat compartments, their volume, and deficit/excess were assessed.
- ✓ Severity of gravitational ptosis. The oval of the face was assessed.

At the end of the facial revitalisation programme, the effectiveness of the treatment was assessed by the doctor.

2.2.2. Clinical-psychological method

The clinical-psychological method included the following techniques

1. A specially designed structured interview with four main blocks:

a) socio-demographic characteristics (age, marital status, economic, occupational and educational status, living conditions, etc.)

b) socio-psychological characteristics (relationships in the parental family, relationships in one's own family - with a spouse and children, interpersonal relationships, including relationships with people of the opposite sex);

c) subjective assessment of one's external attractiveness (attitude to one's physical ‘self’) and personal characteristics;

d) subjective cosmetic complaints, motives for seeking cosmetic help, the extent to which a cosmetic problem affects an individual's social functioning, and the effectiveness of treatment as perceived by the patient.

The medical-sociological scale 'Level of Social Frustration' (LSF) (Wasserman L.I. et al., 2014) belongs to the class of structured interviews according to its psychometric status. The LSF scale allows for a differentiated subjective assessment of the respondent's level of satisfaction or dissatisfaction in five areas: 'relationships with family and friends' (with husband, parents, children); 'relationships with the immediate social environment' (with friends, colleagues, superiors, people of the opposite sex); 'social status' (education, level of professional training, field of professional activity, position in society as a whole); 'economic situation' (material wealth, living conditions, opportunities for leisure

and recreation); 'health and performance' (physical health, psycho-emotional state, performance, lifestyle in general).

The LSF includes 20 aspects of personality functioning with which the patient's satisfaction is rated on a five-point scale. The result of the study is an overall score that characterises the level of frustration (conflict, dissatisfaction) in these five generalised areas of life. The USF technique is an effective tool for identifying risk factors for social and psychological maladjustment and for identifying appropriate ‘targets’ for psychological correction.

2.2.3. Psychodiagnostic method

The psychodiagnostic method was implemented using a set of tests (standardised, psychometric) and non-standardised psychological methods: ‘Test of Neuropsychic Adaptation’, ‘Level of Neuroticism’ test questionnaire, ‘Perceived Stress Scale-10’, ‘General Well-Being Index’, ‘Questionnaire Satisfaction with Quality of Life’, ‘Visual Analogue Scale of Self-Esteem’, ‘Semantic Time Differential’ method, ‘Big Five’ test questionnaires, ‘Coping Strategies’, ‘Meaning in Life Orientations’. In total, 12 clinical, psychological and psychodiagnostic techniques were used in the dissertation research. In accordance with the objectives of the study, 8 methods characterising the current emotional state and satisfaction with various aspects of life, health, personal personality and appearance were applied twice - at the beginning and at the end of the facial skin revitalisation programme.

‘Neuropsychological Adaptation Test’

The ‘Neuropsychological Adaptation Test’ (Gurvich I.N., 1992) is a psychodiagnostic test designed for screening studies to identify individuals with an increased risk of mental maladjustment by determining the presence and severity of certain neurotic and neurosis-like symptoms in the respondent's symptoms, mainly in the emotional-affective sphere.

The test consists of 26 statements; the subject's answers are given on a four-point scale with a zero division (i.e. the possibility of the absence of a symptom is implied), which is used to differentiate the severity (frequency of occurrence) of

the symptoms described in the questionnaire items. The final score is obtained by summing the points. The final score correlates with the main gradations (categories) of the adaptation scale proposed by the author and thus determines the individual's place on the continuum of neuropsychic adaptation. The poles of the continuum are practical health (optimal adaptation) and nosologically formed neuropsychic pathology or a state of pre-disease. Pre-disease is qualified as a condition in which the probability of developing the disease approaches 100%, subject to the continuous effect on the body and personality of pathogenic conditions and factors with, on the one hand, and violations of adaptation-compensatory mechanisms - on the other (Semichov S.B., 1987; Aleksandrovsky, Yu.A., 2021).

The ‘Level of Neuroticism’ test questionnaire

The ‘Level of Neuroticism’ (NL) test questionnaire was developed at the Laboratory of Clinical Psychology and Psychodiagnostics of the Psychoneurological Institute named after V.M. Bekhterev. V.M. Bekhterev in 2005. The method of determining the level of neuroticism consisted in searching for psychological features distinguishing groups of people - mentally healthy and patients with common forms of borderline mental pathology. The severity of the set of psychological characteristics obtained in this way essentially determines the degree of similarity of the respondent to a group of patients with neuroses or to a group of healthy people. The measure of this similarity is considered as an operational definition of the category ‘neurotization’, while the authors of the methodology emphasize that ‘neurotization’ is not identical with the diagnosis of ‘neurosis’. It is a certain predisposition, a risk factor, which is actualized when it is impossible to constructively resolve an intrapersonal conflict or in stressful (conflict, problem) situations, which are potentially significant for the development of neurotic disorders (Karpova E.B. et al., 2014).

The UN scale consists of 35 statements with weighting coefficients ('yes' or 'no'). In addition, the questionnaire contains 10 statements that make up the 'dishonesty' scale, selected from the corresponding scale of the questionnaire ‘The

Minnesota Multiphasic Personality Inventory' (MMPI) (Standardised Multifactorial Method of Personality Investigation adapted by L.N. Sobchik, 2003). This scale is a control scale that reflects the degree of reliability of the research results obtained. Thus, the questionnaire for determining the level of neuroticism consists of 45 statements.

The main indications for the use of the NL questionnaire are mass screening studies of various populations, carried out as part of psychohygienic and psychoprophylactic programmes, to identify groups at risk of mental maladjustment, followed by more detailed clinical and psychological examination.

'Perceived Stress Scale -10'

The 'Perceived Stress Scale-10' (PSS) is an adapted version of the 'Perceived Stress Scale-10' (PSS-10) methodology, intended for the subjective assessment by respondents of the level of tension and stress-generating capacity of their life situation over the past month (Cohen S. et al., 1983). The basis for the creation of the Russian version of the 'Perceived Stress Scale-10' was the French version of the PSS-10 questionnaire, which was chosen in connection with the scientific tasks of cross-cultural comparison of French and Russian samples. At the Department of Medical Psychology and Psychophysiology of St. Petersburg State University, a full psychometric test was conducted, validity and reliability were demonstrated, and average normative scores were obtained for the scales of the PSS-10 methodology on a Russian sample of men and women aged 18-54 years (Ababkov V A. et al., 2016).

The PSS-10 methodology includes two subscales, one measuring the subjectively perceived level of tension in a situation and the other measuring the level of effort expended to cope with the situation. In the process of adapting the methodology, its factor structure was checked for consistency with the theoretical ideas that divide the level of perceived stress into these two factors. Thus, the result of the processing of the questionnaire data is the obtaining of three indicators - the score of the subscale 'Overexertion', the score of the subscale 'Coping with stress', the total score of the 'Perceived Stress Scale-10'. The obvious advantages of the technique are its compactness and compliance with international standards

for the adaptation of psychometric scales and, as a result, the possibility of its use in scientific and practical work.

'Well-Being Index'

The Well-Being Index test (WHO-5, Well-Being Index) (Bech P. 2004) has been developed and recommended by the WHO to quantify the general - mental and physical well-being of different categories of people. It consists of five statements relating to different aspects of well-being, such as mood, activity, interest in the environment, and instructions to choose one of six possible answers according to the current state of the subject.

The results obtained, although not comparable with standard indicators, allow in a screening format to assess the patient's subjective perception of his condition: from good mood, activity, vitality, interest in the environment, to depression, passivity, manifestations of asthenia and apathy (Gerasimova A.A., Kholmogorova A.V., 2020).

'Quality of Life Satisfaction Questionnaire'

The Quality of Life Satisfaction Questionnaire was developed at the Institute of Stress Medicine (The USA) (Eliot R.S., 1993) and adapted by N.E. Vodopyanova at St. Petersburg State University (Workshop on Psychology..., 2005). The technique is based on an existential approach to life stress and is designed to help an individual balance the effects of stress and the line of behaviour to overcome it. It contains nine scales whose ratings reflect satisfaction with various aspects of life (work, personal achievements, health, communication with loved ones) and one's psychological state (optimism, tension, discomfort, other negative emotional states). The technology used to process the research results suggests that the higher the satisfaction with each aspect of quality of life (the higher the score on the corresponding scale), the lower the level of existential stress. The overall quality of life index (QOL) is also calculated, which reflects the degree of subjective satisfaction with the actualisation of personal resources to overcome life stress.

Self-esteem visual analogue scale

To determine the general level and structure of self-esteem, a visual analogue scale (VAS) was used, which is a variant of the classical

pathopsychological method of self-evaluation Dembo-Rubinstein (proposed by T. Dembo and modified by S. Ya. Rubinstein (2010). The technique is based on the principle of subjective scaling and consists of presenting the subject with a series of vertical graphic scales. On these scales, the patient must make a mark corresponding to the assessment of personal qualities such as 'intelligence', 'character', 'appearance', 'health'. In order to formalise the results, all subjects were asked to make a mark on a 10 cm segment with 1 cm increments. The instructions indicated that the lower pole of the scale corresponded to the most negative characteristics and the upper pole to the most positive. This was followed by an experimentally provoked conversation. When analysing the data, not only the position of the marks on the line, but also the results of the discussion were taken into account, which corresponds to the experimental and clinical character of the technique (Rubinshtein S. Ya., 2010).

'Semantic Time Difference (SDT)'

The SDT test allows you to determine the cognitive and emotional characteristics of respondents when assessing subjective time (present, past and future). The stimulus material of the technique in an indirect form allows you to reflect the individual specifics of time perception, thus complementing the clinical and psychological criteria for assessing the patient's mood. The methodology includes a number of different adjectives, on the basis of which each respondent can express his 'temporary' experiences, subjective ideas about his past, present and future. Using SDT, it is not possible to directly measure the level of the subject's mood, but it is possible to indirectly assess the presence of elements of pessimism or optimism, satisfaction or dissatisfaction with life, etc., on the basis of the subject's intuitive perception of time.

The SDT test contains 25 bipolar scales on the basis of which 5 factors are identified (activity of time; emotional colouring of time; magnitude of time; structure of time; perceptibility of time). On each scale, the polar points are represented by antonymous adjectives that metaphorically characterise time. Specially designed SDT scales characterising the present, past and future tenses

allow us to assess individual differences in how a person experiences the temporal aspects of their life. As a result of testing the technique on a group of patients with endogenous and psychogenic depression and a group of healthy people, SDT was recognised as a valid and reliable psychodiagnostic tool (Taverlaur M., 1992; Wasserman L.I. et al., 2014).

The Big Five Test Questionnaire (BIG V)

The Big Five test questionnaire (Goldberg L.R., 1992) aims to identify individual psychological characteristics and personality structure. The theoretical basis for its development was the ‘Five Factor Personality Model’, which, based on an analysis of cross-cultural research, concluded that there are five global (universal and highly generalised) factors that reflect the personal and behavioural characteristics of people, as well as the existence of words (vocabulary) in different cultures to designate them. The methodology developed is aimed at identifying the five global personality factors (BIG V) identified by L.R. Goldberg (1992) (Pervin L., John O., 2001) and accordingly includes five bipolar scales (the names of the scales correspond to the pole of high values).

1. The Extraversion scale measures the breadth and intensity of interpersonal contacts, level of activity, optimism, need for external stimulation and emotional responsiveness.

2. The Self-Confidence scale measures the degree of organisation, discipline, determination, self-discipline, accuracy, perseverance and ambition.

3. The Cooperation scale reflects the quality of interpersonal contacts, the nature of a person's attitude towards other people on a continuum from willingness to cooperate, goodwill, openness, trust, warmth to hostility, cynicism and manipulativeness.

4. The Emotional Stability scale measures the degree of emotional excitability, instability, frustration tolerance (susceptibility to external and internal 'confounders'), anxiety (neuroticism) and self-confidence.

5. The Personal Resources scale reflects the presence (absence) of the desire for self-improvement, the search for new experiences, the breadth of interests, the

originality of approaches to solving ordinary life problems, the richness of imagination, i.e. in a broad sense, individual creativity.

The Big Five test questionnaire was adapted by D.P. Yanichev (2006) (with the aim of obtaining normative values on a domestic sample); the author also indicated the ranges of scale scores (low, below average, average, etc.). This allowed the present study to compare the results of women who sought cosmetological help with normative data and to draw a conclusion about the prevailing features in the structure of their personality (based on the analysis of the personality 'profile').

Coping Strategies Test Questionnaire

The Coping Behaviour Strategies (CBS) test questionnaire aims to identify ways of coping with stressful and personally problematic situations (Wasserman L.I. et al., 2011). The CBS methodology is an adapted version (with normative data from a national sample) of the Ways of Coping Questionnaire (WOCQ) by R. Lazarus and S. Folkman, which is based on the cognitive theory of stress and coping developed by the authors (Lazarus R. S., Folkman S., 1984).

Both the original and the adapted (CBS) questionnaires contain 8 scales corresponding to the main coping strategies identified by the authors of the theory of stress and coping.

1. The Confrontation scale identifies attempts to solve a problem by means of behaviour that is not always purposeful, either to change the situation or to respond to negative emotions associated with the difficulties that have arisen. A strong preference for this strategy may be associated with impulsive behaviour, difficulties in planning actions, predicting their outcome, correcting behavioural strategies, and unjustified persistence.

2. The Distancing scale identifies attempts to overcome negative experiences related to a problem by subjectively reducing its significance and the degree of emotional involvement in it. The use of intellectual techniques such as rationalisation, shifting attention, dissociation, devaluation, etc. is typical.

3. The Self-Control scale identifies attempts to overcome negative experiences related to a problem by deliberate suppression and containment of emotions, minimising their influence on the perception of the situation and the choice of behavioural strategy, high behavioural control. With a clear preference for the self-control strategy, there is a tendency to restrain personal impulses and suppress needs, a desire to hide personal experiences from others, and isolation. Such behaviour may indicate a person's high anxiety about self-disclosure, excessive demands on themselves, leading to ‘neurotic’ over-control of behaviour.

4. The Seeking Social Support scale identifies attempts to resolve a problem by attracting external (social) resources, seeking informational, emotional and effective support. It is characterised by a focus on interaction with other people, an expectation of support, attention, advice and sympathy.

5. The Accepting Responsibility scale involves the subject recognising his or her role in creating a problem and taking responsibility for solving it, in some cases with a strong component of self-criticism and self-blame. When used moderately, this strategy reflects the individual's desire to understand the relationship between one's own actions and their consequences, the willingness to analyse one's own behaviour, and to look for the origins of current difficulties in personal shortcomings and mistakes. Significant expression of this strategy in behaviour can lead to unjustified self-criticism and self-flagellation, feelings of guilt and chronic dissatisfaction with oneself.

6. The Escape-Avoidance scale shows the tendency of an individual to overcome negative experiences caused by difficulties by reacting in an evasive way: denying the problem, fantasising, unjustified expectations, distraction. With a clear preference for the avoidance strategy, infantile forms of behaviour can be observed in stressful situations: denying or completely ignoring the problem, avoiding responsibility and action to resolve difficulties, passivity, impatience, outbursts of irritation, immersion in fantasies, overeating, drinking alcohol, etc. to reduce emotional stress.

7. The Planning to solve a problem scale identifies attempts to overcome a problem by analysing the situation and possible behavioural options, developing a strategy to solve the problem, and planning one's own actions taking into account objective conditions, past experience and available resources. The strategy is considered by most researchers to be adaptive, contributing to the constructive resolution of difficulties.

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The results of the study are expressed in standardised T-scores, which in this paper allowed the CBS 'profiles' of women undergoing cosmetic treatment to be compared with the normative 'profile'.

Life Orientation Meaning Test Questionnaire

Life Orientation Meaning Test Questionnaire was developed by D.A. Leontyev (2006) on the basis of the methodology of the Purpose in Life Test (Crumbaugh J.S., Maholick L.T., 1964), the creation of which was aimed at the empirical validation of a number of ideas of the theory of the search for meaning by V. Frankl (1990). The essence of this theory is that the failure of a person's search for the meaning of his life and the resulting feeling of loss of meaning are the cause of a special class of mental disorders - 'noogenic neuroses', which differ from the previously described types of neuroses.

In psychological research, the Life Orientation Meaning method is used to identify an individual's value-motivational orientation, which is directly related to one's sense of meaning in life, and to identify personal resources for overcoming life's difficulties (‘internal’ coping resources). Accordingly, the Life Orientation Meaning methodology includes two groups of scales. The first group includes scales that actually reflect life meaning orientations that correlate with a time

perspective: life goals (future), life richness (present), and satisfaction with self-realisation or ‘effectiveness’ of life (past). The second group includes scales characterising the internal locus of control (the individual's internality), which is closely related to the meaning of life. The result of the study is expressed in six indicators: a general indicator of life meaning orientations and indicators of five scales.

1. The Goals scale characterises the presence or absence of goals and plans for the future that give meaning, direction and time perspective to life;

2. The Process scale reflects the extent to which the patient perceives the process of his or her life to be interesting, emotionally rich and meaningful.

3. The Result scale reflects a subjective assessment of the meaningfulness and productivity of the past period of life, satisfaction with self-realisation.

4. The Locus of Control –‘Self’ scale reflects a sense of freedom of choice, the ability to shape one's life according to one's own goals and ideas about its meaning, the ability to influence the course of one's life, and responsibility for all significant events.

5. The Locus of Control - Life scale reflects the degree of confidence in a person's basic ability to make life choices independently, to make decisions freely, and to carry them out.

The author of the Life Orientation Meaning method obtained statistical characteristics (mean values and standard deviations) of scale ratings on a normative sample of women (Leontyev D.A., 2006). In the present study, these characteristics were compared with the corresponding data obtained from an experimental sample of women undergoing cosmetic treatment.

2.2.4. Mathematical and statistical data processing methods

The full set of clinical, socio-demographic, socio-psychological and individual psychological characteristics studied for each patient was reflected in the developed information card with 259 items for further analysis (Appendix 1).

Mathematical and statistical data processing was performed using SPSS v. 25.0 and Excel.2010. Pearson's $\chi 2$ was used to compare socio-demographic,

clinical and frequency psychological indicators of patients divided into groups according to the severity of the cosmetic problem and the level of mental adjustment (according to the indicators of the NPA test). One-way analysis of variance (ANOVA) to compare quantitative indicatorsand multiple regression analysis were used to identify the most prognostically informative indicators regarding the risk of mental maladjustment in the studied category of women. In order to obtain statistically significant differences between the psychodiagnostic indicators of the patients and the normative test data, a one-sample T-test was used; the relationship between the clinical and psychological indicators was studied using the Pearson r coefficient. The comparison of the psychodiagnostic indicators obtained in the 'before treatment' and 'after treatment' periods was carried out using the Wilcoxon signed rank test; in order to obtain 'psychological profiles' of the patients of a cosmetology clinic, cluster analysis using Ward's method.

2.3. Research material

The material for the dissertation consists of data from a psychological study of 201 women who came to a beauty clinic with various subjective complaints and objective cosmetic problems. The study was conducted on the basis of the St. Petersburg Beauty Institute 'Galaxy' in compliance with the deontological norms and ethical principles of conducting psychological research in the clinic (Wasserman L.I., Shchelkova O.Yu., 2004; Kuznetsova E., 2022). The possibility of conducting such research was approved by the local ethics committee of the Pavlov First State Medical University of St. Petersburg. Patients were interviewed prior to the psychodiagnostic phase, after which written informed consent was obtained for participation in the psychological study.

2.3.1. Sociodemographic characteristics

In accordance with the objectives of the study, all patients were divided into three groups according to the severity of the cosmetic problem, as determined by an expert (clinical) method during the initial examination of the patient by the attending cosmetologist.

The average age of all women surveyed was 39.21 years old. The average age of the women who made up the subgroups with different degrees of cosmetic problem is shown in Table 1.

The differences in average age between the groups of patients with mild and moderate, as well as mild and severe cosmetic problems are statistically significant ($F = 6.271$ $p = 0.002$): the mild group included patients of a younger age on average.

Table 1.

Average age of patients included in groups with different severity of cosmetic problems

Severity of the cosmetic problem, age (years old)							
Mild		Moderate		Severe		Whole group	
M	δ	M	δ	M	δ	M	δ
34,75	8,46	41,51	9,90	40,27	13,21	39,21	11,23

Table 2 presents data on the level of education, occupational status and type of work of the women surveyed.

As shown in Table 2, in all clinical groups there was a significant preponderance of people with higher education, who accounted for 74.6% of all those studied. The vast majority of patients were in paid employment (72.0%), and the number of women in paid employment in each group greatly exceeded the number of women who were not in paid employment or who worked occasionally. The high level of education is consistent with the data obtained that in all groups more than 20% of the women work in the field of science and education. In all groups, there is a predominance of women employed in the private sector, which is an indirect indication of their activity. There were no statistically significant differences between the groups in terms of educational attainment, employment status and occupational activity.

Table 2.

Distribution by level of education, occupational status and field of activity

Education and occupation	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	People	%	People	%	People	%	People	%
Education								
Secondary	8	15,1	11	16,4	16	21,9	35	18,1
Incomplete higher	4	7,5	4	6,0	6	8,2	14	7,3
Higher	41	77,4	52	77,6	51	69,9	144	74,6
Occupational status								
Works	42	79,2	46	68,7	51	69,9	139	72,0
Does not work	8	15,1	16	23,9	15	20,5	39	20,2
Works intermittently	3	5,7	5	7,5	7	9,6	15	7,8
Professional sphere								
Science and education	13	24,5	14	20,9	16	21,9	43	22,3
Industry	0	0,0	2	3,0	7	9,6	9	4,7
Economic and financial sphere	4	7,5	9	13,4	12	16,4	25	13,0
Commerce	5	9,4	8	11,9	6	8,2	19	9,8
Civil service	8	15,1	6	9,0	5	6,8	19	9,8
Private business	22	41,5	28	41,8	27	37,0	77	39,9
Sport	1	1,9	0	0,0	0	0,0	1	0,5

Table 3 shows the main characteristics of the family sphere of the women surveyed.

Table 3.

Distribution by characteristics of the family sphere

Characteristics of the family sphere	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	People	%	People	%	People	%	People	%
Marital status								
Married	25	47,2	49	73,1	43	58,9	117	60,6

Not married	20	37,7	8	11,9	19	26,0	47	24,4
Divorced	7	13,2	8	11,9	8	11,0	23	11,9
Widow	1	1,9	2	3,0	3	4,1	6	3,1
χ^2=12,19 p=0,058								
Number of children								
One	17	32,1	20	29,9	23	31,5	60	31,1
Two	11	20,8	27	40,3	24	32,9	62	32,1
Three and more	2	3,8	8	11,9	6	8,2	16	8,3
No children	23	43,4	12	17,9	20	27,4	55	28,5
χ^2=12, 77 p=0,047								
Living arrangements								
In her family	32	60,4	53	79,1	48	65,8	133	68,9
In the parental family	12	22,6	5	7,5	13	17,8	30	15,5
Alone	9	17,0	9	13,4	12	16,4	30	15,5

The analysis of marital status shows that, in general and in each individual group, the largest percentage is made up of women who are married at the time of the study, although the proportion of married women and women without a family of their own (never married, divorced and widowed) differs between the groups. The lowest percentage of married women (less than half) and, correspondingly, the highest percentage of women without a family is found in the group of patients with mild cosmetic problems.Their average age is significantly lower than the age of women from the compared groups (Table 1), and the differences between groups for this indicator (marital status) approach the level of statistical significance).

The majority of women surveyed (71.5%) had children. The highest percentage of women with children is observed in older age groups with moderate and significant severity of cosmetic problems; in groups of younger and more often unmarried women with mild clinical symptoms, almost half (43.4%) do not have children, and the differences between groups in this indicator (number of children)

are statistically significant. Women in the group with minor cosmetic problems are also more likely than those in other groups to live with their parents or alone, i.e. not with their own family.

2.3.2. Clinical characteristics

At the stage of initial examination and in the course of therapeutic correction, the following clinical characteristics of women seeking cosmetic help for facial skin defects were determined. They include objective clinical symptoms and subjective complaints, severity, assessed semi-quantitatively, duration of the cosmetic problem, as well as concomitant diseases, morphotypes aging, facial isotype, skin type, Fitzpatrick phototypes and relationship of the clinical picture with genotype and phenotype. At the end of the facial skin revitalisation programme, the effectiveness of the treatment was assessed by the treating physician.

Main clinical symptoms and comorbidities

Table 4 shows the frequency of occurrence of individual clinical symptoms identified during a cosmetic examination and subject to therapeutic correction.

The most common clinical symptoms in the group of women studied were facial wrinkles, gravitational ptosis, furrows and folds. For each of these symptoms, highly statistically significant differences were found between the groups in terms of frequency of occurrence.

Table 4.

Main symptoms identified during clinical examination

Clinical signs	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	People	%	People	%	People	%	People	%
Gravitational ptosis	10	19,2	30	46,2	23	30,7	63	32,8
χ^2=9,76 p=0,008								

Devolumisation	4	7,7	12	18,5	9	12,0	25	13,0
Mimic wrinkles	31	59,6	43	66,2	24	32,0	98	51,0
χ^2=18,35 p=0,000								
Furrows and folds	6	11,5	21	32,3	26	34,7	53	27,6
χ^2=9,31 p=0,010								
Decreased skin turgor	8	15,4	20	30,8	10	13,3	38	19,8
χ^2=7,54 p=0,023								
Inflammatory elements	2	3,8	6	9,2	21	28,0	29	15,1
χ^2=16,62 p=0,000								
Skin dehydration	10	19,2	9	13,8	11	14,7	30	15,6
Connective tissue dysplasia	5	9,6	7	10,8	6	8,0	18	9,4
Vascular pathology of the skin	12	23,1	19	29,2	16	21,3	47	24,5
Rosacea	3	5,8	6	9,2	12	16,0	21	10,9
Hyperpigmentation	11	21,2	16	24,6	16	21,3	43	22,4
Hypertrichosis	5	9,6	5	7,7	16	21,3	26	13,5
χ^2=6,47 p=0,039								
Scar formations	5	9,6	3	4,6	17	22,7	25	13,0
χ^2=10,75 p=0,005								

Note. The sum of the % in the table exceeds 100% because one patient had several symptoms at the same time, which were subject to therapeutic correction.

Gravitational ptosis and wrinkles and folds were more common in the moderate to severe groups (i.e. older women, Table 1) than in the mild group. Expression lines were most common in the mild and moderate groups of women. The frequency of inflammatory elements, scars and hypertrichosis in the group of women with significant severity of the problem significantly exceeds the corresponding indicator in the groups with mild and moderate severity.

Table 5 shows the duration of the existing cosmetic problem in groups of patients of different severity.

Table 5.

Duration of cosmetic problem

Duration	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	Peopl e	%	Peopl e	%	Peopl e	%	Peopl e	%
Less than 1 month	5	9,6	0	0,0	2	2,7	7	3,6
From 1 month to 1 year	12	23,1	10	15,4	7	9,3	29	15,1
From 1 yearto 3 years	19	36,5	21	32,3	18	24,0	58	30,2
From 3 yearsto 5 years	8	15,4	14	21,5	10	13,3	32	16,7
More than 5 years	8	15,4	20	30,8	38	50,7	66	34,3
χ^2=26,21 p=0,001								

Analysis of the duration of the cosmetic problem showed that in the total group of patients (34.3%), as well as in the group with significant severity (50.7%), the largest percentage of people had this problem for more than 5 years. In the group of women with moderate and mild severity of the problem, the largest number of patients fell within the interval of 1 to 3 years. The minimum duration of the problem (less than 1 month) was found in the groups with mild and severe clinical symptoms. The differences between the groups in this indicator (duration of the cosmetic problem) are statistically significant.

Table 6 shows the frequency distribution of comorbid pathologies in groups of patients with different severity of facial skin cosmetic problems.

Table6.

Background and comorbidities

Background diseases	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	People	%	People	%	People	%	People	%
Endocrine	15	28,8	21	32,3	29	38,7	65	33,9

Dermatological	3	5,8	7	10,8	26	34,7	36	18,8
χ^2=20,94 p=0,000								
Somatic	11	21,2	21	32,3	24	32,0	56	29,2
Oncological	3	5,8	7	10,8	1	1,3	11	5,7
Other	24	46,2	19	29,2	17	22,7	60	31,3
χ^2=8,07 p=0,018								

When analysing the frequency of comorbid pathology, it was found that 33.9% of all women had endocrine diseases, 29.2% had various somatic diseases, 5.7% had a history of cancer, and the differences between the groups compared in these indicators were not statistically significant. At the same time, highly statistically significant differences between the groups were obtained in the frequency of dermatological diseases, which were diagnosed in 34.7% of women with significant, 10.8% with moderate and 5.8% with mild cosmetic problems. It should be noted that the majority of patients with endocrine pathology had various types of thyropathy (mainly autoimmune thyroiditis) or polycystic ovarian syndrome. This often determines the specificity of the complaints of such patients presented to the cosmetologist.

Table 7.

Individual characteristics of the structure and skin of the face

Individual characteristics	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	People	%	People	%	People	%	People	%
Facial isotype								
Rhombus	6	11,5	12	18,5	9	12,0	27	14,1
Rectangle	8	15,4	12	18,5	12	16,0	32	16,7
Square	11	21,2	10	15,4	14	18,7	35	18,2
Trapezoid	12	23,1	15	23,1	19	25,3	46	24,0

Heart shaped	13	25,0	9	13,8	12	16,0	34	17,7
Oval	2	3,8	7	10,8	9	12,0	18	9,4
Morphotypes of ageing								
Deformation	7	13,5	27	41,5	20	26,7	54	28,1
Muscular	17	32,7	9	13,8	17	22,7	43	22,4
Finely wrinkled	14	26,9	12	18,5	7	9,3	33	17,2
Tired	10	19,2	10	15,4	22	29,3	42	21,9
Combined	4	7,7	7	10,8	9	12,0	20	10,4
χ^2=22,28 p=0,004								
Facial skin type								
Very oily	0	0,0	1	1,5	7	9,3	8	4,2
Oily	4	7,7	10	15,4	16	21,3	30	15,6
Dry	14	26,9	13	20,0	17	22,7	44	22,9
Combined	15	28,8	24	36,9	25	33,3	64	33,3
χ^2=19,98 p=0,010								
Fitzpatrick phototypes								
Celtic	6	11,5	2	3,1	4	5,3	12	6,3
Nordic	31	59,6	25	38,5	40	53,3	96	50,0
European dark	15	28,8	35	53,8	29	38,7	79	41,1
Mediterranean	0	0,0	3	4,6	2	2,7	5	2,6
χ^2=13,27 p=0,039								

Other concomitant diseases related to the cardiovascular system, injuries or pathologies of the urinary system predominated in the group of patients with low severity of the problem.

Individual genetic and phenotypic characteristics

Table 7 shows the main individual geno- and phenotypic characteristics of the structure and skin of the patients' faces, as well as their frequency distribution in groups of patients with different severity of cosmetic problems.

In the entire group of patients, as well as in the group with average severity of the problem, the deforming morphotype of ageing was significantly predominant; in the group of patients with low severity of the problem, muscular

and finely wrinkled morphotypes predominated, while in the group with significant severity of the cosmetic problem, the tired morphotype of ageing predominated.

In each of the groups compared, and in the group as a whole, the combined type of facial skin predominated. The main differences between the groups were that in the group with mild severity of the problem, dry skin was more common than in the other groups; in the group with moderate severity and especially in the group with severe severity, oily skin was more common. The most common facial phototypes in the group of women studied were the Nordic and dark European types, while the Nordic type predominated in the group of patients with a mild severity of the problem and the dark European type predominated in the group with an average severity of the cosmetic problem.

Table 8 shows the frequency of identification of the relationship between the clinical presentation and the genotype, as well as the phenotype, in groups of patients with different severity of the cosmetic problem.

Table8.

Relationship between clinical presentation and genotype and phenotype

The relationship between the clinical picture	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	People	%	People	%	People	%	People	%
And genotype	38	73,1	54	83,1	55	73,3	147	76,6
And phenotype	34	65,4	33	50,8	53	70,7	120	62,5
χ^2=6,14 p=0,047								

In the group as a whole and in each of the compared groups, a high percentage of patients were identified in whom, according to the expert assessment of the attending physician, there was a connection between the clinical picture and the genotype, and the differences in this indicator between the groups were insignificant. The connection between the clinical picture and

the phenotype is most frequent in the group with a significant severity of the problem, the least frequent in the group with an average severity of the cosmetic problem, and the differences between the groups in this indicator are statistically significant. This distribution is due to a clearly visible relationship between the onset of cosmetic changes and heredity. Young patients with genetically determined facial changes apply for their correction when they reach adulthood and a little later, because they see the prospects for their development in their parents. Their awareness of the possibilities of modern hardware and injection therapy makes it possible to correct these features very effectively with early treatment. At the same time, the influence of the phenotype affects the severity of the manifestations of a cosmetic defect. Factors such as sunlight, smoking and many others worsen the condition of the skin: uniformity of tone, turgor, elasticity.

Cosmetic corrections

Programmed revitalisation of the skin of the face uses various methods of therapeutic correction and their combinations. Programmed revitalisation of the skin of the face is one of the modern comprehensive treatment approaches, highly individual in nature, including in each specific case various combinations of hardware methods of influence, injection methods, external agents, methods of dermatological and cosmetological home care, per os preparations, etc. The methods used and the frequency of their application in the compared groups of patients are presented in Table 9.

Table9.

Methods for therapeutic correction of facial skin and their combinations

Scope and methods of therapeutic correction	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	People	%	People	%	People	%	People	%
Scope of cosmetology care								

Targeted (one symptom)	22	42,3	17	26,2	25	33,3	64	33,3
Comprehensive	30	57,7	48	73,8	50	66,7	128	66,7
Home remedies for external use								
Skin creams	38	73,1	49	75,4	54	72,0	141	73,4
Serums	17	32,7	23	35,4	26	34,7	66	34,4
Lotions	15	28,8	15	23,1	25	33,3	55	28,6
Tonics	12	23,1	16	24,6	18	24,0	46	24,0
Cleansers	20	38,5	25	38,5	33	44,0	78	40,6
Patches	13	25,0	12	18,5	14	18,7	39	20,3
Masks	15	28,8	21	32,3	27	36,0	63	32,8
Not used	14	26,9	16	24,6	21	28,0	51	26,6
Products for professional external care								
Peelings	15	28,8	19	29,2	20	26,7	54	28,1
Masks	21	40,4	26	40,0	35	46,7	82	42,7
Massage	9	17,3	13	20,0	13	17,3	35	18,2
Not used	29	55,8	34	52,3	38	50,7	101	52,6
Hardware Treatment Methods								
Focused ultrasound	10	19,2	24	36,9	13	17,3	47	24,5
χ^2=8,29 p=0,016								
Radio frequency lifting	10	19,2	22	33,8	18	24,0	50	26,0
Infrared photothermolysis	3	5,8	2	3,1	8	10,7	13	6,8
Fractional photothermolysis	11	21,2	14	21,5	18	24,0	43	22,4
Needle radiofrequency therapy	11	21,2	4	6,2	12	16,0	27	14,1
χ^2=5,76 p=0,056								
CO2 grinding	7	13,5	4	6,2	10	13,3	21	10,9
IPL technology	8	15,4	13	20,0	16	21,3	37	19,3
Vascular laser destruction	15	28,8	18	27,7	30	40,0	63	32,8
Laser hair removal	5	9,6	4	6,2	15	20,0	24	12,5
χ^2=6,65 p=0,036								
Photodynamic therapy	3	5,8	3	4,6	16	21,3	22	11,5
χ^2=11,87 p=0,003								

Non-injection biorevitalisation	6	11,5	3	4,6	10	13,3	19	9,9
Cryolipolysis	4	7,7	5	7,7	8	10,7	17	8,9
Not used	19	36,5	15	23,1	15	20,0	49	25,5
	χ^2=4,73 p=0,094							
Injection treatments								
Botulinum therapy	33	63,5	44	67,7	24	32,0	101	52,6
χ^2=21,16 p=0,000								
Hyaluronic acid based fillers	20	38,5	36	55,4	27	36,0	83	43,2
χ^2=5,99 p=0,050								
Calcium hydroxyapatite based fillers	13	25,0	35	53,8	19	25,3	67	34,9
χ^2=15,54 p=0,000								
Stimulators of collagen and elastin production	13	25,0	21	32,3	13	17,3	47	24,5
Bio-revitalisers	14	26,9	24	36,9	14	18,7	52	27,1
χ^2=5,88 p=0,053								
Mesotherapy	12	23,1	16	24,6	13	17,3	41	21,4
PRP therapy (platelet rich plasma injections)	10	19,2	14	21,5	14	18,7	38	19,8
Thread lifting	3	5,8	11	16,9	10	13,3	24	12,5
Not used	7	13,5	7	10,8	28	37,3	42	21,9
χ^2=17,33 p=0,000								
Health aids for internal use at home								
Used	16	30,8	18	27,7	37	49,3	71	37,0
χ^2=8,18 p=0,017								
Combination of cosmetic correction methods used								
External care only	1	1,9	0	0,0	3	4,0	4	2,1
Injections only	9	17,3	11	16,9	9	12,0	29	15,1
Hardware treatment method only	1	1,9	2	3,1	7	9,3	10	5,2

External care + injections	9	17,3	4	6,2	5	6,7	18	9,4
External care + hardware methods	5	9,6	5	7,7	19	25,3	29	15,1
External care + injections + hardware methods	18	34,6	32	49,2	27	36,0	77	40,1
Injections + hardware method	9	17,3	11	16,9	5	6,7	25	13,0
χ^2=26,84 p=0,008								

As shown in Table 9, 2/3 of the patients received complex cosmetic treatment, 1/3 received targeted care aimed at eliminating a symptom, and differences in the cosmetic care between groups with different severity of cosmetic problems are not statistically significant. There are also no significant differences between the groups in the frequency of use of different products for external use at home and professional external care products.

Among the hardware methods, focused ultrasound was used more often in patients with moderate severity of the problem than in the other two groups, while needle radiofrequency therapy was used more often in the group of patients with mild facial skin problems. Laser hair removal and photodynamic therapy were statistically significantly more commonly used in the group of patients with severe cosmetic problems. Hardware methods were less common in the mild facial skin group.

Among the injection methods, botulinum therapy (botulotoxin A injections) and bio-revitalisers were used more frequently in the treatment of patients with mild and moderate severity of the problem. Fillers based on hyaluronic acid and fillers based on calcium hydroxyapatite were used more frequently (twice) in the group of patients with moderate severity of the problem. In the group of patients with significant severity of cosmetic problems, injection methods of treatment were used statistically significantly less often, and medications for internal use at home were more common than in the other two groups.

At the end of the treatment course, its effectiveness was assessed. The evaluation of the effectiveness of the cosmetic treatment in groups of patients with different severity of cosmetic problems is shown in Table 10.

Table 10.

The effectiveness of treatment according to the doctor

Effectiveness of treatment	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	People	%	People	%	People	%	People	%
Minimal effect	0	0,0	0	0,0	2	2,7	2	1,0
The problem is partially resolved, further treatment is indicated	1	1,9	6	9,2	20	26,7	27	14,1
The problem is partially resolved, no further treatment is indicated	17	32,7	23	35,4	34	45,3	74	38,5
The problem is completely resolved	34	65,4	36	55,4	19	25,3	89	46,4
χ^2=32,00 p=0,000								

As you can see, in the entire group of women studied, as well as in the groups with mild and moderate severity of cosmetic problems, the maximum percentage of patients completely eliminated the facial skin problem with which they came to the clinic. In the group of patients with significant severity of the problem, the percentage of women in whom, according to the attending physician, ‘the problem is partially resolved, further therapy is not indicated’, as well as the percentage of women who were indicated for further therapy, is significantly higher than in the groups with moderate and mild severity of the problem. The differences in treatment efficacy are highly statistically significant.

In general, the socio-demographic data presented, obtained in a non-selective screening study, show that the majority of women who seek help from cosmetology are educated, socially active, have family values and are raising children, and work mainly in the private sector. Most patients have families and children, and their presence is associated with age. The least favourable marital

status, according to the data of this study, is observed in the group of younger women with minor cosmetic problems.

The analysis of the clinical characteristics shows a natural correlation between the symptoms and the age of the patients, as well as a correlation between the severity of the cosmetic problem and its duration, the presence of underlying diseases, a number of individual geno- and phenotypic characteristics of the structure and skin of the patient's face, with the choice of treatment methods used and their effectiveness.

CHAPTER 3. RESEARCH ON THE PSYCHOLOGICAL ADJUSTMENT OF WOMEN WITH COSMETIC PROBLEMS

The chapter presents an analysis of the psychological characteristics of patients of a cosmetology clinic, studied with the help of the author's structured interview and psychological diagnostic methods at the initial stage of treatment correction. The psychodiagnostic indicators of the patients were compared with the average indicators obtained by the authors from psychological tests on domestic normative samples. A comparison was made of all the psychological indicators studied, characterising various aspects of psychological adaptation (socio-psychological and individual psychological - emotional, personal, behavioural) of patients with different severity of cosmetic problems, and the relationship of these psychological indicators with the clinical characteristics and age of the patients was presented. Groups of patients were compared who, on the basis of the screening self-assessment ‘Test of Neuropsychic Adaptation’ (NPA), were divided into two groups, called ‘with impairment’ and ‘without impairment’ of mental adaptation in NPA terminology, while the chapter emphasises that these names are conditional in nature and cannot be considered as a criterion of mental disorder. It is also emphasised that, according to modern concepts, psychological adjustment is a substructure of the human mental adjustment system, and therefore the NPA test is relevant to the tasks of this study, especially those related to the assessment of the state of the emotional-affective sphere of the women studied. The results of the comparative analysis of psychodiagnostic indicators of patients with different levels of mental adjustment are supplemented by the results of the multiple regression analysis, which made it possible to identify the most prognostically informative factors of mental adjustment disorders. At the end of the chapter, typical ‘psychological profiles’ of patients in a cosmetology clinic with different facial skin defects, identified by cluster analysis, are presented (Bagnenko E.S., Bogatenkov A.I., 2023).

3.1. Psychological characteristics of patients in a beauty clinic compared with normative data

The few psychological studies of patients in an aesthetic medicine clinic undergoing minimally invasive treatment provide conflicting data regarding the normative/maladaptive nature of patients' personality traits, behaviour and emotional state. At the same time, it is clear that further research in this area is needed to more fully implement a client-centred approach to cosmetic treatment. This determined the first objective of this dissertation research: to identify the psychological characteristics of patients in a cosmetology clinic by conducting a comparative analysis of their psychodiagnostic indicators with normative test indicators obtained on domestic normative population samples.

A comparison of the results of a psychological study of patients with the test 'norm' was carried out according to the indicators of those methods for which the literature presents average normative data obtained on a national sample: 'Level of Neuroticism' (NL), 'Perceived Stress Scale-10' (PSS-10), 'End-to-end Bipolar Inventory' (BIG V), 'Strategies of Coping Behaviour' (CBS), 'Meaning in Life Orientations' (MLO). A one-sample t-test was used to determine statistically significant differences.

Level of neuroticism

When comparing the final indicator of the 'Level of neuroticism' method with normative data (Scale for psychological express diagnostics..., 1999), the following results were obtained LN of the patients: M=46.32+3.5; normative value: M=30.0+5.8 (T=4.703 p=0.000). In addition, it can be noted that the average NL indicator in the group of patients corresponds to the gradation 'low level of neuroticism' (from +41 to +80). The probability of the presence of neuroticism is estimated as 0.13, while the probability of the absence of neuroticism is 0.87, according to the distribution of levels and estimates of the probability of neuroticism in the Russian female sample, obtained by the authors of the 'level of neuroticism' methodology (Karpova E.B. et al., 2014).

Thus, the level of neuroticism among the patients of the Beauty Clinic turned out to be lower[1]than the average of the population. This indicates emotional stability and good frustration tolerance, the absence of a tendency to somatise anxiety and 'neurotic' over-control of behaviour in the patients studied. This indicates emotional stability and good frustration tolerance, the absence of a tendency to somatise anxiety and 'neurotic' over-control of the behaviour of the patients studied.

Level of perceived stress

Table 11 presents the results of a comparative analysis of the indicators of the ‘Perceived Stress Scale’ of patients of a cosmetology clinic with normative data (n=175) (Ababkov V.A. et al., 2016).

Table 11.

Statistical characteristics of the 'Perceived Stress Scale' indicators

Indicators of the PSS-10 method	M	δ	M	δ	T-test	Significance of differences
	Norm		Patients			
Total score	24,44	6,58	26,45	7,40	4,685	p=0,000
Overstrain	13,62	2,75	17,39	5,70	10,080	p=0,000
Counteracting stress	10,82	4,29	9,06	2,74	-7,874	p=0,000

Table 11 shows highly significant differences in the indicators of the PSS-10 method between the group of patients studied at the cosmetology clinic and the ‘test norm’. In the case of the general indicator of subjectively perceived stress and in the case of the feeling of emotional overload, the indicators of the patients are significantly higher than the norm, while the efforts to counteract stress are significantly lower.

[1] According to the rules for processing and interpreting data from the ‘Level of Neuroticism’ method, the higher the value of the UL indicator, the less pronounced the neuroticism.

Summarising the data from the PSS-10 and NL methods, we can conclude that many patients experience a feeling of inner tension and frustration, but the low level of indicators of neuroticism (NL method) and counteraction to stress (PSS-10) indicate the stability of the individual and the effectiveness of the resources for coping with stress of the women studied.

Personality traits

Table 12 shows the results of a comparative analysis of the indicators of the 'Big V' method of patients of a cosmetic clinic with normative data (n = 131) (Yanichev D.P., 2006).

Table 12.

Statistical characteristics of the ‘Big V’ methodology indicators

Indicators of the ‘BIG V’ methodology	M	δ	M	δ	T-test	Significance of differences
	Norm		Patients			
Extraversion	27,9	4,5	27,66	5,13	-0,596	–
Self-awareness	26,6	5,7	30,36	5,30	9,130	p=0,000
Cooperation	32,9	3,4	33,84	3,92	3,100	p=0,002
Emotional stability	24,4	5,5	23,44	5,00	-2,062	p=0,041
Personal resources	31,0	4,3	28,51	5,40	-5,052	p=0,000

As you can see, statistically significant differences were obtained between the normative sample and the patients of the beauty clinic for all the scale indicators of the 'Big V' methodology, except for the indicator of the 'Extraversion' scale. The most significant differences were found in the scales ‘Self-perception’ and ‘Personal resources’, in the first case the indicators of the patients predominate, in the second - the indicators obtained on a representative normative group of women.

This combination characterises the patients as being more organised, purposeful, persistent, disciplined, demanding of themselves ('Self-awareness') and at the same time less inclined to seek new experiences, less creative and

more pragmatic ('Personal resources') than the normative group. In addition, the cosmetology clinic patients were found to be more friendly, more inclined to establish emotionally warm and trusting relationships, to cooperate with others ('Cooperation') and at the same time less emotionally stable, more anxious and insecure ('Emotional Stability') than the women who made up the normative group. The results obtained in the study of the individual psychological characteristics of the personality of patients in a cosmetic clinic are in line with the data of German authors, who also used the BIG-V technique and showed that their respondents (n=145) were characterised by friendliness, openness and neuroticism (Scharschmidt D. et al., 2018).

Coping strategies

Table 13 presents the results of a comparative analysis of the indicators of the 'Ways of coping behaviour' method of patients of a cosmetic clinic with normative data (n=988) (Wasserman L.I. et al., 2010; Wasserman L.I. et al., 2011).

Table13.

Statistical characteristics of the method indicators

'Ways of coping behaviour'

Indicators of the 'Ways of coping behaviour' methodology	M	δ	M	δ	T-test	Significance of differences
	Norm		Patients			
Confrontation	50,0	10,0	52,81	9,68	3,491	p=0,001
Distancing	50,0	10,0	51,41	9,23	1,845	p=0,067
Self-control	50,0	10,0	50,30	10,10	0,362	–
Finding social support	50,0	10,0	51,88	8,66	2,617	p=0,010
Taking responsibility	50,0	10,0	51,38	8,73	1,904	p=0,059
Escape-avoidance	50,0	10,0	55,06	9,63	6,330	p=0,000
Planning to solve a problem	50,0	10,0	52,28	9,39	2,927	p=0,004
Positive reassessment	50,0	10,0	52,15	10,19	2,543	p=0,012

The results of the study show that statistically significant differences between the group of patients and the normative data were obtained for 7 out of 8 indicators of the Methods of Coping Behaviour method. The most significant differences between the average group indicators of the patients and the ‘norm’ were obtained on the ‘Confrontation’ and ‘Flight-Avoidance’ scales. This indicates that, in a stressful situation, the patients, to a greater extent than the women who made up the normative sample, tend to take active, energetic action, defend their interests and openly display negative emotions related to the situation, which can make it difficult to find a rational way out of the situation.

At the same time, the 'escape-avoidance' strategy involves an individual's attempts to overcome negative experiences caused by stress by responding through avoidance, problem denial, and distraction, which makes it possible to quickly reduce emotional tension in a stressful situation, but, like the 'confrontation' strategy, makes it difficult to approach problem solving rationally. At the same time, it should be noted that in addition to the non-constructive coping strategies mentioned ('escape-avoidance' and 'confrontation'), constructive strategies such as 'search' are more pronounced in the repertoire of stress-coping behaviour of patients at the beauty clinic than in the 'norm'. Constructive strategies such as 'social support' (the ability to use an external resource to cope with problematic situations), 'problem-solving planning' (an analytical approach to finding a way out of a problem situation), and 'positive reappraisal' (the ability to see the positive aspects of a problem situation and to use the experience gained) are more pronounced in the arsenal of stress coping strategies of patients at the beauty clinic than in the 'norm'. We can therefore conclude that patients in a cosmetology clinic actively use a wide range of cognitive and behavioural strategies to cope with stress (Bagnenko E.S., 2021b), while remaining within the normative range (40-60T) (Wasserman L.I. et al., 2011).

Coping resources

In accordance with literature data (Shindrikov R.Yu. et al., 2020; Brehm S.S. et al., 2005), in the present study the features of the value-semantic sphere of the individual were considered as personal coping resources (Bagnenko E.S., 2022a). Table 14 shows the results of the analysis of the indicators of the 'Life Meaning Orientations' method for patients of a cosmetic clinic in comparison with normative data (n=100) (Leontyev D.A., 2006).

Table14.

Statistical characteristics of the indicators of the 'Life Meaning Orientations' method

Indicators of the 'Life Meaning Orientations' method	M	δ	M	δ	T-test	Significance of differences
	Norm		Patients			
Goals in life	32,90	5,92	32,66	6,31	-0,489	–
Life process	31,09	4,44	29,18	5,96	-4,051	p=0,000
Life productivity	25,46	4,30	26,16	4,90	1,815	p=0,071
Locus of control - I	21,13	3,85	20,66	3,92	-1,528	–
Locus of control - life	30,14	5,80	26,83	2,95	-14,173	p=0,000
Locus of control - life	95,76	16,54	101	17,29	4,497	p=0,000

The data in Table 14 show that for 4 of the 6 indicators of the 'Meaningful Orientations in Life' method, statistically significant differences were obtained between the group of patients at the cosmetic clinic and the normative sample of women. It was found that among the indicators of scales correlated with a time perspective, the indicator of the 'Life Performance' scale predominates in the group of patients, and the indicator of the 'Life Process' scale predominates in the normative group. The obtained result reflects that the patients, in comparison with the average 'norm', are more satisfied with the segment of life they have lived, perceiving it as productive and meaningful, and are more

satisfied with the level of self-realisation. At the same time, the cosmetology clinic patients are less satisfied with their present (‘the process of life’), perceiving it as less interesting, emotionally rich and meaningful than the women who made up the normative sample. In this respect, it is likely that at the time of the study, the patients showed less confidence in the fundamental ability of a person to make independent life choices, to make decisions freely and to implement them (Leontiev D.A., 2006), compared to the ‘norm’ (locus scale ‘control – life’). Nevertheless, the overall indicator of meaningfulness in life was significantly higher in the group of patients we studied than in the average ‘norm’.

The study revealed statistically significant differences between the patients and the 'norm' in 19 of the 23 psychodiagnostic indicators examined, allowing us to draw the following conclusions.

1. Patients who came to the clinic with cosmetic problems of the facial skin are characterised by a more intense subjective experience of stress, internal tension and higher rates of emotional instability, compared with the normative sample of local women. At the same time, in comparison with the average ‘norm’, the patients are characterised by a lower level of neuroticism, which is a risk factor for mental maladjustment, and a lower intensity of efforts aimed at counteracting stress, which demonstrates the effectiveness of mechanisms for coping with stress (mechanisms of psychological adaptation).

2. Patients at the beauty clinic use a wide range of strategies to cope with stress. Both constructive coping strategies (the use of social support, awareness of one's role and the possibility of seeing the positive aspects of a problem situation, an analytical approach to its solution) and non-constructive strategies (the possibility of conflict-generating affective behaviour in a problem situation, cognitive or physical distancing from its solution) are more represented in a group of patients at a beauty clinic than in the average ‘norm’.

3. The implementation of stress coping behaviour is facilitated by such personal coping resources as satisfaction with the lived period of life and self-

realisation, as well as the general level of meaningfulness of life. At the same time, the patients of the cosmetic clinic are less satisfied with the current (present) period of life than the normative group of women; in an existential sense, they are less confident in the ability of a person to make his/her own choices and decisions freely.

4. Among the individual-typological personality traits of the group of patients, compared with the women who made up the normative sample, the traits of organisation, purposefulness, responsibility, cooperation and good will predominate; at the same time, they are more pragmatic, more conservative and more attached to stereotypes, and less inclined to search for something new, original and creative.

3.2. Psychological characteristics of women with different levels of cosmetic problems

The paragraph presents the results of a comparative analysis of the system of significant relationships, emotional state, satisfaction with quality of life, personal characteristics, strategies and resources for coping behaviour of groups of women with different severity of cosmetic problems. Contingency tables, Pearson $\chi 2$ and one-way analysis of variance (ANOVA) were used.

3.2.1. System of meaningful relationships

The following are the results of a study of the main psychological and social positions in the relationship system of the women studied, obtained mainly through the structured interview conducted by the author. The Visual Analogue Scale (VAS) and the Semantic Time Differential technique were also used.

Relations with the social environment

In the table, Figure 15 presents the results of an analysis of the frequency of occurrence of certain types of relationships between parents and patients, forming groups with different levels of severity of the cosmetic problem.

Table 15.

Attitude of parents (in childhood or now, if you live together)

Attitude of parents	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	People	%	People	%	People	%	People	%
Overprotection	5	9,4	9	13,4	9	12,5	23	12,0
Suppression	9	17,0	13	19,4	10	13,9	32	16,7
Rejection	1	1,9	0	0,0	4	5,6	5	2,6
Full acceptance and support	38	71,7	45	67,2	49	68,1	132	68,8

According to self-report data, the majority of patients in the total group and in the groups with different severity of cosmetic problems were brought up in emotionally favourable conditions of acceptance and support by their parents. At the same time, more than ¼ of the patients in each group were raised in conditions of overprotection and suppression. Five people rated their parents' attitude towards them as rejection; such parenting styles are considered in the literature as pathogenic, determining violations of self-esteem, social shyness and dependence, as well as the risk of neurotic personality development (Eidemiller E.G., Justitskis V., 2009).

There were no differences in the nature of parental attitudes between the groups compared.

Table 16 shows the results of an analysis of the frequency of certain types of relationships in the patients' own families, in registered or civil marriages, and in relationships with children.

Table16.

Family relationships and relationships with children

Type of relationship	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	Peopl	%	Peopl	%	Peopl	%	Peopl	%

	e		e		e		e	
Family relationships								
Openly conflicted, tense	1	1,9	2	3,0	0	0,0	3	1,6
Cold, unapproachable	6	11,3	3	4,5	5	6,9	14	7,3
Warm, emotionally pleasing	46	86,8	62	92,5	67	93,1	175	91,1
Relationships with children								
Cold, unapproachable	1	1,9	0	0,0	1	1,4	2	1,0
Emotionally neutral	8	15,1	7	10,4	5	6,9	20	10,4
Warm, trusting	37	69,8	58	86,6	61	84,7	156	81,3

Table 16 shows that more than 90% of patients in each of the groups compared described the relationships in their own family as emotionally warm, and only a small number of women in each group described these relationships as alienated or indifferent. A similar distribution of responses was found when analysing patients' relationships with their own children. In the vast majority of cases these relationships were described as warm and trusting, but in each group there were women who had less favourable - emotionally neutral or cold - relationships with their children (only 10.4%). Differences between groups in the nature of relationships with relatives are not significant.

One of the important areas in the system of personal relationships is the area of relationships with people of the opposite sex. Table 17 shows the results of a study of how easily and successfully relationships develop between female patients and men.

A study of the nature of relationships with men showed that 82.3% of the sample self-rated their relationships with men as 'easy', and this percentage is high in each group. Thus, the vast majority of women in each group emphasise the absence of tension in their relationships with men. At the same time, 13.0% of all respondents note that this relationship is 'difficult', and the largest number of such answers (15.1%) is in the group with a weak manifestation of the cosmetic problem, i.e. the group of younger women. At the same time, several people in each group (from 2 to 4) chose the answer ‘I don't communicate, I avoid’. The

differences between the groups on this indicator (relationships with men) are insignificant.

Table 17.

Relationships with men

Relationships with men	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	People	%	People	%	People	%	People	%
I don't communicate, I avoid it	3	5,7	2	3,0	4	5,6	9	4,7
Difficult	8	15,1	10	14,9	7	9,7	25	13,0
Relationships are easy	42	79,2	55	82,1	61	84,7	158	82,3

Attitude towards yourself

The central place in the system of personality relations is occupied by the attitude to oneself. Its violation is the main link in the development of neurotic and adjustment disorders (Myasishchev V.N., 1960; Vasilyeva A.V., Karavaeva T.A., 2020). In this connection, a number of aspects of the attitude to oneself as one of the most important components of a person's self-awareness were studied in groups of patients with different degrees of severity of cosmetic problems.

Table18.

Attitude towards different aspects of the ‘Self’.

Type of relationship	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	People	%	People	%	People	%	People	%
Treating yourself as an individual								
Complete dissatisfaction	0	0,0	0	0,0	4	5,6	4	2,1%
Some dissatisfaction	33	62,3	43	64,2	39	54,2	115	59,9
Complete acceptance	20	37,7	24	35,8	29	40,3	73	38,0

and satisfaction								
Attitude to ypur physical ‘Self’								
Total dissatisfaction	1	1,9	2	3,0	4	5,6	7	3,6
Some dissatisfaction	37	69,8	40	59,7	41	56,9	118	61,5
Complete acceptance and satisfaction	15	28,3	25	37,3	27	37,5	67	34,9
Confidence in your external attractiveness								
Lack of confidence	2	3,8	5	7,5	6	8,3	13	6,8
Incomplete confidence	32	60,4	37	55,2	45	62,5	114	59,4
Complete confidence	19	35,8	25	37,3	21	29,2	65	33,9

Table 18 shows the frequency of occurrence of certain types of patients' attitudes towards themselves as individuals, as bearers of socially approved qualities, i.e. the level of self-acceptance and self-esteem in general. It also shows the distribution of the frequency of occurrence of individual levels of acceptance of one's own physical image and the frequency of occurrence of individual levels of confidence in one's own external attractiveness.

The results of the study in Table 18 show that both in the case of treating oneself as an individual (as a bearer of socially approved qualities) and in the case of relating to one's physical 'self', the responses of 'some dissatisfaction' are significantly predominant in all groups. Complete self-acceptance in the aspects mentioned (personality and appearance) occurs in more than 30% of women in each group; the exception is young women from the group with mild facial skin problems, who are more critical of their physical self. In their group, the percentage of women who are not completely satisfied is more than twice as high as the percentage of women who are completely satisfied with their appearance. It is important to note that in the group of patients with significant severity of cosmetic problems, the percentage of complete rejection of their personal qualities and appearance is 5.6% (4 people). It is obvious that these women need more in-depth psychodiagnostic research and psychological correction.

More than half of the women in each group are not completely confident in their external attractiveness. The differences in these indicators (attitude to oneself as a person, attitude to one's physical self and confidence in one's external attractiveness) between groups of patients with different severity of cosmetic problems are not significant.

Table 19 shows the distribution of the frequency of occurrence of different degrees of expression of the desire to change appearance in the compared groups of women.

In the overwhelming majority of cases in each of the three groups compared, the desire to change their appearance a lot is expressed insignificantly or moderately. However, 6 women in each group expressed this desire significantly.

Table19.

The desire to change a lot about your appearance

The desire to change a lot about your appearance	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	People	%	People	%	People	%	People	%
Slightly expressed	28	52,8	40	59,7	37	51,4	105	54,7
Moderately expressed	19	35,8	21	31,3	29	40,3	69	35,9
Significantly expressed	6	11,3	6	9,0	6	8,3	18	9,4

Just as in the case of women who declare a complete rejection of their personality and physical self, these women need a more in-depth psychological examination, also in connection with the certain percentage of people with body dysmorphic disorder reported in the scientific literature among the patients of an aesthetic medicine clinic (Bagnenko E.S., 2011; Pikoos T.D. et al. 2021). Although, according to our data, there were no people with full-blown dysmorphophobia in our sample, it is noteworthy that the strongest desire to change one's appearance is precisely in the group of patients with a weak

manifestation of a cosmetic problem, which, as already shown, consists mainly of young women.

Table 20 shows the results of a self-esteem study using the experimental-clinical technique of T. Dembo - S. Ya. Rubinstein, organised as a Visual Analogue Scale (VAS), in groups of women with different levels of cosmetic problems.

Table 20.

Self-esteem scale indicators (absolute values, mm)

Psychodiagnostic indicator	Severity of the cosmetic problem					
	Mild		Moderate		Severe	
	M	δ	M	δ	M	δ
Intelligence	75,00	12,21	73,48	11,94	72,99	13,54
Character	71,83	15,24	73,66	12,30	69,29	15,20
Appearance	66,73	17	67,05	16,12	63,25	16,88
Health	72,61	16,79	73,91	17,01	67,56	19,15

One-way analysis of variance (ANOVA) revealed no statistically significant differences between the groups on the self-esteem indicators 'intelligence', 'character', 'appearance', 'health'. In all groups, patients rated their intellectual abilities the highest and their appearance the lowest. However, in all groups, the average self-esteem indicators for all parameters (intelligence, character, appearance, health) according to clinical-psychological (not psychometric) assessment do not seem to be reduced: using a 100 mm VAS, all indicators are above the average level.

Attitudes towards cosmetic problems and treatment

Below are the results of a frequency analysis of the occurrence of individual subjective complaints of patients in a cosmetic clinic, the degree of their impact on life activity (according to a structured interview), the main

motives for seeking cosmetic help, as well as the effectiveness (efficacy) of the treatment performed (according to the patient).

Table 21.

Frequency of subjective cosmetic complaints

Subjective complaints	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	People	%	People	%	People	%	People	%
Pigmentation	29	54,7	35	52,2	34	47,2	98	51,0
Wrinkles	40	75,5	55	82,1	55	76,4	150	78,1
Changing the oval of the face	30	56,6	43	64,2	37	51,4	110	57,3
Inflammatory elements	22	41,5	17	25,4	19	26,4	58	30,2
Dry skin	29	54,7	46	68,7	42	58,3	117	60,9
Skin laxity	24	45,3	38	56,7	40	55,6	102	53,1
Facial redness (visibility of blood vessels)	23	43,4	31	46,3	24	33,3	78	40,6
Unwanted facial hair	22	41,5	21	31,3	27	37,5	70	36,5

Note. The sum of % in the table exceeds 100% because each patient could have not one but several complaints about the condition of her facial skin.

As you can see, the most common complaint of patients in all groups is the appearance of facial wrinkles, and this is also true for the group of patients with mild cosmetic problems, whose average age is statistically significantly lower than in the other two groups, at 34.75 years (p. 2.3.1.). In addition, facial wrinkles are the most common symptom identified during a clinical examination by a dermatologist-cosmetologist (section 2.3.2.). Other common subjective complaints are dry skin and changes in facial contours. It seems natural that there is a predominance of complaints about the presence of inflammatory elements on the skin of the face in the group of younger women with low severity of the cosmetic problem compared to patients with moderate and significant severity. However, no

statistically significant differences were found in the frequency of occurrence of individual subjective cosmetic complaints between the groups compared.

A structured interview was used to determine the women's motives for consulting a beautician. Table 22 shows the frequency of occurrence of the main motives of the patients in the three groups compared.

An analysis of the frequency of occurrence of the main motives for seeking cosmetological help showed that the first motive was the ‘desire to have healthy skin’, which was found in more than 95% of cases in each group of women. The second motive in terms of frequency of occurrence in each group was the motive ‘to be more successful in personal life’, which was particularly represented in the group of women with an average degree of facial skin defects, whose average age was over 40 years old.

Table 22.

Motives for seeking cosmetic help

Motives for seeking cosmetic help	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	People	%	People	%	People	%	People	%
Dissatisfaction with skin appearance	36	67,9	51	76,1	47	65,3	134	69,8
Desire for healthy skin	51	96,2	66	98,5	70	97,2	187	97,4
Be more successful professionally	32	60,4	45	67,2	39	54,2	116	60,4
Be more successful in your personal life	37	69,8	56	83,6	50	69,4	143	74,5
Fashion trend in reference environment	21	39,6	22	32,8	24	33,3	67	34,9

Note. The sum of the percentages in the table exceeds 100% because each patient may have not one but several reasons for consulting a dermatologist-cosmetologist.

The motive 'to be more successful in professional activities' was found in 60.4% and was also most common in the group of women with average severity of the problem. A similar percentage of occurrence in the groups had the motive

'fashion trends in the reference environment', with some predominance in the group of younger women with mild severity of the cosmetic problem compared to women with moderate and significant severity. However, there were no statistically significant differences between the groups in the frequency of each of the motives for visiting a beauty clinic.

A structured interview was then used to explore the patients' opinions on the extent to which the existing cosmetic problem affects their life functioning. Table 23 shows the frequency distribution of patients' responses to this interview item in the three groups.

Table23.

The impact of a cosmetic facial skin problem on daily life

Impact on life activities	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	People	%	People	%	People	%	People	%
Unlikely to influence	22	42,3	26	40,0	22	29,3	70	36,5
Rather influences	9	17,3	17	26,2	6	8,0	32	16,7
Significantly influences	21	40,4	22	33,8	47	62,7	90	46,9
χ^2=15,47, p=0,004								

As you can see, statistically significant differences were found between the groups in the frequency of responses to the question about the impact of a cosmetic problem on life activity. The results of the study are largely logical, since the majority of patients with a significant severity of the cosmetic problem (62.7%) believe that this problem significantly affects their life, while in the groups of patients with a moderate and slight severity of the cosmetic problem, a significantly lower percentage of such responses (33.8% and 40.4%, respectively). At the same time, there is a polarisation of responses in the groups compared, as more than 1/4 of women with severe facial skin problems (29.3%), as well as 40.0% of women with moderate and 42.3% with mild severity, believe that the

cosmetic problem does not affect the success of their social, role and personal functioning.

Table 24 shows the frequency distribution of different levels of patient satisfaction with the results of cosmetic treatment. An examination of the patients' assessment of the effectiveness of the cosmetic treatment showed that in the group as a whole and in the groups with low and especially moderate severity of the cosmetic problem, there was complete elimination of the cosmetic problem (59.3% and 73.0%, respectively).

Table 24.

Patient-rated treatment effectiveness

Effectiveness of treatment	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	People	%	People	%	People	%	People	%
Minimum	1	3,7	1	2,7	3	9,7	5	5,3
Moderate (partial elimination of the problem)	10	37,0	9	24,3	13	41,9	32	33,7
Maximum (complete elimination of the problem)	16	59,3	27	73,0	15	48,4	58	61,1

In the group with significant severity of facial skin defects, such patients were slightly less than half (48.4%). The remaining women in all groups rated the efficacy of the treatment as average (‘partial elimination of the cosmetic problem’); none of them chose the ‘no efficacy’ scale, and 5 of all the patients studied chose the ‘minimal efficacy’ scale. Thus, the patients were less strict in their assessment of the treatment result than the attending dermatologist-cosmetologist (Section 2.3.2.); this particularly concerns the opinion of the attending physician and the patients regarding the complete elimination of the problem.

There were no differences between the compared groups in the assessment of the effectiveness of the cosmetic treatment.

Attitude to time perspective

Attitude to time perspective is an important indicator of a person's mental state (Beck A. et al., 2003; Golovakha E.I., Kronik A.A., 2008). In particular, the relationship between attitude to time perspective and depression has been proven (Shustrova G.P., 2006; Wasserman L.I. et al., 2014). In this regard, in this study, the attitude to time perspective is considered not only in the context of significant personal relationships, but also in the context of the risk of emotional and affective disorders, which in turn are the most important factor of mental maladjustment (Illness and health, psychotherapy..., 2019).

Table 25 shows the statistical characteristics of the scales of the Semantic Time Differential (STD) technique, which reveals the respondents' attitudes towards their present, past and future.

Table25.

Attitude to time perspective

STD factors	Severity of the cosmetic problem					
	Mild		Moderate		Severe	
	M	δ	M	δ	M	δ
Present						
Average rating of the present	5,36	3,85	4,91	3,65	5,66	4,15
Activity	3,62	4,15	3,65	4,40	3,43	4,71
Emotional colouring	6,84	6,35	6,14	6,47	7,94	6,37
Size	6,51	5,80	6,35	4,60	6,26	4,87
Structure	5,60	5,32	4,78	4,80	5,37	5,70
Sensibility	4,27	5,23	3,67	5,60	5,35	5,23
Past						
Average past score	4,42	4,36	4,07	4,63	4,34	5,01
Activity	4,89	4,30	4,73	5,22	3,74	5,36
Emotional colouring	5,04	6,99	5,43	6,84	6,35	7,21
Size	6,09	7,14	5,53	5,84	5,35	6,92

Structure	3,60	6,32	2,82	6,40	3,91	6,39
Sensibility	2,49	4,32	1,84	5,58	2,33	5,23
Future						
Average rating of the past	7,94	3,62	7,02	3,86	7,50	3,87
Activity	3,84	3,62	3,44	4,12	3,30	3,47
Emotional colouring	11,60	5,26	10,17	5,70	10,98	5,16
Size	10,24	5,65	9,69	5,26	9,52	5,72
Structure	8,67	5,76	6,56	5,71	7,63	5,68
Sensibility	5,67	5,65	5,29	4,97	6,19	5,00

The data obtained indicate that there are no statistically significant differences between groups of patients with different severity of cosmetic problems, both between the average assessments of their present, past and future, and between the assessments of individual time factors characterising their dynamics, structure, emotional colouring, etc., in each time period.

At the same time, there is a general trend in each group's emotional perception and cognitive assessment of different periods of their lives. Table 25 shows that patients in the three groups have higher average assessments of their future than of the present and especially of the past. In addition, there is a clear predominance of the factors 'emotional colouring' and 'size' in each time period in each of the groups.

Taken together, the obtained data mean that the examined patients of the cosmetic clinic have the most positive (optimistic) attitude to their future in comparison with the present and past periods of their life.They metaphorically characterise the present, the past and the future as light, colourful, bright and calm (‘Emotional colouring’ factor), as well as long-lasting, voluminous, wide and deep (‘Size’ factor), and the assessments of these factors in all periods do not exceed the limits of the normative range, and in the case of the assessment of the future they exceed it. The lowest values (within the normative range) in all groups and in all periods have the factor ‘Activity’, which reflects the expressed energetic fullness of the subject's mental life, possibly emotional stress (Vasserman L.I. et al., 2014).

Thus, using the technology of the psychosemantic approach, which is the basis of the ‘Semantic Time Differential’ method, it was found that the studied patients, regardless of the severity of the cosmetic problem, positively assessed the current period of life as a whole and its individual aspects, perceived the lived period of life as quite productive, fruitful. The most positive attitude was manifested in the high assessment of the future, which reflects not only an optimistic background of mood, the presence of goals and plans for the future that give life meaning, direction and perspective, but also the possession of good adaptive capabilities (personal resources) to overcome stress (Wasserman L. I. et al., 2014).

In general, when studying the system of significant relationships, no significant differences were found between groups of patients with different severity of cosmetic problems: for most indicators characterising individual aspects of the relationship with the social environment, attitude to oneself, to the treatment process, to the time perspective, no statistically significant differences were found between groups. The exception was women's subjective assessment of the degree of impact of a cosmetological problem of the facial skin on their life. The distribution of patients' answers to the corresponding point of the structured interview shows that the majority of patients with a significant severity of the cosmetic problem emphasize its significant impact on their life. The answers received in the groups of patients with a moderate and slight severity of the problem are polar in nature: in each of them there were more than 1/3 of respondents who believe that the facial skin defect does not affect their life, and the same number of patients who believe that it has a very significant impact.

The analysis showed that the majority of the patients at the beauty clinic did not show any pronounced signs of tension, dissatisfaction or deep inner discomfort in the system of significant relationships. At the same time, there were individual patients in each group who needed psychological help to cope with life difficulties, interpersonal and intrapersonal problems.

3.2.2. Negative emotional states

Below are the results of a comparative study of the level of neuroticism, the level of perceived stress, the level of social frustration, and the frequency and nature of the current psychotraumatic situation in groups of patients with different levels of cosmetic problems.

Level of neuroticism

The level of neuroticism is one of the most important indicators of a person's psychological adjustment, as it reflects the potential propensity to develop neurotic disorders when exposed to personally significant stressors and a lack of psychological resources to overcome them.

Table 26 shows the average indicators of the level of neuroticism in groups of patients with different severity of cosmetic problems, obtained using the method ‘Level of Neuroticism’ (NL).

Table26.

Level of Neuroticism

UN methodology indicator	Severity of the cosmetic problem					
	Mild		Moderate		Severe	
	M	δ	M	δ	M	δ
Level of Neuroticism	49,18	42,27	45,51	45,00	44,93	41,33

The study revealed no statistically significant differences in the absolute psychometric indicator ‘level of neuroticism’ between patients in the three groups compared. In each of these groups, the indicators of this level before and after treatment corresponded to the gradation ‘low level of neuroticism’ (from +41 to +80). The probability of the presence of neuroticism was estimated at 0.13, while the probability of the absence of neuroticism was 0.87, according to the distribution of levels and estimates of the probability of neuroticism in the Russian female sample obtained by the authors of the ‘Level of Neuroticism’ methodology (Karpova E.B. et al., 2014). This corresponds to the above result

of the comparison of the whole group of studied patients with the average normative data obtained from a domestic female sample (Section 3.1.).

Level of perceived stress

Table 27 shows the results of a comparative analysis of the subjective assessment of the stressfulness of one's life situation during the last month, obtained using the 'Perceived Stress Scale - PSS-10' method in groups of patients with different severity of cosmetic problems.

Table27.

Level of perceived stress

Indicators of the PSS-10 method	Severity of the cosmetic problem					
	Mild		Moderate		Severe	
	M	δ	M	δ	M	δ
Overall score	26,49	6,34	26,49	6,34	26,37	7,26
Overstrain	17,21	4,76	17,90	5,18	17,10	5,56
Counteracting stress	9,28	2,50	9,75	2,78	9,26	2,65

The results obtained in separate groups of patients with mild, moderate and significant severity of the cosmetic problem are not statistically significantly different from each other and are consistent with the result of comparing the indicators of the 'Perceived Stress Scale-10' in the whole group of patients with normative data (Section 3.1.). In the case of a general indicator of subjectively perceived stress and in the case of a feeling of emotional overload, the patients' indicators are significantly higher than the normative ones, but the efforts aimed at counteracting stress are significantly lower. This suggests that, despite the feeling of internal tension, the patients in each group are equally resistant to stress, i.e. they have a good level of frustration tolerance.

Level of social frustration

The medical-social scale 'Level of Social Frustration' (LSF) was used to investigate the degree of satisfaction/dissatisfaction in the main areas of life of the patients at the cosmetic clinic (Table 28).

Table28.

Dissatisfaction in different areas of life

Areas of life/dissatisfaction	Severity of the cosmetic problem					
	Mild		Moderate		Severe	
	M	δ	M	δ	M	δ
Relationships with family and friends	9,15	3,69	9,04	3,56	9,30	4,33
Social relationships outside the family	8,43	3,98	8,66	3,74	9,28	4,30
Social status	9,11	4,26	9,66	4,38	9,93	4,40
Economic situation	9,87	3,32	10,38	3,81	10,90	4,35
Health and performance	10,22	3,90	10,94	4,04	10,72	4,19

Note: the range of possible scores is from 5 to 25. A higher score corresponds to greater dissatisfaction and frustration in a particular area of life.

The data in Table 28 show that patients in all groups are satisfied with their relationships with their immediate social environment and are 'fairly satisfied' with their economic situation and their health; there were no differences between groups in terms of social frustration indicators.

The presence and nature (acute or chronic) of the current psychotraumatic situation was then examined. Table 29 shows the results of the study of the frequency of occurrence of psychotraumatic situations in groups of patients with different severity of cosmetic problems.

The majority of patients in each group reported the absence of an actual psychotraumatic situation. At the same time, 22.4% of all women reported the presence of a prolonged psychotraumatic situation.

Table29.

The presence and nature of a current psychotraumatic situation

Psychotraumatic situation	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	Peopl	%	Peop	%	Peop	%	Peopl	%

	e		le		le		e	
Currently unavailable	39	73,6	44	65,7	50	69,4	133	69,3
Presence of acute stress	4	7,5	7	10,4	5	6,9	16	8,3
Proltracted psychotraumatic situation	10	18,9	16	23,9	17	23,6	43	22,4

The differences between the groups in these indicators (presence and type of traumatic situation) are not significant. It is important to note that in each group there were between 4 and 7 women who were currently experiencing an acute stressful situation (8.3% in total).

Summarising the data obtained from the use of psychodiagnostic techniques and interview questions aimed at identifying negative emotional states, we can conclude that many patients experience a feeling of inner tension and frustration. However, the low levels of the indicators of neuroticism (NL method) and resistance to stress (PSS-10) show the stability of the individual and the effectiveness of the resources for psychological coping with stress in the women studied.

3.2.3. Psychological well-being and quality of life satisfaction

As an alternative to negative emotional states, indicators of psychological and physical well-being (well-being index) and satisfaction with the quality of life of patients in the three groups compared were examined.

Wellness Index

Table 30 shows the results of a comparative study of the WHO-5 method indicator, a screening tool developed by the WHO for rapid assessment of a patient's general (psychological and physical) well-being.

Table30.

Wellness Index

WHO-V methodology indicator	Severity of the cosmetic problem					
	Mild		Moderate		Severe	
	M	δ	M	δ	M	δ
Wellness index	63,66	21,39	59,92	21,27	62,20	19,84

There were no statistically significant differences between the groups in the final indicator of the WHO-5 methodology. Considering that the method has no normative values and that the maximum value of the 'Wellness Index' is 100 points, it can be argued that such components of psychological well-being as positive mood, activity, interest in the environment are represented in each group of patients in sufficient quantities (not reduced).

Quality of life satisfaction

Table 31 shows the results of a comparative analysis of indicators of satisfaction with certain aspects of quality of life and their psychological state in patients with different levels of cosmetic problems, obtained using the "Quality of Life Satisfaction Questionnaire" (QoL) (Workshop on Psychology..., 2005).

Table31.

Satisfaction with quality of life and mental health

QoL methodology indicators	Severity of the cosmetic problem					
	Mild		Moderate		Severe	
	M	δ	M	δ	M	δ
Quality of Life Index (QLI)	26,89	4,89	26,88	5,62	28,06	4,73
Job (career)	28,55	7,46	27,11	6,60	29,24	6,10
Personal achievements	28,89	6,37	28,93	6,26	30,08	5,65
Health	26,68	7,86	26,73	8,48	28,22	7,00
Communicating with friends and family	28,39	6,36	28,80	7,36	31,03	5,99
Support	28,18	6,98	26,20	7,61	28,12	6,20
Optimism	28,75	5,88	29,07	5,66	28,31	5,79
Tension	25,55	7,52	25,73	7,67	28,38	6,01
Self-control	22, 36	5,05	24,02	5,96	23,54	6,00
Negative emotion	24,66	6,89	25,31	7,36	25,63	7,02

Note. The technology used to process the results of the QoL methodology suggests that the higher the score, the higher the satisfaction with each aspect of quality of life.

Mathematical and statistical analysis revealed differences between the groups that were close to statistical significance in the indicators of the QoL methodology scales 'Communication with friends and loved ones' (F=2.510; p=0.085) and 'Tension' (F=2.709; p=0.070). In each case, the average scale score was higher in the group of women with significant cosmetic problems: they were more satisfied with the range and quality of social contacts and experienced less emotional distress (anxiety) than patients in the other two groups.

The absolute indicator of satisfaction with quality of life (QoL indicator) in each group was then correlated with the levels proposed by the author of the methodology, based on the distribution of ratings in the normative sample. Table 32 shows the results of an analysis of the frequency of occurrence of different levels of QoL in the groups of patients compared.

Table 32.

Frequency of occurrence of levels of satisfaction with quality of life

QoL level	Severity of the cosmetic problem							
	Mild		Moderate		Severe		Whole group	
	People	%	People	%	People	%	People	%
Low	3	7,0	7	15,9	2	3,6	12	8,4
Average	31	72,1	27	50,0	36	64,3	89	62,2
High	9	20,9	15	34,1	18	32,1	42	29,4
χ^2=7,91, p=0,095								

Differences in the frequency of occurrence of QoL levels were found between the groups of women compared, which approached statistical significance. The frequency distribution shows that in each group there was a significant predominance of the average level of satisfaction, which (frequency) was maximum in the group with a low severity of the cosmetic problem and minimum in the group with an average severity of the problem. In this group

there was a significantly higher percentage of people with a low level of satisfaction with the quality of life than in other groups.

3.2.4. Individual psychological characteristics of personality

Table 33 shows the results of a comparative analysis of the severity of basic personality traits in groups of patients with different severity of cosmetic problems, obtained using the Big Five test questionnaire (BIG V).

Table33.

Individual psychological characteristics of personality

Indicators of the BIG V methodology			Severity of the cosmetic problem						
	Mild		Level	Average		Level	Severe		Level
	M	δ		M	δ		M	δ	
Extraversion	28,66	5,30	3	28,04	4,83	3	26,69	5,14	2
Self-awareness	31,36	5,93	4	30,37	5,06	3	29,65	4,50	3
Cooperation	34,49	4,28	3	34,22	3,53	3	33,12	3,88	3
Emotional stability	23,49	5,56	3	23,16	6,16	3	23,62	6,25	3
Personal resources	29,36	5,60	2	28,84	4,75	2	27,66	5,66	2

Distribution of mean BIG V scale scores in the national sample

BIG V methodology scales	Scale ratings				
	Low (1)	Below average (2)	Average (3)	Above average (4)	High (5)
Extraversion	≥ 22	23-26	27-30	31-34	≤ 35
Self-awareness	≥ 18	19-21	22-30	31-35	≤ 36
Cooperation	≥ 29	30-31	32-36	37-38	≤ 39
Emotional stability	≥ 14	15-18	19-27	28-32	≤ 33
Personal resources	≥ 22	23-29	30-34	35-37	≤ 38

The analysis of Table 33 shows that there are no statistically significant differences between the compared groups in the average scale scores of the BIG-V methodology, which measures the severity of individual personality traits. Correlation of scale scores in each group with the distribution of average scale

scores obtained by D.P. Yanichev (2006) on a domestic sample (n=131) shows a generally balanced nature of personality traits, their expression being predominantly at the level of average scores in each of the compared groups. The exception is the scale indicator 'personal resources', which is expressed at the 'below average' level in each group of patients. This feature, which characterises the women studied as more pragmatic, preferring stability rather than seeking new experiences, looking for original approaches to solving everyday problems, having a rich imagination and creativity, was also revealed at the stage of comparing patients of a cosmetic clinic with normative data (p. 3.1.). It should also be noted that in the group of women with a weak manifestation of the cosmetic problem the indicator of the scale 'Self-confidence' corresponds to the 'Above average' level and reflects the presence in the personality structure of the traits of organisation, responsibility, determination and reliability.

3.2.5. Strategies and personal resources for coping with stress

The most important mechanisms of psychological adaptation aimed at overcoming stressful and problematic life situations are coping strategies and personal coping resources (Ababkov V.A., Perret M., 2004; Kryukova T.L., Gushchina T.V., 2015). In this regard, these psychological and behavioural characteristics have been studied in groups of patients with different severity of cosmetic problems.

Coping strategies

Table 34 shows the statistical characteristics of the scale scores of the Strategies of Coping Behaviour (CBS) method (Wasserman L.I. et al., 2010; Wasserman L.I. et al., 2014a).

Table 34

Strategies (coping)

Indicators of the CBS methodology	Severity of the cosmetic problem					
	Mild		Moderate		Severe	
	M	δ	M	δ	M	δ

Confrontation	53,75	10,54	53,52	8,37	51,68	9,98
Distancing	52,27	8,56	50,73	9,46	51,18	9,69
Self-control	51,30	9,24	51,52	9,45	48,79	11,11
Search for social support	53,57	8,07	52,23	8,28	50,61	9,07
Taking responsibility	53,75	8,15	51,25	8,23	49,84	9,20
Escape-Avoidance	57,34	10,33	53,80	8,93	54,32	9,53
Planning to solve a problem	54,39	7,86	52,16	8,94	51,04	10,46
Positive revaluation	52,00	10,34	53,84	10,70	51,18	9,60

In the structure of coping in the group of patients with a low and significant degree of severity of the cosmetic problem, the emotionally oriented coping 'escape-avoidance' is slightly dominant, aimed at normalising the emotional state under the influence of stressful factors by 'leaving', repressing and ignoring the problem. At the same time, patients with mild cosmetic problems tend to use constructive coping strategies aimed at analysing and planning a solution to the problem, as well as seeking external resources to overcome it.

Statistically significant differences between the groups ($F = 2.567$; $p = 0.000$) were obtained for the indicator of the 'Taking responsibility' scale, which turned out to be significantly lower in the group of patients with a significant severity of the cosmetic problem. Patients in this group were less than patients in other groups (but within the 'norms') characterised by understanding their role in the problem, accepting blame and responsibility for solving stressful and difficult life situations.

Personal coping resources

Life-meaning orientations were studied as coping resources - one of the important characteristics of the value-motivational sphere of the individual, which has a regulatory influence on many aspects of human behaviour. Table 35 shows the statistical characteristics of the scale scores of the Life-Meaning Orientations (LMO) methodology (Leontyev D.A., 2006).

Table35.

Life-Meaning Orientations

Indicators of the LMO methodology	Severity of the cosmetic problem					
	Mild		Moderate		Severe	
	M	δ	M	δ	M	δ
Goals	32,11	6,23	33,08	6,63	32,64	6,19
Process	29,79	5,96	28,82	6,03	29,00	6,01
Result	25,62	5,31	26,47	4,43	26,31	5,02
Locus of control – 'Self'	20,81	4,26	21,00	3,77	20,23	3,84
Locus of control - life	26,21	2,81	27,25	3,03	26,95	2,99
General LMO indicator	101,64	18,88	102,78	16,66	101,31	16,92

For all indicators of the LMO method, all groups obtained similar scores: the differences in the average scale scores between the groups are not significant. The closeness of the scores on the life satisfaction scales correlated with the time perspective ('Goals', 'Process', 'Result') shows that patients with different degrees of cosmetic problems are equally satisfied with the past and present part of life and have a similar emotional attitude towards the future. In addition, the absence of differences in the indicators of the locus of control scales suggests that patients in the three groups have equal opportunities to make their own decisions and take responsibility for life events. It is important to emphasise that, given the similarity of the LMO scale scores in the three groups compared, the overall indicator of meaningfulness of life obtained for the whole group is higher than the average normative values (Section 3.1.).

Thus, a comparative analysis of social and individual psychological characteristics, which together characterise the level of psychological adaptation, carried out in groups of patients with mild, moderate and severe severity of the cosmetic problem, did not show their clear connection with the degree of severity of the facial skin defect. Among the wide range of psychological characteristics studied, statistically significant and close differences were obtained for the following indicators 'The impact of a cosmetic problem on life activity' (structured

interview), 'Satisfaction with communication with friends and relatives', 'Tension' (satisfaction with emotional state) (QoL method), as well as 'Acceptance of responsibility' (CBS method). In all cases, the psychodiagnostic indicators differed most from other groups in the group of patients with significant severity of cosmetic problems, and this difference did not necessarily indicate a worse psychological status of patients in this group compared to patients in other groups.

3.3. Psychological characteristics of women with different levels of neuropsychological adjustment

In Chapter 1, based on the analysis of scientific literature, it is shown that, according to modern ideas, psychological adaptation is a substructure of the human mental adaptation system, located in an integrated unity and interaction with other substructures of mental adaptation - biological and social. Violation of mental adaptation under the influence of stress factors can lead to clinically formalized or subclinical neurotic, psychosomatic or behavioural disorders (Vasilieva A.V., Karavaeva T.A., 2020; Drobizhev, M.Yu., 2000; Aleksandrovsky Yu.A., 2021). On the basis of these ideas, a screening 'Test of Neuropsychic Adaptation' (NPA) was developed, which is aimed at detecting disorders of mental adaptation, mainly in the emotional-affective sphere. At the same time, emotional reaction is one of the mechanisms of psychological adaptation to stress (Kotsyubinsky A.P., 2001), therefore the NPA, which has a broader construct of ‘mental adaptation’ in its name, is relevant to the task of studying the psychological adaptation of women with cosmetic problems of the facial skin. In the future the author's name of the technique will be used - 'Test of neuropsychic adaptation', which is aimed at the simultaneous detection of violations of the general system of mental adaptation and its substructure - psychological adaptation.

In the second stage of the comparative study, all women who completed the NPA test (n=161) were distributed according to levels (categories) on the continuum of neuropsychological adaptation (Gurvich I.N., 1992). Table 36

shows the percentage distribution of the women studied by level (category) of NPA.

Table 36.

Distribution of patients in a beauty clinic by level of mental adaptation

Level of mental adjustment	People	%
1. ‘Health’	30	18,6
2. 'Optimal adaptation'	7	4,3
3. 'Non-pathological mental disadaptation’	37	23,0
4. 'Pathological mental disadaptation'	12	7,5
5. ‘Probably a painful condition’*	75	46,6

Note: * This is not a verified clinical diagnosis, but a conditional name for one of the levels of mental adjustment in the NPA method, data for which were obtained from patient self-report.

The patients were then divided into two comparison groups: group 1 - without significant mental adjustment disorders ('healthy', 'optimal adjustment', 'non-pathological mental maladjustment', n = 74, mean age 39.71 + 1.22 years); group 2 - with mental adjustment disorders ('pathological mental maladjustment', 'probably painful condition', n = 87, mean age 39.38 + 1.21 years). As expected, the two groups differed statistically significantly in terms of the total NPA score. This indicator was -1.16+0.15 in group 1 and 3.20+0.11 in group 2 (p=0.000).

The study of the main socio-demographic characteristics showed that in groups 1 and 2 there was a predominance of women with higher education (88.9% and 69.8%, respectively), employed on a permanent basis (76.4% and 69.8%, respectively), mainly in the private sector and in the fields of science and education; the majority of women in groups 1 and 2 had their own family (66.7% and 60.5%, respectively) and children (77.8% and 72.1%). 7% and 60.5% respectively) and children (77.8% and 72.1%); statistically significant differences between the groups were found in the parameter 'living arrangements': in group 2 there was a higher percentage of women living alone (22.1% and 4.2% respectively, $\chi 2 = 11.19$, $p = 0.004$) than in group 1.)

The most common clinical symptoms in both groups were: facial wrinkles, gravitational ptosis, furrows and folds. Statistically significant differences were found between groups 1 and 2 in the frequency of occurrence of symptoms: in group 1, facial wrinkles (57.3% and 43.0%, $\chi 2=3.33$, $p=0.048$) and scars (17.8 and 7) were more frequent (0.0%, $\chi 2=4.40$, $p=0.030$), in group 2 - connective tissue dysplasia (2.7% and 15.1%, $\chi 2=7.08$, $p=0.007$). There were no statistically significant differences between groups 1 and 2 regarding the severity of the cosmetic problem, its duration, the frequency of concomitant and background diseases (endocrine, dermatological, oncological, etc.), the degree of impact of the facial skin defect on life activity (according to the patients' self-assessment) and the effectiveness of treatment (according to the physician's expert assessment).

Thus, the groups of patients compared were quite comparable in terms of basic socio-demographic and clinical characteristics.

As in the case of patients with different severity of cosmetic problems, two groups of women were compared according to the indicators of psychodiagnostic techniques obtained before the start of cosmetic treatment. A total of 35 indicators reflecting the emotional-affective and individual-personal characteristics of the patients, measured using quantitative psychodiagnostic techniques, were analysed: 'Level of Neuroticism' (NL), 'Perceived Stress Scale' (PSS-10), 'Wellness Index', 'Satisfaction Questionnaire', 'Quality of Life' (QoL), 'Big Five' (BIG V), 'Methods of Coping Behaviour' (CBS methods), 'Life Meaning Orientations' (LMO); to determine the level of mental adaptation, the 'Test of Neuropsychic Adaptation' (NPA) was used.

One-way ANOVA

Table 37 shows the results of a comparative analysis of psychodiagnostic indicators of patients in two groups between whom statistically significant differences were found (27 indicators in total).

Table37.

Psychodiagnostic indicators of patients at a beauty clinic with different levels of mental adaptation

Methodology	Psychodiagnostic indicator	Group 1		Group2		F	p
		M	δ	M	δ		
NL	Level of neuroticism	74,28	30,61	23,51	33,09	84,00	0,000
WHO-V	Final assessment	70,93	18,22	56,10	19,21	22,50	0,000
PSS-10	Total score	23,76	6,14	29,36	6,62	27,56	0,000
PSS-10	Overstrain	15,30	5,06	19,27	4,85	23,22	0,000
PSS-10	Counteracting stress	8,46	2,33	10,09	2,75	14,50	0,000
QoL	Quality of Life Index	30,62	4,20	24,87	3,84	67,96	0,000
QoL	Job (career)	31,27	6,24	26,35	6,51	19,74	0,000
QoL	Personal achievements	32,66	4,78	27,10	5,73	36,52	0,000
QoL	Health	30,86	6,49	24,48	7,07	29,26	0,000
QoL	Communicating with friends and family	33,26	5,63	27,12	5,53	39,94	0,000
QoL	Support	30,97	5,80	26,16	6,11	31,48	0,000
QoL	Optimism	31,17	5,40	26,75	5,18	23,21	0,000
QoL	Tension	30,34	6,45	23,88	5,95	36,07	0,000
QoL	Self-control	25,66	5,28	21,14	5,32	24,04	0,000
QoL	Negative emotions	29,39	5,28	21,86	6,48	53,53	0,000
BIG V	Extraversion	29,27	4,79	26,32	5,13	12,66	0,001
BIG V	Self-awareness	31,97	4,54	29,49	5,07	9,52	0,002
BIG V	Emotional stability	27,01	4,48	20,71	5,31	55,83	0,000
CBS	Distancing	49,34	8,56	53,37	9,66	6,27	0,014
CBS	Taking responsibility	49,44	7,55	53,62	9,28	7,86	0,006
CBS	Escape-Avoidance	51,67	8,57	58,37	9,18	18,33	0,000
LMO	Total score	112,22	14,32	93,34	14,33	68,69	0,000
LMO	Goals	35,85	5,02	30,00	6,00	43,76	0,000
LMO	Goals	32,23	5,24	26,66	5,23	44,89	0,000
LMO	Result	26,66	4,02	24,18	4,46	43,00	0,000
LMO	Locus of control – 'Self'	22,86	3,26	18,79	3,44	58,42	0,000

LMO	Locus - Life	27,97	2,50	25,93	2,89	22,37	0,000

Notes. The technology for processing the results of the NL methodology assumes that the higher the score, the lower the level of neuroticism; QoL methods - the higher the score, the higher the satisfaction with each aspect of quality of life.

Comparative analysis of psychodiagnostic indicators reflecting the emotional and affective status of patients in both groups showed that the overall level of neuroticism is significantly lower in Group 1 than in Group 2: in the first group, emotional stability, frustration tolerance, social confidence, activity and free self-realisation of patients are significantly more pronounced (lack of uncertainty and excessive 'neurotic' self-control). These results can be supplemented by the results of the analysis of the frequency of occurrence in two groups of different levels of neuroticism, identified by the authors of the UN methodology on the basis of the distribution of the final indicators of neuroticism (Karpova E.B. et al., 2014). Thus, a 'very low' level of neuroticism was found in 50.0% of patients in Group 1 and in 2.9% of patients in Group 2; a 'very high' level - in 0.0% of patients in Group 1 and in 4.3% in Group 2 ($\chi 2$ = 51.84, p = 0.000). This is in line with the results of a comparison of the WHO-V final ratings, which showed that patients in Group 1 rated their own mood, activity, interest in the environment and overall psychological and physical well-being statistically significantly higher than patients in Group 2.

At the same time, Table 37 shows highly statistically significant differences between the compared groups for all indicators of the PSS-10 method, which turned out to be significantly higher in the group of patients with mental adjustment disorders (group 2). They experienced more intense emotional stress in the last month and made greater psychological efforts to overcome it than the patients who made up Group 1.

The study revealed a highly statistically significant predominance of all indicators of the QoL method in Group 1 compared to Group 2, which reflects a significantly higher satisfaction with the quality of life in general and its various aspects in patients in Group 1 compared to patients in Group 2. This is

confirmed by the results of the analysis of the frequency of occurrence in the compared groups of various levels of satisfaction with the quality of life, identified by the author of the QoL method on the basis of the distribution of the final indicators of the QoL ('Quality of Life Index') (Workshop on Health Psychology, 2005). According to the results of the frequency analysis, a 'low' level of QoL was found in 0.0% of patients in Group 1 and in 13.6% of patients in Group 2, a 'average' level - in 46.0% of patients in Group 1 and in 80.3% of patients in Group 2, a 'high' level - in 54.0% of patients in Group 1 and in 6.1% in Group 2 ($\chi 2$ = 39, 66 p=0.000). Taken together, these results indicate that patients in group 1 are significantly more satisfied than patients in Group 2 with various aspects of their social functioning (work, personal achievements, communication, social support), as well as with their psychological state and emotional balance and ability to control their manifestations, and with their health in general.

The results of the comparative analysis of the psychodiagnostic indicators reflecting the individual personal characteristics of women with cosmetic problems of the facial skin (Table 37) show that in Group 1, compared to Group 2, the mean values of the scales 'Extraversion', 'Self-awareness' and 'Emotional stability' of the BIG-V technique were higher. This indicates that in the typological personality structure of the patients in Group 1, compared to the patients in Group 2, the characteristics of activity and sociability, purposefulness, organisation and responsibility, as well as emotional stability and stress tolerance, are stronger.

Statistically significant differences between the groups were found for indicators of 3 of the 8 coping strategies studied (CBS scale scores). In each case,the indicators of patients in Group 2 prevailed. The most significant differences were found between the mean scores of the 'escape-avoidance' scale, which reflects a greater tendency of patients in Group 2 to avoid effectively solving problems and stressful situations by using cognitive techniques of denial, distraction, unjustified expectations and fantasy, other ways of reducing emotional

stress. The coping strategy of 'distancing' has a similar focus, the indicator of which is also predominant in Group 2 and reflects the tendency of patients in this group to overcome negative experiences related to the problem by subjectively reducing its significance, using cognitive techniques of rationalisation, shifting attention and devaluation. At the same time, the average score on the 'Taking responsibility' scale is higher in Group 2 than in Group 1, with a high level of statistical significance.

Table 37 also shows the results of a comparison of the LMO method indicators reflecting the value and motivational orientation of the individual. Highly statistically significant differences were found between the groups of patients compared for all indicators of the Life Support Method. In Group 1 (without mental adjustment disorders) compared to Group 2 (with mental adjustment disorders), both indicators of life meaning orientations correlated with the time perspective (goals - future, process - present, result - lived segment of life) and indicators of internal personality, reflecting the idea of oneself as a person with freedom of choice, building his life in accordance with his goals and understanding of its meaning (locus of control - I), and also capable of managing significant events in life (locus of control - life).

Multiple regression analysis

The next stage of the study was to identify, from the totality of the psychological characteristics studied (psychodiagnostic indicators), those that were most predictive of the risk of mental maladjustment.

As the results of the comparative analysis presented above (Table 37) show, the level of mental adaptation of the patients in the beauty clinic is associated with a significant number of psychodiagnostic indicators measured before the start of treatment (27 indicators in total). In this regard, a multiple regression analysis was carried out in order to identify the most predictive psychological characteristics.

Using this type of analysis, in which the level of mental adaptation (the final assessment of the NPA technique) was chosen as the dependent variable, four

models of the relationship between psychological variables and NPA were constructed. Of these models, a model with four predictors (variables) was selected as the most informative, explaining more than 2/3 of the variance in the level of mental adjustment (R2=0.708). These predictors are shown in Table 38.

Table 38.

Model of regression dependence of psychological characteristics and neuropsychological adaptation (NPA) of patients in a beauty clinic

Variables included (psychodiagnostic indicators)	Coefficient β	Level of significance
'Level of neuroticism' (NL method)	-0,482	p=0,000
'Locus of control' - 'Self' (LMO method)	-0,183	p=0,004
'Emotional stability' (BIG V method)	-0,244	p=0,001
'Support' (QoL technique)	-0,145	p=0,032

'Support' (QoL method)

With a low level of neuroticism (high value of the NL indicator), on the contrary, there is emotional stability and a positive background of basic experiences, self-esteem, independence, ease of communication, good resistance to stress (Karpova E.B. et al., 2014). This result is supported by the negative value of the beta coefficient for the 'emotional stability' indicator (BIG V method): the lower the emotional stability and balance, the higher the NPA indicator, which reflects the risk of mental maladjustment.

The negative values of the coefficients β obtained for two other psychodiagnostic indicators ('locus of control - self' and 'support') also reflect their relationship with the level of mental adjustment: the lower these indicators, the higher the NPA indicator. In terms of content, this means that a high level of personality internality and the presence of emotional and effective support from the immediate social environment are favourable prognostic factors that reduce the risk of mental maladjustment.

It is important to note the results of the multiple regression analysis, which show that the most informative psychodiagnostic methods in relation to the prognosis of mental adjustment disorders in patients of a cosmetology clinic are the test questionnaires 'Level of Neuroticism', 'Meaning in Life Orientations', 'Big Five' and 'Quality of Life Satisfaction Questionnaire'.

3.4. Relationship between indicators of psychological adjustment and clinical and biological indicators

This section presents statistically significant relationships obtained by correlation analysis between psychodiagnostic indicators that together characterise the level and quality of psychological adjustment, the age of the patients and a number of clinical characteristics (symptoms, their duration and severity, concomitant diseases, etc.). In the case of the age and treatment effectiveness indicators, a link was established not only with the psychological data, but also with the clinical characteristics of the patients, in order to assess the results of the study in a comprehensive manner.

3.4.1. Relationship between clinical features and age

Table 39 shows statistically significant correlations between age and clinical symptoms identified during the initial examination by a dermatologist-cosmetologist.

The results of the study of the relationship between clinical symptoms and age, presented in Table 39, show that with increasing age, the incidence of facial skin defects such as gravitational ptosis, devolumisation, furrows and folds, reduced skin turgor and hyperpigmentation increases. On the contrary, the younger the patient, the more common are inflammatory elements, rosacea, hypertrichosis and scars.

Table39.

Relationship between age and clinical symptoms

Clinical symptoms	Correlation coefficient (r)
Gravitational ptosis	0,522**
Devolubilisation	0,265**

Furrows and folds	0,516**
Decreased skin turgor	0,295**
Inflammatory elements	-0,364**
Rosacea	-0,173*
Hyperpigmentation	0,213**
Hypertrichosis	-0,166*
Scars	-0,194**

Note. In tables 39 and 40: ** – correlation is significant at the 0.01 level (two-sided), * – correlation is significant at the 0.05 level (two-sided).

Regular positive relationships were observed with a number of other clinical characteristics: the relationship between age and the severity of the cosmetic problem ($r=0.180$, $p<0.05$), between age and the duration of the cosmetic problem ($r=0.455$, $p<0.01$): the older the age, the greater the severity and duration of the cosmetic problem. At the same time, there was a negative relationship between age and the degree of impact of a cosmetic problem on life activity (according to the patients' self-assessment) ($r=-0.243$, $p<0.01$). The older the patient, the less impact a cosmetic defect has on his or her life activities and, conversely, the younger the patient, the greater the impact on his or her life.

3.4.2. Relationship between psychological traits and age

Table 40 shows statistically significant correlations between age and psychodiagnostic indicators measured at the beginning of treatment.

Table40.

The relationship between age and psychodiagnostic indicators

Methodology	Psychodiagnostic indicator	Correlation coefficient (r)
QoL	Health	-0,177*
QoL	Support	-0,171*
QoL	Self-control	-0,222**
VAS	Здоровье	-0,149*
SDT	Average future estimate	-0,183*
SDT	Future value	-0,197*

SDT	Time structure	-0,174*
BIG V	Personal resources	-0,221**
CBS	Taking responsibility	-0,196*
CBS	Escape-Avoidance	-0,176*

The results of the correlation analysis show that in the group of patients studied at the Beauty Clinic, satisfaction with such aspects of quality of life as health, the presence and nature of support from the immediate social environment, and the ability to control their emotional reactions decreases with increasing age (QoL method). Also, according to the data obtained, the older the patient, the lower the assessment of his current health (VAS method) and the lower the overall assessment of his future as a whole and its individual aspects related to the feeling of inner freedom, semantic fullness, as well as the predictability, structure and controllability of his future (SDT method). In problematic and stressful situations, with increasing age, the ability to see one's own role in the emergence and solution of the problem decreases, and the frequency of using non-constructive coping strategies associated with the desire to "escape" the problematic situation by fantasising, taking drugs, etc. decreases (CBS method) (Bagnenko E.S., 2023).

3.4.3. Relationship between clinical and psychological features

Table 41 shows statistically significant correlations between the presence of clinical symptoms and psychological characteristics (psychodiagnostic indicators) of patients.

Table41.

Relationship between clinical symptoms and psychological features

Clinical symptoms	Methodology	Psychodiagnostic indicator	Correlation coefficient (r)
Gravitational ptosis	QoL	Health	-0,207*
	QoL	Support	-0,175*
	SDT	Present time activity	-0,207*
	CBS	Taking responsibility	-0,166*

Mimic wrinkles	SDT	Present time value	0,183*
Furrows and folds	SFL	Satisfaction with performance	-0,175*
	VAS	Health	-0,151*
	SDT	Present time activity	-0,211*
Decreased skin turgor	VAS	Character	0,188*
	VAS	Appearance	0,166*
	BIG V	Cooperation	0,176*
Inflammatory elements	QoL	Health	0,169*
	QoL	Tension	0, 165*
	CBS	Self-control	-0,179*
Skin dehydration	BIG V	Extraversion	0,173
Connective tissue dysplasia	Interview	Reason for visiting a beautician: fashion trend	-0,217**
	NPA	Total score	0,188*
	QoL	Personal achievements	-0,179*
	QoL	Self-control	-0,170*
	SDT	Emotional colouring of the present	-0,203*
Vascular pathology of the skin	SFL	Satisfaction with relationships with relatives	0,291**
	SFL	Satisfaction with opposite sex related relationships	0,185*
	SFL	Satisfaction with relations with social environment	0,195*
	SFL	Satisfaction with your psycho-emotional state	0,237**
	SFL	Satisfaction with health and performance	0,186*
Hypertrichosis	SFL	Satisfaction with your physical condition	0,182*
	QoL	Job (career)	0,171*
Scars	NPA	Total score	-0,203*
	CBS	Taking responsibility	-0,258**

Some of the obtained correlations have a clear meaning, some of them seem to have a purely statistical (random, difficult to explain) character. Nevertheless, the whole set of obtained correlations can be taken into account when developing the main directions of psychological assistance to patients of a cosmetological clinic with facial skin defects (Bagnenko E.S., 2021a).

Thus, the frequency of occurrence of gravitational ptosis is accompanied by a decrease in satisfaction with the quality of life in the areas of health and support from the social environment (QoL method), a decrease in the assessment of the perception of the current period of life as active (SDT method) and a decrease in the frequency of using coping strategies associated with taking responsibility for the emergence and resolution of problematic and stressful life situations (CBS method).

The presence (occurrence) of furrows and folds on the skin of the face, as in gravitational ptosis, is manifested by a decrease in the perception of the present time as active (SDTmethod); in addition, this symptom is accompanied by a decrease in satisfaction with performance (SFL method).

With connective tissue dysplasia, the frequency (atypical) of the motive for going to the cosmetologist, described in the interview as 'the desire to follow a fashion trend', decreases, and satisfaction with such aspects of quality of life as personal achievements (primarily career) and the ability to control one's own emotional reactions (self-control) decreases. (The evaluation of the emotional colouring of the present time also decreases: its subjective perception is dominated by negative aspects and dissatisfaction (SDT method). At the same time, the level of mental adaptation increases (decrease in the NPA indicator).

Taking into account the design features of the SFL method (a higher score corresponds to greater dissatisfaction), an increase in the incidence of vascular pathology of the skin is accompanied by a decrease in satisfaction in a wide range of social relationships, in the area of one's own mood, performance and health.

The appearance of facial scars is accompanied by a decrease in the indicator of the strategy of 'taking responsibility' in the structure of coping behaviour, i.e. behaviour aimed at overcoming stress (CBS technique).

In addition to the correlations listed, which reflect a decrease in psychodiagnostic indicators with an increase in the frequency of occurrence of a clinical symptom, a number of opposite statistically significant (in some cases difficult to interpret) relationships were identified: as the frequency of a symptom increases, the value of the psychodiagnostic indicator increases.

For example, an increase in the frequency of the symptom 'reduced skin turgor' is associated with an increase in self-esteem regarding character and appearance (VAS method) and a desire to cooperate and a generally positive attitude towards people (BIG V method). The mediator of this relationship may be the age of the patients: with increasing age, the frequency of decreased skin turgor increases (Table 39).

The frequency of occurrence of the symptom 'inflammatory elements' is associated with an increase in satisfaction with quality of life in the areas of health and the experience of internal tension and discomfort (QoL method). It can be assumed that the age of the patient plays an indirect role in this pattern: the younger the age, the more often inflammatory elements are found (Table 39), and at a young age these inflammatory elements are more of a stress factor.

An increase in the incidence of facial dehydration is associated with an increase in extraversion (BIG V method), and hypertrichosis is associated with an increase in job satisfaction (QoL method) and a decrease in health satisfaction (SFL method), facial wrinkles are associated with an increase in the assessment of the present as an important, meaningful period of life.

Table 42 presents the results of a correlation analysis of a number of other clinical indicators recorded in the study with indicators of psychodiagnostic techniques.

Table42

Relationship between other clinical features and psychodiagnostic indicators

Clininal characteristics	Methodology	Psychodiagnostic indicator	Correlation coefficient (r)
Background diseases: endocrine	BIG V	Extraversion	-0,218**
Associated diseases: dermatological	CBS	Search for social support	-0,316**
Comorbidities: cancer	Interview	Treat yourself as an individual	0,182*
Duration of the problem	Interview	Confidence in your external attractiveness	-0,172*
	WHO-V	Wellness Index	-0,186*
The impact of a cosmetic problem on life activity	SDT	Average future estimate	0,184*
	SDT	Emotional future estimate	0,169*
	SDT	Future structure	0,181*
	SDT	Perceptibility for the future	0,168*

The data in Table 42 show that, in the presence of endocrine diseases, the degree of extraversion (activity, sociability, emotional responsiveness) decreases and, on the contrary, the introverted orientation of the personality increases (BIG V method). In the presence of dermatological diseases, the frequency of using the constructive coping strategy of 'seeking social support', which implies the possibility of obtaining external resources to resolve life difficulties (CBS method), decreases; a history of cancer is associated with an increase in the level of self-esteem (structured interview).

It was also found that an increase in the severity of a cosmetic problem is associated with a decrease in the level of extraversion, i.e. a decrease in social contacts, sociability and activity (BIG V method), as well as a decrease in the frequency of using the constructive coping strategy of 'taking responsibility' in problematic life situations, with a tendency to shift blame and responsibility to others (CBS method).

As expected, an increase in the duration of a cosmetic problem is associated with a decrease in confidence in one's external attractiveness and a decrease in overall physical and psychological well-being (WHO-V method).

In the context of studying the psychological adjustment of women with facial skin defects, it is not unimportant to establish the influence of the severity of a cosmetic problem on life activity, as determined by the patients' self-report with their psychological characteristics. The correlation analysis carried out revealed a direct (positive) relationship between the degree of such influence and the attitude towards their future. The greater the impact of a facial skin defect on various areas of the patients' lives at the present time, the more positively they assess their future, characterising it as emotionally bright, structured, logically harmonious and highly personally significant (SDT method). It is also important to repeat that the degree of impact of a cosmetic problem on life activity is negatively related to the age of the patient: the older the patient, the less impact the cosmetic defect has on his or her life activity (Bagnenko E.S., 2021a).The totality of these data indicates the importance of the time factor in relation to a cosmetic defect. If currently 46.9% of women consider its impact on their life activity to be significant (point 3.2.1), when assessing their future this impact is not perceived as fatal, bringing discomfort and problems; on the contrary, bright expectations and hopes are associated with the future, and with age the impact of cosmetic problems on different areas of life decreases.

3.4.4. Relationship between treatment efficacy and clinical and psychological characteristics

Table 43 shows the results of a correlation analysis of the assessment of the effectiveness of the cosmetic treatment (as assessed by the treating physician and as assessed by the patients) with the clinical and psychological characteristics of the patients.

Table43.

Relationship between treatment efficacy, clinical and psychological characteristics

Clinical and psychological characteristics	Treatment effectiveness (patient)	Treatment effectiveness (doctor)
Clinical characteristics		
Mimic wrinkles		0,257**
Inflamatory elements		-0,425**
Decreased skin turgor		0,185*
Skin dehydration		0,153*
Rosacea		-0,232**
Scar formations	-0,245**	
Comorbid dermatological conditions		-0,374**
Severity of the cosmetic problem		-0,391**
Psychodiagnostic methods and indicators		
Structured interview		
Psychodiagnostic methods and indicators		0,217**
Treatment effectiveness as assessed by the patient	1,00	0,276**
The effectiveness of the treatment, according to the doctor	0,276**	1,00
Personality test questionnaire BIG V		
Self-awareness (organisation)		0,183*
Cooperation (cooperativeness)		0,177*
CBS test questionnaire (Coping Strategies)		
Planning to solve a problem		0,217**
SDT methodology		
Past time structure	-0,251*	

The data presented in Table 43 show the relationship between treatment efficacy (as assessed by the clinician) and a number of clinical characteristics.

Statistical analysis revealed that a decrease in treatment efficacy is associated with the presence of clinical symptoms such as inflammatory elements on the facial skin and rosacea, as well as the presence of underlying dermatological diseases. On the contrary, a higher assessment of the effectiveness of treatment corresponds to the presence in the clinical picture of facial wrinkles, decreased skin turgor and dehydration of the facial skin. There was also a natural negative correlation between the effectiveness of the treatment and the severity of the cosmetic problem: the greater the severity of the skin defect, the lower the effectiveness (according to the doctor).

According to the results of the correlation analysis, the effectiveness of the treatment (as assessed by the patient) from the clinical characteristics is only associated with the presence of scars on the facial skin: if they are present, the assessment of effectiveness is reduced.

For example, the correlation analysis revealed a significantly greater number of relationships between the treating physician's assessment of treatment effectiveness and clinical symptoms than the number of relationships between the subjective assessment of treatment effectiveness and clinical symptoms.

A study of the relationship between the doctor's assessment of the effectiveness of treatment and the psychological characteristics of patients showed a positive relationship between effectiveness and the indicators 'confidence in one's external attractiveness' (interview), 'self-awareness', 'cooperation' (BIG V method) and 'planning a solution to a problem' (CBS method), i.e. psychological indicators reflecting organisation, cooperation, goodwill and a rational approach to solving problems. It is therefore obvious that the effectiveness of treatment in a beauty clinic, as in other clinics, is linked to the representation in the personality structure of patients of characteristics that determine their compliance (adherence to treatment).

The effectiveness of treatment, according to the patient, is negatively correlated with the assessment of the structure, clarity and orderliness of his past.

It is also worth noting that although doctors' and patients' assessments of

treatment effectiveness are positively correlated at a high level of statistical significance, doctors' assessments of effectiveness are much more saturated with correlations than patients' assessments. In this respect, it can be assumed that physicians take into account a significantly larger number of external indicators when assessing the effectiveness of their work than patients do, and that their assessment is more differentiated.

3.4.5. The relationship between self-appraisal and clinical and psychological characteristics

Previously, Tables 42 and 43 presented statistically significant relationships between clinical characteristics and certain aspects of the perception and attitudes of women with facial skin defects towards their appearance, the most psychologically understandable of which is a decrease in confidence in their external attractiveness as the duration of the cosmetic problem increases.

In connection with the assumption that the assessment of one's own appearance can be determined not only by objective clinical characteristics (presence of symptoms, their severity, duration, etc.), but also by subjective personal, emotional-affective and other psychological characteristics of the patients, a correlation analysis of the indicators of attitude to one's own appearance with all previously measured psychodiagnostic indicators was then carried out. A similar analysis was also carried out in connection with the issue of the occurrence of body dysmorphic disorder in aesthetic medicine clinics discussed in the scientific literature (Section 1.3.).

Table 44 shows the statistically significant results of the study of the relationship between indicators of attitudes towards one's own appearance and other psychodiagnostic indicators of women with cosmetological problems.

Table44

The relationship between attitudes to appearance and psychodiagnostic indicators

Psychodiagnostic indicator, methodology	Relationship in your physical 'Self'	Confidence in your external attractiveness	The desire to change a lot about your appearance	Appearance (beauty)
Total score, NPA	-0,391**	-0,483**	0,353**	-0,235**
Level of neurotisation, NL	0,409**	0,450**	-0,337**	0,236**
Overstrain, PSS-10	-0,244**	-0,274**	0,314**	
Counteracting stress, PSS-10	-0,241**	-0,295**	0,238**	
Total score, PSS-10	-0,272**	-0,323**	0,332**	
Satisfaction with relations with family and friends, SFL		-0,188*	0,188*	
Satisfaction with relations with the social environment, SFL		-0,257**	0,186*	
Satisfaction with socio-economic situation, SFL		-0,240**	0,203**	
Health and performance satisfaction, SFL	-0,286**	-0,328**	0,295**	
Wellness Index, WHO-V	0,367**	0,452**	-0,336**	0,222**
Quality of life index, QoL	0,474**	0,481**	-0,279**	0,182*
Job, QoL	0,216**	0,282**		
Personal achievements, QoL	0,372**	0,364**	-0,303**	0,188*
Health, QoL	0,510**	0,458**	-0,236**	
Communication, QoL	0,290**	0,380**		
Support, QoL	0,417**	0,430**	-0,244**	
Optimism, QoL	0,277**	0,242**	-0,196*	0,187*
Tension, QoL	0,445**	0,456**	-0,196*	0,176*
Self-control,QoL	0,355**	0,268**	-0,223**	
Negative emotions, QoL	0,323**	0,365**	-0,348**	0,167*
Intelligence, VAS		0,216**		0,436**
Appearance (beauty), VAS		0,228**	-0,177*	1,00
Health, VAS		0,305**		0,400**

Average assessment of the present, SDT		0,226**	-0,217**	
Average assessment of the past, SDT		0,239**	-0,228**	0,174*
Average assessment of the future, SDT		0,203*		
Extraversion, BIGV		0,201*		
Self-awareness, BIGV	0,191*	0,207**		
Cooperation, BIGV	0,280**	0,273**		0,191*
Emotional stability, BIGV	0,366**	0,338**	-0,380**	
Personal resources, BIGV				0,204*
Taking responsibility, CBS	-0,190*	-0,213**	0,244**	
Escape – Avoidance, CBS	-0,225**	-0,247**	0,202**	
Goals in life, LMO	0,291**	0,301**	-0,232**	
Life process, LMO	0,337**	0,432**	-0,283**	0,218**
Result, LMO	0,331**	0,342**	-0,285**	0,224*
Locus of control – 'Self', LMO	0,363**	0,352**	-0,280**	0,203*
Locus of control – Life, LMO	0,238**	0,250**	-0163*	
Total score, LMO	0,346**	0,382**	-0,278**	0,234**

Notes. In the NPA method, a higher level of adaptation corresponds to a lower value of the total score (z); in the NL method, a higher level of neuroticism corresponds to a lower value of the NL indicator; in the SFL method, a higher level of satisfaction corresponds to a lower score in each area of life.

As you can see, all four indicators of the attitude to one's appearance naturally correlate with the indicators of the NPA, NL, WHO-V methods. The better the attitude to one's physical 'Self', the greater the confidence in one's external attractiveness, the higher the self-esteem in the parameter 'appearance' (VAS method) and the less expressed the desire to change one's appearance, the higher the level of mental adaptation, the general physical and psychological well-being and the lower the level of neuroticism. Practically the same situation is reflected in the correlations between the indicators of the PSS-10 method and the attitude towards appearance: the better this attitude and the less expressed the

desire to change one's appearance, the lower the overall level of perceived stress, the less subjective experience of internal tension and the less psychological effort made to cope with it. It is also clear that the opposite patterns are also true: the higher the level of mental adjustment, the lower the level of neuroticism and perceived stress, and the better the attitude to one's appearance.

Table 44 also shows that satisfaction with one's appearance is positively related to satisfaction in such important areas of life as relationships with family, relationships in the immediate social environment outside the family (friends, colleagues, people of the opposite sex, etc.), satisfaction with one's social status and economic situation, as well as one's health and performance (SFL method).

This is in line with the results of the study of the relationship between the evaluation of one's appearance and the indicators of the QoL methodology. The higher the evaluation of one's appearance and the confidence in one's attractiveness, the lower the expressed desire to change one's appearance, the higher the satisfaction with the quality of life in general, as well as the higher the satisfaction with aspects such as social functioning (work, personal achievements, communication, social support) and emotional state (optimism, tension, self-control, negative emotions).

Important relationships have been identified between acceptance of one's appearance and a number of basic personality and character traits reflected in the indicators of the BIG V methodology. For example, the degree of confidence in one's external attractiveness is positively correlated with extraversion (sociability and activity), as is the attitude towards one's physical self. 'Emotional stability' and the assessment of appearance (beauty) (VAS method) correlate positively with organisation ('self-consciousness') and with the willingness to cooperate, agree and be friendly with others ('cooperation'). 'Emotional stability' is positively associated with the degree of acceptance of one's physical 'Self' and with confidence in one's external attractiveness, and is negatively associated with the desire to change one's appearance a lot, and on the contrary, neuroticism (emotional instability) is associated with a low assessment of one's appearance and the desire to change it.

A positive relationship has been demonstrated between the assessment of appearance and such an important characteristic as 'personal resources': an increase in the assessment of one's appearance is accompanied by an increase in the desire to seek new experiences, knowledge, new non-standard solutions and self-development. The following relationship is also true: the higher the creative potential of an individual, the higher the level of acceptance of one's appearance as an element of self-awareness.

Two of the eight coping strategies examined were associated with self-esteem in appearance. According to the results of the correlation analysis, a decrease in the evaluation of one's physical 'Self' and confidence in one's external attractiveness is accompanied by an increase in the frequency of using the strategies of 'taking responsibility' (the tendency to take responsibility for the situation, often accompanied by feelings of guilt) and 'escape-avoidance' in stressful situations. (cognitive or physical detachment from a situation in order to reduce its emotionally traumatic impact). At the same time, the desire to change one's appearance is associated with an increase in the frequency of using these coping strategies. It can be assumed that this desire itself (and even more so the attempts to realise it) is also a coping strategy, the meaning of which is to explain failures, difficulties, stress in one's life in terms of shortcomings in one's appearance, and to eliminate problems means to improve them, i.e. to use a protective rationalisation technique.

When analysing the relationships between psychodiagnostic indicators characterising the attitude to the time perspective and indicators characterising the attitude to one's own appearance, clear, consistent and highly statistically significant results were obtained. The better the attitude to one's own appearance, the more satisfied the patients are with the current life situation (average assessment of the present, SDT method; life process, LMO method), have a better attitude towards the past period of their life, considering it rich, emotionally positive and productive (average assessment of the past, SDT method; outcome, LMO method), and are more confident in their future, in the successful

achievement of goals (average assessment of the future, SDT method; goals, SDT method).

A direct statistically significant relationship was found between all the aspects of attitudes towards one's own appearance and the characteristics of the value-semantic sphere of personality (locus of control, LMO method). The better the assessment of one's own appearance, the higher the internality of the personality and, conversely, patients with an internal locus of control are more satisfied with their appearance and more confident in their external attractiveness.

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Thus, the study revealed a large number of relationships between attitudes towards one's own appearance and other psychological characteristics of patients in a cosmetic clinic. The number of such relationships significantly exceeds the number of relationships between attitudes towards appearance and objective clinical characteristics recorded by the attending physician; of these relationships, only the negative relationship between confidence in one's own external attractiveness and the duration of the cosmetic problem is not only statistically but also clinically justified.

It is important to note that, among psychological characteristics, statistically significant relations with attitudes to one's appearance have not only transient characteristics, largely determined by the current emotional background (satisfaction with various aspects of life, experience of psychological stress, feeling of psychological well-being, etc.), but also stable typological personality-characteristic traits. All five basic personality traits are the Big V factors that make up the personality structure (Pervin L., John O., 2001) correlate with the assessment of one's appearance, which emphasizes its role in the psychological

organisation of the individual. In addition, it can be assumed that the attitude towards one's appearance characterises, to a certain extent, the maturity of the individual, since it is associated with personality traits united by factors (basic traits) 'self-awareness', 'cooperation', 'emotional stability', 'personal resources'. This corresponds to the natural direct relationship found in the study between the evaluation of one's own appearance and the inner life of the individual.

3.5. «Psychological profiles» of beauty clinic patients

Subsequently, cluster analysis according to Ward's method was used to try to identify groups of patients with similar ‘psychological profiles’ (clusters) and to determine statistically significant differences between clusters according to the psychological characteristics studied, using one-way analysis of variance. This approach is justified in the context of psychological support of the treatment process and has long been used by researchers to identify specific ‘psychological profiles’ of patients undergoing one or another type of treatment. As a result of the cluster analysis, 3 clusters were identified, grouping together patients with similar ‘psychological profiles’.

The table in Figure 45 shows statistically significant and similar results of a comparative analysis of psychodiagnostic indicators of patients who made up 'Cluster-1', 'Cluster-2' and 'Cluster-3'.

Table45.

Statistical characteristics of scales of psychodiagnostic methods in groups of patients forming 'Cluster-1', 'Cluster-2', 'Cluster-3'.

Psychodiagnostic indicator, methodology	‘Claster – 1’		‘Claster – 2’		‘Claster – 3’		F	*p*
	M	σ	M	σ	M	σ		
Insincerity, NL	4,47	1,35	5,13	1,41	2,78	1,30	8,70	0,001
Level of neuroticism, NL	48,26	19,17	96,19	15,95	-30,11	19,33	135,97	0,000
Overstrain, PSS -10	18,47	4,69	13,25	5,26	23,67	4,69	13,97	0,000

Counteracting stress, PSS-10	8,91	2-50	7,25	2,08	12,11	2,47	11,90	0,000
Total score, PSS -10	27,38	6,01	20,50	5,97	35,78	4,71	20,18	0,000
Satisfaction with education, SFL	1,79	0,91	2,06	1,29	2,89	1,05	3,90	0,026
Satisfaction with the level of vocational training, SFL	2,09	0,96	2,31	1,30	3,11	0,78	3,42	0,040
Satisfaction with level of financial situation, SFL	2,44	1,16	2,44	1,09	3,33	0,87	2,50	0,092
Satisfaction with emotional state, SFL	2,68	1,09	2,19	1,33	3,56	1,42	3,68	0,032
Satisfaction with performance, SFL	2,44	0,82	2,06	1,39	3,11	1,68	2,85	0,066
Satisfaction with social status (block of questions), SFL	7,71	3,65	9,25	5,22	11,00	2,69	2,65	0,080
Wellness Index, WHO-V	61,06	21,56	82,00	12,73	50,67	20,59	9,26	0,000
Quality of life index, QoL	27,04	3,35	33,47	3,62	20,91	4,31	37,54	0,000
Job, QoL	29,26	6,39	33,88	5,25	24,67	3,74	7,67	0,001
Personal achievements, QoL	30,38	4,70	35,25	3,36	22,23	5,70	23,23	0,000
Health, QoL	26,41	6,63	35,69	3,69	17,11	5,60	30,71	0,000
Communication, QoL	28,76	6,53	35,94	3,91	26,22	6,87	10,25	0,000
Support, QoL	27,59	6,39	34,63	4,6	21,33	4,42	16,71	0,000
Optimism, QoL	28,35	4,59	34,19	5,75	25,44	6,91	10,10	0,000
Tension, QoL	25,62	6,85	33,63	5,77	18,33	4,82	18,10	0,000
Self-control,QoL	21,97	4,39	26,94	4,60	16,89	5,30	14,46	0,000
Negative emotions, QoL	25,06	5,12	31,13	5,20	15,89	5,37	25,01	0,000
Appearance (beauty), VAS	65,29	12,12	76,88	13,15	52,89	19,40	9,21	0,000
Health, VAS	69,91	16,79	82,50	10,65	59,67	24,26	6,74	0,002
Cooperation, BIGV	33,38	3,76	35,56	3,86	32,67	3,00	2,46	0,095
Emotional stability, BIGV	23,56	5,06	28,13	3,63	19,22	4,68	11,09	0,000
Personal resources, BIGV	26,65	4,36	30,81	4,86	27,44	4,72	4,62	0,014

Confrontation, CBS	52,50	8,89	49,75	7,53	60,78	4,06	5,63	0,006
Escape – Avoidance, CBS	53,94	7,94	51,63	10,30	60,44	12,28	2,63	0,081
Life process, LMO	30,38	5,43	34,19	4,48	26,22	6,00	6,78	0,002
Result, LMO	27,00	3,85	30,50	2,50	22,22	5,07	14,14	0,000
Locus of control – ‘Self’, LMO	30,50	3,47	23,63	3,10	17,89	3,89	8,02	0,001
Locus of control - Life, LMO	26,94	2,80	28,44	2,13	25,33	1,80	4,58	0,014
Total score, LMO	106,18	15,79	116,88	12,33	90,33	16,64	9,00	0,000

The first cluster ('Cluster-1'), conventionally called 'optimal psychological adjustment', united more than half of the women included in the clustering sample (57.63%; average age 42.50 years old).Their psychodiagnostic indicators occupy an intermediate position between those of the patients who make up 'Cluster 2' and 'Cluster 3', and in most cases correspond to the standard indicators (Section 3.1). Thus, the indicator of the UN methodology corresponds to the gradation of the distribution of final ratings 'low level of neuroticism' (Karpova E.B. et al., 2014), reflecting the stability of the emotional background, immunity to confusing factors (frustration tolerance) and self-confidence. The indicators of the PSS-10 method reflect the presence of perceived stress in the patient's current state, but the low level of neuroticism (NL method) and resistance to stress (PSS-10 method) show the stability of the individual and the effectiveness of resources for coping with stress in the patients who make up this cluster. Indicators of satisfaction with social relations and other aspects characterising the quality of life of patients are not reduced, and indicators of satisfaction with the level of their education, professional training and social status exceed the corresponding indicators of patients forming 'Cluster 2' and 'Cluster 3'. Apparently, due to this satisfaction, the indicator of the scale ‘Personal resources’ (desire for self-development, search for something new) in this group of patients is lower than in the other two groups (clusters) and corresponds to the 'below average' gradation, according to the distribution of average scale scores 'Big V' methodology, obtained by D.P.

Yanichev (2006) on a domestic normative sample. The severity of the personality traits 'emotional stability' and 'cooperation' corresponds to the average normative level, as well as the representation in the behaviour of the coping strategies 'confrontation' and 'escape-avoidance' (the normative range of indicators is T = 50 + 10) (Wasserman L.I. et al., 2014). Self-esteem of appearance and health is not reduced (VAS). Indicators of meaningfulness of life correlated with a time perspective are lower than those of patients forming 'Cluster 2' and higher than those of patients forming 'Cluster 3', and at the same time the 'life process' indicator (satisfaction with the current period of life) approximately corresponds to the normative data, and the 'result' indicator (satisfaction with the lived segment of life) and the general indicator of meaningful life orientation (LMO) exceed them (Leontyev D.A., 2006), which together characterizes a harmonious and emotionally balanced 'psychological profile'. It is also important to note the highest values of the indicator of personality internality (activity, responsibility, independence) in comparison with other clusters and average normative data.

The second cluster ('Cluster-2'), provisionally named 'Full psychological well-being, social success and its demonstration', included 27.12% of patients (average age 39. 25 years old) who received minimum scores on psychodiagnostic scales reflecting emotional stress, psychological discomfort, dissatisfaction with various aspects of life, as well as the presence in behaviour of non-constructive coping strategies - 'confrontation' (implying a certain level of aggressiveness, hostility) and 'escape-avoidance' (distancing from problems, avoiding their solution). For example, the indicator of neuroticism (NL method) corresponds to the 'very low level' gradation.

At the same time, these patients received the highest possible scores (compared to the patients who made up the first and third clusters) on scales reflecting good psychological and physical well-being, satisfaction with all aspects of life examined, including their appearance and health, as well as scales reflecting stable personality and character traits: 'emotional stability', 'cooperation' (cooperativeness, friendly attitude towards others), 'personal resources' (desire for

self-development). In addition, the women who made up the second cluster are characterised by a higher assessment of the lived ('result') and present ('process') segments of life compared to other respondents (and also compared to normative data, Paragraph 3.1.), a higher indicator of meaningful life orientations.

It should be noted that the patients forming the second cluster, in comparison with the patients included in the first and third clusters, had an increased indicator of the ‘Insincerity’ scale (NL method), and this indicator is on the border of the acceptable level (threshold value), after which the results testing can be considered unreliable (Karpova E.B. et al., 2014). This reflects the presence of a pronounced defensive reaction of patients during a psychological study, which is manifested in the desire to make the most favourable impression, to demonstrate their success and sociability, to hide, intentionally or unintentionally, existing problems and shortcomings, which indirectly indicates their presence, possible psychological trauma associated with them. At the same time, it cannot be excluded that the presentation of complete well-being is a habitual way of interpersonal interaction of this group of patients, based on an appropriate self-perception.

The third cluster ('Cluster-3') consisted of 15.25% women (average age 43.7 years) whose psychodiagnostic indicators in most cases turned out to be filled with the mirror opposite psychological content compared to the indicators of the patients who made up 'Cluster-2'. That is why this cluster was called 'Psychological distres and "cry for help"'. Thus, the indicator of the 'Insincerity' scale reflects the tendency to increase existing psychological problems and difficulties in social interaction. The NL indicator corresponds to an increased level of neuroticism. The indicators of 'overexertion' and 'coping with stress' and the overall level of perceived stress (ShVS-10 method) are significantly higher than the corresponding indicators of the patients belonging to the first and second clusters, and also higher than the average normative indicators. Patients' responses to satisfaction with their education, job, financial situation, social status, performance and emotional state (USF method) range from 'difficult to say' to 'rather dissatisfied'. All 10 indicators of satisfaction with the quality of life are lower than the corresponding indicators

of patients forming the first cluster, and especially the second cluster, and basically correspond to a 'low level' according to the grading system of satisfaction with the quality of life proposed by N.E. Vodopyanova (2005). Among the basic personal characteristics (BIG V method), the greatest difference from the other two clusters is the indicator of the 'emotional stability' scale, which corresponds to the lower limit of the 'average values' (Yanichev D.P., 2006). The indicators of non-constructive stress coping strategies 'confrontation' and 'flight-avoidance' exceed the corresponding indicators in the other two groups and are at the upper limit of the normative range (T=50+10), slightly exceeding it. In comparison with other patients, especially with those who formed 'Cluster-2', the assessment of their appearance, health, present and past periods of their life, as well as the level of internalisation, which reflects a person's ability to be an active 'creator' of their life, independent of external circumstances, and to bear responsibility for it, i.e. in a broad sense, characterises the maturity of the individual. Thus, the patients who make up 'Cluster 3' have a less favourable 'psychological profile' than the patients who make up the first and second clusters, which, however, does not allow qualifying it as pathological, but reflects real psychological problems, primarily in the emotional-affective sphere and related to self-esteem and self-confidence. The totality of the presented psychodiagnostic data, including the low score on the 'Insincerity' scale, which reflects the willingness to show one's emotional problems and difficulties in social interaction, convinces of the need to provide psychological assistance to the patients who made up 'Cluster-3' (Bagnenko E.S., 2021c).

Thus, cluster analysis allowed the identification of three groups of patients with different 'psychological profiles', conventionally called: 1) 'optimal psychological adaptation', 2) 'complete psychological well-being, social success and its demonstration', 3) 'psychological distress and "call" for help'. As the name suggests, patients with the third profile need targeted psychological help. Presumably, such help may be needed by individual patients with a second profile

- patients with a pronounced defensive reaction and demonstration of complete and exceptional well-being in answers to test questions.

At the end of the chapter it should be noted that the results presented in it, comparing the study of psychological characteristics of patients in a cosmetology clinic with normative test data, showed that these characteristics can both promote and hinder successful psychological adjustment. Thus, in the group of patients, in comparison with the test 'norm', a higher level of subjective stress, internal tension and emotional instability was revealed, a higher frequency of using coping strategies aimed at optimising the emotional state ('distancing' (from the problem), 'escape-avoidance') than at resolving it constructively. At the same time, the patients demonstrated the effectiveness of mechanisms for coping with stress (psychological adaptation mechanisms), which was reflected in particular in the predominance of indicators of constructive coping strategies 'seeking social support', 'taking responsibility', 'planning to solve a problem' and stable personality traits that can be considered as reliable coping resources: 'self-confidence', 'cooperation'.

In accordance with the objectives of the study, all patients were further divided into comparison groups according to the severity of the cosmetic problem (based on the expert assessment of the attending physician) and according to the level of neuropsychic adaptation determined during a screening study using the symptomatic self-assessment 'Test of Neuropsychic Adaptation' (NPA). The results of the comparison of the groups of patients identified according to the above criteria (severity of the cosmetic problem and level of mental adaptation) did not show the expected clear differences in the characteristics of the emotional state, quality of life, psychological well-being between the groups of women with a low, moderate and significant degree of severity of the cosmetic problem. At the same time, highly statistically significant differences were found for 27 psychodiagnostic indicators between groups of women divided by the level of neuropsychological adaptation (according to the final assessment of the NPA test).These indicators were subjected to multiple regression analysis, which

identified the most predictive characteristics of the risk of mental maladjustment, including an increase in the 'level of neuroticism' (NL method).They reflect the degree of emotional excitability and instability, as well as the egocentric orientation of the personality; external locus of control (low level of internality) (decrease in the 'locus of control - self' indicator, LMO method) and dissatisfaction with the level of social support (decrease in the 'support' indicator, QoL method).

The study also attempted to establish relationships between the nature of the clinical symptoms (facial skin defect), concomitant diseases, treatment effectiveness, other clinical characteristics of the patients and psychodiagnostic indicators. A large number of such relationships were identified, but not in all cases it is possible to say with certainty whether the relationship is meaningful, semantic or purely statistical. A logical, psychologically understandable relationship were identified between an increase in the duration of a cosmetic problem and a decrease in confidence in one's external attractiveness, as well as a decrease in overall physical and psychological well-being.

In the final stage of the study, a cluster analysis of all the quantitative psychodiagnostic indicators was carried out, which made it possible to identify three groups of patients who differed in terms of the totality of their psychological characteristics. The resulting 'psychological profiles' were conventionally named 'optimal psychological adaptation', 'complete psychological well-being, social success and its demonstration', 'psychological distress and a "cry for help"'. Each of these profiles presupposes a certain type of interaction between the treating dermatologist-cosmetologist and the patient in order to achieve greater compliance and thus treatment effectiveness; in some cases, consultation with a psychotherapist is required.

CHAPTER 4. DYNAMICS OF PSYCHOLOGICAL CHARACTERISTICS OF PATIENTS IN A BEAUTY CLINIC DURING THE PROCESS OF THERAPEUTIC CORRECTION

Potentially dynamic psychological characteristics - features of emotional state, self-esteem, level of satisfaction with social relationships and quality of life in general - were measured and analysed twice: before the start and at the end of treatment correction. These parameters were studied over time in women whose cosmetic treatment lasted at least three months. Paired comparisons of the psychodiagnostic indicators obtained in the 'pre-treatment' and 'post-treatment' periods were made using the Wilcoxon signed-rank test.

4.1. Dynamics of emotional state

Given the literature data on the dynamic nature of psychological problems and conditions in women undergoing medical-cosmetic correction, in particular that the elimination of facial skin problems has a positive effect on emotional state, social success and quality of life in general, psychometric indicators capable of reflecting these dynamics were consistently compared.

Table 46.

Dynamics of indicators of emotional state of patients in a cosmetic clinic in the process of therapeutic correction

Methodology	Psychodiagnostic indicator	Before treatment		Aftertreatment		Z	p
		M	δ	M	δ		
NPA	Final assessment	1,19	2,47	0,38	2,40	-2,469	0,014
NL	Final assessment	46,32	42,35	52,88	36,20	-2,126	0,034
PSS-10	Total score	26,77	6,82	24,06	6,82	-2,720	0,007
PSS-10	Overstrain	17,34	5,31	15,53	5,34	-2,758	0,006
WHO-V	Final assessment	61,93	20,65	74,88	18,02	-4,017	0,000

QoL	Stress	26,99	7,06	28,32	8,00	-2,756	0,006
QoL	Negative emotions	25,48	7,05	26,28	6,35	-2,595	0,009

Note: Tables 46-47 present only those psychodiagnostic indicators measured before and after treatment for which statistically significant and near significant differences were obtained.

Table 46 shows the statistical characteristics of the scale scores of the psychological methods reflecting different aspects of the emotional state of the patients in the periods before and after the end of the cosmetic treatment.

The NPA (Final Assessment) indicator corresponds to the author's name of the technique 'Test of Neuropsychic Adaptation' (NPA), which aims to assess the presence and severity of neurotic and neurosis-like symptoms in respondents, mainly in the emotional-affective sphere. As you can see, there was a statistically significant decrease in the final NPA score after treatment compared to the pre-treatment period. In accordance with the data processing technology of the NPA methodology (Gurvich I.N., 1992), this indicates a decrease in the risk of mental disadaptation, a decrease in the process of cosmetological correction of possible (according to self-report data) preclinically expressed neurosis-like symptoms and subthreshold affective disorders (Kotsyubinsky A.P., Mazo G.E., 2015).

The average NL indicator measured after the course of therapeutic correction exceeds the corresponding indicator measured before treatment at a statistically significant level. In accordance with the design features of the 'level of neuroticism' method, an increase in the positive value of the NL indicator indicates a decrease in neuroticism. Psychologically, this means a decrease in the manifestations of emotional excitability, against the background of which various negative experiences are produced (anxiety, tension, restlessness, irritability), frustration with various external and internal factors, as well as a decrease in the tendency to hypochondriacal fixation and focus on one's personal shortcomings, which in turn determine difficulties in communication, social shyness and dependence (Karpova E.B. et al., 2014). It is also important to note that in the group of patients studied, the UL indicator both before and

after treatment (despite the significant difference between them) corresponded to the ‘low level’ gradation (from +41 to +80).

As already mentioned, the 'level of neuroticism' method includes a control scale of 'insincerity', which reflects the degree of reliability of the research results obtained. In the group of women studied, this indicator before treatment was L = 4.58 + 0.13, after treatment - L = 4.95 + 0.18 (Z = - 2.631; p = 0.009), with a threshold value of L = 5 (Karpova E B. et al., 2014). Thus, in both cases, the results should be considered reliable, i.e. not biased by the influence of the 'social desirability of answers' factor. However, when completing the post-treatment NL questionnaire, patients tried to make their answers more socially acceptable, to reduce the importance of difficulties and problems, and to emphasise their own psychological and social well-being more than before treatment.

Statistically significant differences were found between the general indicators of perceived stress measured before and after cosmetic correction (PSS-10 method). The results show that after the treatment, the patients' subjective feeling of general stress significantly decreased, and the level of general mental activity, emotional tone and psychological comfort increased (Ababkov V.A. et al., 2016). This corresponds to a decrease in the indicator of the subscale 'Overexertion' in the 'after treatment' period compared to the 'before treatment' period. There were no statistically significant differences in the indicators of the 'Coping with stress' subscale, which reflects the emotional and personal costs of coping with stressful situations. This indicator both before and after treatment turned out to be lower than the normative data (M = 10.82, δ = 4.29) obtained by the authors of the PSS-10 method on a domestic sample (Ababkov V.A. et al., 2016).

The results presented correspond to a statistically significant increase in the final assessment of the WHO-V methodology, showing an increase in background mood, activity, interest in the environment and a general feeling of psychological and physical well-being during the treatment process.

The results of a comparative analysis of the average ratings of the ‘Stress’ and ‘Negative Emotions’ scales obtained in the periods before and after treatment using the ‘Quality of Life Satisfaction Questionnaire’ (QoL) show an increase in the subjective satisfaction with their psychological state of patients of the cosmetology clinic during the treatment process. An increase in satisfaction with a decrease in the subjective feeling of general mental tension and anxiety, emotional instability and depression, as well as satisfaction from a feeling of greater balance of emotions and the ability to control their manifestations.

It is important to note that the results of a comparative psychometric study did not reveal statistically significant differences between groups of women with different degrees of severity of cosmetic problems in indicators characterising the psycho-emotional state (indicators of the 'level of neuroticism', 'perceived stress scale', 'wellness index') measured in the periods both before and after cosmetic treatment. At the same time, in each of these groups and in the whole sample the positive dynamics of these indicators was revealed in the process of cosmetic treatment, i.e. in the period 'after treatment' in comparison with the period 'before treatment' (Bagnenko E.S., Grinenko A.O., 2022; Bagnenko E.S. et al., 2023).

4.2. Dynamics of self-esteem

The most important characteristic of a personality, its self-awareness and the central link in the system of personality relations is self-esteem (Iovlev B.V., Karpova E.B., 1999), which largely performs the function of regulating behaviour (Ananyev B.G., 1980). Changing various aspects of one's attitude towards oneself in a positive direction is the beginning of deeper positive changes in the system of relationships as a whole. Therefore, an important step in studying the dynamics of personality adaptation in the process of cosmetic treatment is to study the dynamics of self-esteem. Table 47 shows statistically significant differences between the indicators of the ‘appearance’ scale of the visual analogue scale of self-esteem (VAS). According to other VAS indicators (intelligence, character, health), no significant changes were observed during the treatment process.

Table47.

Dynamics of the indicator of self-appraisal of patients of a cosmetic clinic in the process of therapeutic correction

Methodology	Psychodiagnostic indicator	Before treatment		After treatment		Z	p
		M	δ	M	δ		
VAS	Appearance	65,42	16,91	82,22	10,14	-7,139	0,000

The results of the study show a highly significant increase in self-esteem (according to VAS data) during treatment. The increase in satisfaction with one's own appearance is consistent with the expert medical assessment of the efficacy of the cosmetic treatment, according to which minimal efficacy was noted in only 1.0% of patients, while the cosmetic problem was completely eliminated in 46.1% of cases (Paragraph 2.3.2.). The maximum effect of the treatment was noted by patients in 61.1% of cases (Paragraph 3.2.1.).

4.3. Dynamics of quality of life satisfaction

Table 48 shows statistically significant differences between the indicators of the scales of the QoL method.

Table48.

Dynamics of quality of life indicators of patients of a beauty clinic in the process of therapeutic correction

Methodology	Psychodiagnostic indicator	Before treatment		After treatment		Z	p
		M	δ	M	δ		
QoL	Quality of life index	27,64	5,06	28,58	5,35	-3,252	0,001
QoL	Personal achievements	29,77	6,04	29,77	5,90	-3,510	0,000
QoL	Communication with friends and family	30,06	6,59	30,81	6,97	-2,270	0,023
QoL	Self-control	23,32	5,70	24,14	5,97	-3,317	0,001

The results of the comparative analysis show a significant increase over the course of treatment in indicators of satisfaction with various aspects of social functioning (personal achievements, communication), as well as the ability to manage one's own emotional and behavioural reactions (self-control).

4.4. Dynamics of individual psychological characteristics

Contrary to conventional wisdom about the stable nature of personal characteristics, life events can, to some extent, change the nature of personal manifestations and determine the dynamics of established patterns of behaviour and cognitive attitudes. This is proven by the results of a study of basic personal characteristics related to the 'Big V' - characteristics that make up the personality structure (Pervin L., John O., 2001). Table 49 shows statistically significant differences between the scores on the two Big V scales.

Table49

Dynamics of personal characteristics of patients in a cosmetology clinic in the process of therapeutic correction

Methodology	Psychodiagnostic indicator	Before treatment		After treatment		Z	p
		M	δ	M	δ		
BIG V	Self-awareness	30,36	5,50	31,93	4,60	-2,982	0,003
BIG V	Personal resources	28,51	5,40	29,41	4,86	-3,456	0,001

As you can see, in the process of cosmetological treatment there is a dynamic of not only transient emotional states and experiences (mood background, assessment of appearance), but also of more stable psychological characteristics of patients. For example, the study showed an increase in the indicators of the 'self-awareness' and 'personal resources' scales of the BIG V methodology. The results show that at the end of the treatment the patients felt more organised, disciplined, responsible, purposeful and persistent than before the treatment, thus strengthening the strong-willed aspects of personality and

self-confidence. In addition, after the treatment and the (partial or complete) solution of a cosmetic problem, according to the results of the study, women's desire for further self-improvement, search for new experiences and original approaches to solving life's problems increased, i.e. in a broad sense, creative personality traits and behaviour increased.

To summarise the results of the dynamic study, of the 26 psychodiagnostic indicators measured before the start of treatment, 16 indicators show statistically significant changes at the end of treatment, reflecting the positive dynamics of the emotional state, self-awareness, personality and quality of life of the patients in the process of non-surgical correction of facial skin defects.

4.5. Dynamics of psychodiagnostic indicators in groups of patients with different levels of mental adaptation

Subsequently, the dynamics of psychodiagnostic indicators in groups of patients divided by the level of mental adaptation, determined on the basis of the results of the screening 'Test of Neuropsychic Adaptation' (Paragraph 3.5.), were studied and analysed in a comparative aspect.

Table 50 shows the dynamics of the psychodiagnostic indicators in the group 'without mental adjustment disorders' (Group 1).

Table50.

Dynamics of psychodiagnostic indicators in Group 1
('without mental adjustment disorders')

Methodology	Psychodiagnostic indicator	Before treatment		After treatment		Z	p
		M	δ	M	δ		
VAS	Appearance	71,00	14,69	83,62	9,98	-3,694	0,000
BIG V	Self-awareness	31,97	4,54	33,07	4,92	-2,288	0,022
SDT	Current average rating	6,01	3,84	7,16	4,12	-2,270	0,023

SDT	Present value	7,48	4,53	8,69	5,10	-1,890	0,059
SDT	Present structure	5,89	5,16	8,03	5,27	-2,002	0,045
SDT	Sensibility of the present	5,23	4,59	6,39	4,99	-2,023	0,045

In the group 'without mental adaptation disorders', as well as in the whole group of patients included in the dynamic study, the indicator of self-esteem of one's appearance increased after the treatment in comparison with the period before the treatment. This is a natural result connected both with objective changes in the condition of the facial skin under the influence of the therapy, and with the recorded increase/stabilisation of the emotional background during the treatment process. Among the personal indicators, the indicator of the 'self-confidence' scale has the greatest positive dynamics, reflecting the degree of organisation, discipline, purposefulness, self-determination, perseverance and endurance, the ability to maintain one's own behaviour and not to be subject to disturbing factors.

Significant dynamics of the psychodiagnostic indicators reflecting the attitude to the time perspective were also noted: a statistically significant predominance of the average score and ratings of three out of five factors characterising the attitude to the present was obtained. This shows that patients in group 1 rated the current period of life in general and its individual aspects significantly higher after cosmetic treatment than before treatment. For example, patients in this group metaphorically characterise their present as much longer, more voluminous, wider and deeper (the ‘Size’ factor), more rhythmic and continuous (the ‘Structure’ factor), more real, closer and more open (the 'Sensibility' factor) after treatment than before treatment. In the context of the psychosemantic approach that forms the basis of the SDT methodology, this reflects a generally positive dynamic in the process of treating cognitive-affective attitudes towards the current period of one's life. It is important to note that in relation to other aspects of time perspective - one's past and future - no significant changes were observed during the treatment process.

Table 51 shows the dynamics of psychodiagnostic indicators in the group 'with mental adjustment disorders' (Group 2).

Table51.

Dynamics of psychodiagnostic indicators in Group 2
('with mental adjustment disorder')

Methodology	Psychodiagnostic indicator	Before treatment		After treatment		Z	p
		M	δ	M	δ		
VAS	Appearance	62,90	17,26	80,56	10,30	-5,550	0,000
BIG V	Self-awareness	29,49	5,07	31,64	3,86	-2,232	0,026
BIG V	Personal resources	28,33	5,52	29,55	4,10	-3,144	0,002
BIG V	Emotional stability	20,71	5,31	22,95	5,91	-1,766	0,077

As in Group 1, in Group 2 ('with mental adjustment disorders'), during the treatment there was a statistically significant increase in the indicators reflecting self-esteem of one's appearance and the degree of expression of personality traits that ensure purposeful, organised behaviour ('self-awareness') and the desire for self-development, searching for new things ('personal resources'). At the level of tendency to statistical significance, there was an increase in the indicator of emotional stability.

Comparative analysis of the dynamics of psychological indicators in groups of patients with different levels of mental adaptation showed that what was common to both groups was an increase during treatment in indicators reflecting the degree of satisfaction with their appearance, as well as the degree of expression in the personality structure of traits grouped under the name of 'self-awareness'. In fact, it reflects the strong-willed side and maturity of the individual. The differences were manifested in the complete absence of changes during the treatment in the attitude to time perspective in the group of patients 'with mental adjustment disorders', on the one hand, and a significant improvement in the assessment of the current period of their life in the group of patients 'without mental adjustment disorders', on the other hand.

As a conclusion of Chapter 4, it can be noted that a study aimed at objectifying changes in the psychological characteristics of patients in a beauty clinic showed, first of all, a significant change in the emotional state of women at the end of minimally invasive cosmetological treatment in comparison with the period when it began. Thus, the obtained results indicate a significant decrease in the level of neuroticism, considered as an indicator of the risk of developing neurotic disorders (Karpova E.B. et al., 2014), a decrease in the level of subjectively perceived stress and an increase in satisfaction with various aspects of the quality of life related to the sphere of social functioning (communication with friends and family, personal achievements) and to the sphere of one's own psycho-emotional state. At the same time, and as it can be assumed, depending not only on the objective result of treatment, but also on the improvement of the general emotional background, the evaluation of one's own appearance increased.It is an extremely important component of self-awareness, largely determining the nature of intrapersonal experience and the success of social functioning (Bagnenko E.S. et al., 2021; Dobosz M. et al., 2022). A significant result is also a change in not only dynamic, but also more stable psychological characteristics: at the end of the therapeutic correction, in comparison with the period before it began, the indicators 'self-awareness' and 'personal resources', which together characterise the maturity of the individual (its volitional component and creativity), increased. A comparative analysis of the dynamics of psychological characteristics in groups of patients with different levels of mental adaptation showed a more pronounced dynamics of psychological characteristics in the group 'without mental adaptation disorders' compared to the group 'with mental adaptation disorders', which (dynamics) manifested itself primarily in the cognitive and emotional assessment of the current period of one's life.

Chapter 5. THEORETICAL CONCEPT AND MODEL OF PSYCHOLOGICAL ADJUSTMENT OF WOMEN WITH COSMETIC PROBLEMS

The analysis of the world literature and the cosmetologist's own experience allowed, even at the preliminary stage of the research, to outline the significant components that together (in integrated unity and interaction) constitute the essence of psychological adaptation as one of the substructures of the system of human biopsychosocial adaptation.It is understood as a systemic process of active adaptation of the human psyche to the conditions of the physical and social environment surrounding it, as well as the result of this process (Berezin F.B., 1988; Wasserman L.I. et al., 2014; Aleksandrovsky Yu.A., 2021). As already mentioned, an important role in this process and its result is played by psychological mechanisms of overcoming stress, difficulties in life, diseases and other frustrating circumstances, which may include facial skin defects. It is obvious that the stressogenicity and emotional significance of these cosmetic defects, as well as the effectiveness of coping with them, are determined by psychological factors, which together constitute the personal adaptation potential, interacting with personal adaptation strategies (Posokhova S.T., 2001; 2013; Ababkov V.A., Perret M., 2004; Lazarus R., 2008; Nikolaev E.L., Lazareva E.Yu., 2013; Aksenova G.I. et al., 2018; Arapova O.I., 2023).

It is also obvious that, in addition to subjective psychological factors (personal-characterological, emotional-affective, value-motivational, behavioural), the nature and success of the process of psychological adaptation of women with facial skin defects is determined by objective factors, such as the nature of the clinical symptoms, their severity, the duration of the cosmetic problem, the presence of underlying diseases, etc..It may also be associated with socio-demographic factors (age, status and relationships, type of professional activity, etc.), and may also be associated with socio-demographic factors (age, marital status and family relationships, type of professional activity, etc.), which, refracted through the

patient's system of meanings and values, are reflected in the characteristics of his or her psychological adjustment.

In order to facilitate the synergistic perception of various factors of psychological adaptation of women with cosmetic facial skin defects, these factors are presented in Figure 3 in the form of a conditional graphic model. It shows that psychological adaptation is associated with blocks of socio-demographic, clinical and psychological characteristics of patients, which are interconnected in their queue (indicated by arrows in the diagram). The significant relationships between the individual characteristics included in the blocks identified in the study form a systemic unit and can be considered as a complex of factors that determine the nature of psychological adaptation in women with cosmetic facial skin defects.

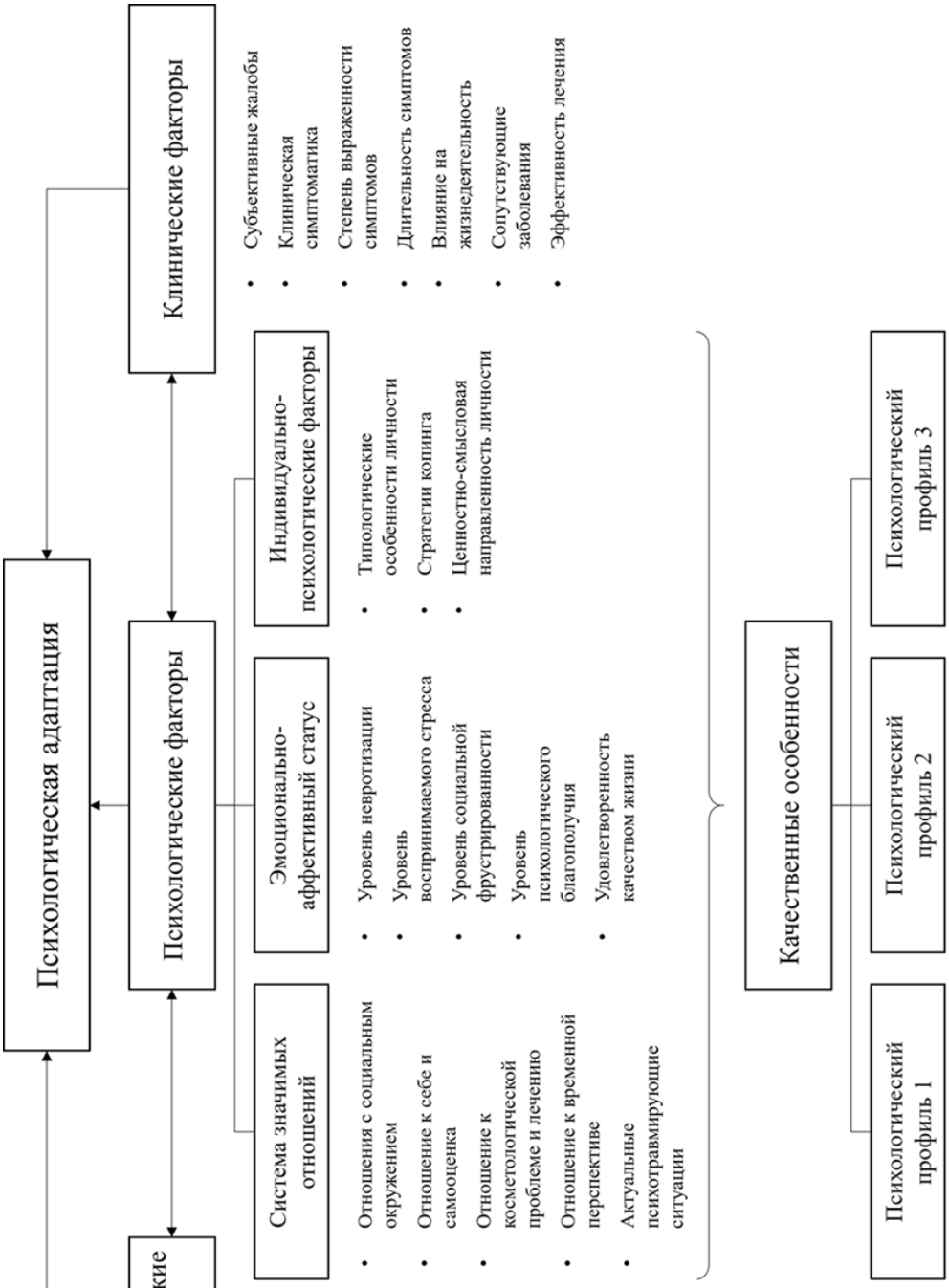

Рисунок 3 – Структурно-функциональная модель психологической адаптации женщин с косметологическими проблемами

Fig. 3 Psychological adjustment

Socio-demographic factors:

- Age
- Education
- Professional status
- Occupational field
- Marital status
- Parental status
- Living together

Psychological factors:

- System of meaningful relationships:

  Relationships with the social environment

  Self-attitudeandself-esteem

  Attitude to a cosmetic problem and treatment

  Time perspective relationship

  Current psychotraumatic situations

  - Emotionally effective status:

  Level of neurotisation

  Level of perceived stress

  Level of social frustration

  Level of psychological well-being

  Quality of life satisfaction

- Individual and psychological factors:

  Typological personality traits

  Copying strategies

  Value-semantic orientation of the individual

Clinical factors:

- Symptoms
- Clinical symptomatology
- Symptom severity
- Duration of symtoms
- Impact on life activities
- Associated illnesses
- Treatment efficacy

Quality features:

- Psychological profile 1
- Psychological profile 2
- Psychological profile 3

Socio-demographic factors

Of the demographic characteristics studied, patient age is the most closely related to other factors. Natural, clinically justified, significant positive correlations were found between the age of patients and such clinical symptoms as gravitational ptosis, wrinkles and folds, decreased skin turgor - symptoms that tend to progress with age, as well as negative correlations with inflammatory elements on the face (acne) - a symptom characteristic of young people. Age is statistically significantly associated with the severity of a cosmetic problem, its duration and its impact on life activities (as assessed by patients). Indirectly, age is related to other demographic characteristics, as the lowest percentage of married women (less than half) and, correspondingly, the highest percentage of women without a family or children were found in the group of patients with mild cosmetic problems, whose average age is significantly lower than that of women with moderate and significant severity of this problem.

At the same time, the relationship between age and a wide range of psychological characteristics related to the sphere of emotional experience, areas of personality

and behaviour has been traced. Thus, with increasing age, satisfaction with health in general and its individual aspects, with one's ability to control the manifestation of emotions, as well as with the support provided by the immediate social environment, decreases; uncertainty (anxious attitude) about the future increases. With age, the need for self-realisation and development decreases and, on the contrary, the need for stability increases. In the structure of coping, with increasing age, the frequency of using the strategy of 'taking responsibility' decreases and, on the contrary, the defensive tendency to project guilt and responsibility for negative situations onto others and external circumstances increases. At the same time, the older the patient, the less often non-constructive infantile forms of behaviour are used in stressful situations: denial or complete ignoring of the problem ('escape-avoidance').Thus, in the system of psychological adjustment of women with cosmetic problems, socio-demographic factors, among which the dominant role is played by the age of the patients, as well as the presence of their own family and children, are closely related to clinical and psychological characteristics.

Clinical factors

A differentiated analysis of the relationship between the severity of a cosmetic problem and each of the socio-demographic and psychological indicators studied revealed the existence of such a relationship in a significant number of cases.

As mentioned above, a relationship was found between the severity of clinical symptoms and marital status, the presence of children, mediated by age: in the group of younger patients with a less severe cosmetic problem, unmarried women without children are more common.

The degree of severity of a cosmetic problem is associated with such psychological characteristics as a subjective assessment of the impact of this problem on the patient's life. As expected, the highest frequency of influence (70.7%) was found in the group of patients with a significant severity of the cosmetic problem. At the same time, these patients are less likely than patients in other groups (with mild and moderate severity of the problem) to have a low level

of the overall quality of life index, and also have a higher satisfaction with quality of life in areas such as interpersonal communication ('Communication with friends, relatives') and emotional state ('Sress'). Also, compared to those whose cosmetic problem is not so pronounced, women with significant severity of facial skin defects are less likely to use the coping mechanism of 'taking responsibility'. These data show the non-linear nature of the relationship between the severity of a cosmetic problem and subjective life satisfaction, which, as in the case of marital status, may be mediated by the age factor, since the average age of patients with a significant severity of the problem is statistically significantly higher than that of patients with a low severity.

As shown in Chapter 3, there are a large number (30 in total) of multidirectional (positive and negative) relationships between individual clinical symptoms diagnosed by a clinician and the psychological characteristics assessed in patients. A number of these relationships have a natural, clear psychological meaning, such as the relationship between the presence of gravitational ptosis, facial wrinkles and folds, on the one hand, and a decrease in satisfaction with health in general and satisfaction with the current stage of life, on the other, or the relationship between the presence of vascular pathology of the skin, on the one hand, and a decrease in satisfaction with various aspects of social functioning and satisfaction with one's emotional state, on the other. Other clinical manifestations have a less obvious (difficult to explain) relationship with psychodiagnostic indicators.

A number of other clinically significant characteristics also have statistically significant relationships with patients' psychological characteristics. For example, the duration of the existing cosmetic problem is negatively correlated with the degree of confidence in one's external attractiveness and with the index of good health (psychological well-being). An important clinical indicator is the doctor's expert assessment of the effectiveness of the treatment. The obtained correlations between this assessment and a number of psychodiagnostic indicators are essential for understanding the mechanisms of formation of compliant behaviour (adherence

to treatment) of patients in a beauty clinic. The higher the effectiveness of treatment, the more the traits of organisation and purposefulness ('self-awareness') are represented in the personality structure of patients, as well as goodwill, disposition towards people ('cooperativeness'), the more often she uses a constructive cognitive strategy 'planning to solve a problem' when coping with difficulties, and these psychological characteristics determine the patient's behaviour in the treatment process, thus influencing its effectiveness to a certain extent. Thus, clinical and psychological factors of psychological adaptation have a close reciprocal relationship; to a lesser extent this concerns the severity of clinical symptoms, and to a greater extent - their nature, duration and effectiveness of treatment.

Psychological factors

The complex of psychological factors that potentially determine the success of psychological adaptation and at the same time represent its structure, according to literature data, includes a system of significant relationships, emotional and affective state, individual psychological characteristics of the individual, mechanisms of stress overcoming behaviour (Kotsyubinsky A.P., 2001; Isaeva E.R., 2009; Wasserman L.I. et al., 2014; Mikhailichenko et al., 2017; Shchelkova O.Yu. et al., 2018, Shchelkova O.Yu. et al., 2022). In the present study, these psychological characteristics were consistently studied in groups of patients with different degrees of severity of cosmetic defects, as well as in the entire group of studied patients of a beauty clinic, compared with normative data presented in the literature, and compared in groups with different levels of mental adaptation (psychometric indicator of the self-assessment NPA scale). The relationships between a wide range of psychological characteristics and clinical and sociodemographic indicators are shown.

System of meaningful relationships and interpersonal interaction

One of the general theoretical foundations of Russian medical psychology is the concept of personality developed by V.N. Myasishchev (1960). In this concept,

personality is considered as a system of relations between an individual and the environment, as a holistically organised system of active, selective, social and conscious relations with reality. Violation of particularly significant personality relationships leads to various forms of psychogenic (conflict-related) diseases and reactions, which occur with pronounced or disappearing clinical symptoms and impaired social adaptation (Illness and health..., 2019).

When studying the system of personality relationships, based on a preliminary clinical and psychological interview, the following areas of relationships were identified as the most significant for the patients of the beauty clinic and systematically studied using a structured interview, the USF medical-sociological scale and the SDT test.

1. Relationships with the social environment: the attitude of parents (in childhood or now, if they live together); relationships in one's own family and with children; relationships with people of the opposite sex.

2. Attitude towards oneself: attitude towards oneself as an individual; attitude towards one's physical 'Self'; confidence in one's attractiveness; desire to change one's appearance.

3. Attitudes towards a cosmetic problem and treatment: subjective cosmetic complaints, motives for seeking cosmetic help; impact of a cosmetic facial skin problem on life activities; effectiveness of treatment as judged by the patient.

4. Attitude to time perspective: attitude to past, present and future periods of life.

It has been found that a number of clinical symptoms are related to patients' dissatisfaction in significant areas of personality functioning, such as relationships with the microsocial and wider social environment, including relationships with people of the opposite sex, areas of health and performance, and their own emotional state. Such relationships are particularly typical of patients with vascular pathology of the facial skin. A number of other clinical symptoms (gravitational ptosis, facial wrinkles, furrows and folds, etc.) and

their combinations are related to the patient's negative assessment of various characteristics of the current period (its activity, emotional fullness, etc.), while the degree of influence of the cosmetic problem on life activity is related to a positive assessment of one's future, which reflects the hope for improvement of the current situation.

Emotional-affective state

The emotional state is one of the cardinal and obligatory subjects of study in medical psychology and psychiatry. Chapter 1 presents studies in which emotional and affective disorders (mainly anxiety and depression) were identified in patients at a cosmetic clinic. Our observations did not reveal such clinically pronounced pathological conditions. At the same time, the emotional background against which the cosmetological treatment took place could probably determine the attitude to oneself and relationships in the main areas of social relations, attitude to the time perspective, attitude to the treatment and assessment of its results, and the nature of the answers to psychodiagnostic questionnaires. In this context, in order to determine the factors of psychological adaptation, a set of methods for a comprehensive assessment of the emotional state at the beginning and at the end of the cosmetic treatment was used.

1. Assessment of negative emotional states: level of neuroticism, level of perceived stress, level of social frustration, presence and nature of current psychotraumatic situation.

2. Assessment of psychological well-being and satisfaction with quality of life: As an alternative to negative emotional states, indicators of psychological and physical well-being (well-being index) and satisfaction with various aspects (9 in total) of quality of life were assessed in patients at a beauty clinic.

According to the results of this study, the presence of the clinical symptom 'gravitational ptosis' is accompanied by a decrease in satisfaction with the quality of life in the areas of health and social support, the presence of the symptom 'connective tissue dysplasia' - in the areas of personal achievements and regulation of emotions ('self-control'), which corresponds to a decrease in the NPA indicator

in women with this skin pathology. It was also found that the degree of severity of clinical symptoms was related both to the general index of satisfaction with quality of life and to indicators of satisfaction in the areas of interpersonal communication and emotional state; in these cases, satisfaction was higher in the group of women with a significant severity of the cosmetic problem.

Individual psychological characteristics of personality

Personality is the most complex subject in psychology: '... it unites all psychology into one whole, and there is no research in this science that does not contribute to the knowledge of personality' (Maley R., 1975, p. 198). The whole diversity of personality manifestations is determined by a more stable structure represented by personality traits and dynamic relations between them (Merlin V.S., 1986). Accordingly, the study of personality from the point of view of the structural approach involves the use of methods of multidimensional psychological diagnostics, which in the case of medical and psychological diagnostics involve the identification of individual personality traits.They both increase the risk of developing mental maladjustment and prevent it, and act as psychological resources for overcoming unfavourable life situations and other stress factors. Such methods are based on one of the most famous modern structural theories of personality - the 'Five-Factor Model of Personality' by L. Goldberg, which identifies five global personality factors and their interrelations, and include the Big Five (BIG V) method. The use of this technique in a psychological study of patients in a beauty clinic made it possible to determine the strength of these factors in the personality structure and to compare them with normative data obtained from a national sample. These factors are: 'Extroversion', 'Self-confidence', 'Cooperation', 'Emotional stability', 'Personal resources'.

The study found significant correlations between these factors (BIG V scale scores) and a number of demographic and clinical characteristics. Thus, with increasing age, the need for self-development, the search for something new and original decreases, and the commitment to the familiar and stable (‘personal resources’) increases.

The age factor probably mediates the direct relationship between the occurrence of the symptom 'decreased skin turgor' and the personality factor 'cooperation' (desire to cooperate, friendly attitude towards people), as well as between the symptom 'dehydration of the skin' and the factor 'extraversion'. Of particular note is the direct relationship between the doctor's clinical assessment of the effectiveness of the treatment and the personality factors 'self-confidence' (organisation, determination, commitment and reliability) and 'cooperation'. In fact, we are talking about the dependence of the result of the cosmetic treatment on the correct therapeutic behaviour of the patient.

Coping strategies and personal coping resources

An analysis of the literature devoted to the mechanisms of psychological adaptation of the individual has shown that its central mechanism is stress-management behaviour, implemented through the use of coping strategies based on personal and environmental coping resources. At the same time, coping strategies are considered as actual reactions of an individual to a perceived threat, as a way of coping with stress (Sirota N.A., Yaltonsky V.M., 1994; Ababkov V.A., Perret M., 2004; Wasserman L.I. et al., 2010). Most strategies are derived from two methods of psychological coping - coping aimed at emotions (mainly at changing attitudes towards the situation) and coping aimed at solving the problem (Lazarus R.S., 1985). A distinction is also made between active and passive coping behaviour. Purposeful behaviour aimed at eliminating or reducing the intensity of a stressor's impact on a person is active coping behaviour. Predominantly intrapsychic forms of coping with stress, aimed at reducing emotional distress before the situation changes, are considered passive coping behaviours.

The foregoing provisions of stress and coping theory are reflected in numerous empirical studies of the mechanisms of personality adaptation to various illnesses. The overwhelming majority of such work shows that active, problem-oriented coping is the optimal way to deal with the stress of illness and to ensure a relatively high quality of life. The preference for passive, emotionally oriented coping strategies correlates with a high probability of psychological adjustment

disorders, low quality of life and an unfavourable course of the disease. Similar conclusions have been reached in the study of various clinical samples, but such studies have not yet been carried out in a cosmetic clinic.

In this regard, the study examined the main ways of coping with stress (coping strategies), personal coping resources (among a wide range of which value-motivational orientation and individual psychological characteristics of the individual were highlighted), social coping resources (reflected in characteristics of the system of significant relationships of the individual), as well as the relationship of this complex of psychosocial characteristics with clinical indicators of patients.

The analysis of the structure of coping behaviour showed its harmonious, balanced nature in the studied group of women: the indicators of none of the 8 coping strategies studied did not exceed the 'normative range'. At the same time, the emotionally oriented coping strategy 'escape-avoidance' has a certain predominance compared to other strategies, which in its content characteristics approaches the psychological defence mechanism 'repression' (problems). Individual coping strategies have a psychologically understandable relationship with clinical indicators. A special place among these strategies is occupied by the strategy of 'taking responsibility', the indicator of which correlates negatively with the presence of symptoms of 'gravitational ptosis' and 'scars'. The frequency of use of this constructive coping strategy, which involves understanding and recognising one's role in the emergence and resolution of a problematic situation, decreases as the severity of the cosmetic problem increases.

It is important to understand the psychological aspects of the treatment process in cosmetology that the constructive cognitive coping strategy 'planning a solution to the problem' is positively related to its effectiveness. Among the personal coping resources, as mentioned above, the characteristics grouped into the personality factors 'self-consciousness', 'cooperation' and 'extroversion' are related to the clinical indicators. Among the social coping resources, satisfaction with communication with friends and relatives (with the degree of severity of the cosmetic problem) has the closest relationship with clinical characteristics.

Satisfaction with relationships with relatives, with people of the opposite sex and with the wider social environment is associated with the presence of a number of clinical symptoms (mainly with 'vascular pathology of the skin'). It has also been shown that satisfaction with support from the immediate social environment decreases with age.

Thus, the study revealed numerous close relationships between the structural and functional components of psychological adjustment of patients in a beauty clinic, namely between clinical characteristics (type of symptoms, their severity and duration), socio-demographic characteristics (mainly age and family presence) and a wide range of psychological characteristics (system of significant relationships, emotional state, personality, coping mechanisms). Such an abundance of characteristics and relationships led to the search for more generalised factors that combine individual characteristics of psychological adjustment and the links between them.

Psychological profiles

Cluster analysis identified three groups of patients with different 'psychological profiles'(Bagnenko E.S., Bogatenkov A.I., 2023).

More than half of the patients who made up the clustering sample were united by a number of psychological characteristics, which made it possible to name this cluster 'Optimal Psychological Adjustment'. The main difference from the other two clusters was manifested in psychodiagnostic indicators characterising the state of the emotional-affective sphere. Women included in this cluster have a low level of neuroticism, which in terms of content reflects emotional stability, high resistance to stress, good self-control, self-confidence, absence of increased anxiety and hypochondriac fixation on health, as well as fixation on personal shortcomings and problems, which together indicate a low risk of developing borderline mental pathology (Karpova E.B. et al., 2014). The chosen name of the cluster corresponds to the opinion of modern scientists, who consider psychological adaptation as a process of self-regulation of emotions and behaviour, including a volitional component (Thompson R.A., 2019), and psychological

stability as a criterion of successful adaptation (Smith B.L. et al., 2019). To this we can add that women in this group have the highest of the three clusters (and in comparison with normative data) the indicator of personality internality ('locus of control - Self'), which also includes a volitional component and is an important personal resource for overcoming the effects of stress (coping resource).

The cluster 'complete psychological well-being, social success and its demonstration' included 27.12% of women whose psychodiagnostic indicators reflected a minimal level of neuroticism and the same level of social frustration, as well as a high level of satisfaction with their physical and psychological well-being, appearance, quality of life as a whole and its individual aspects (professional activity, personal achievements, interpersonal interaction and social support, etc.), lived ('result') and actual ('process') segments of life. Indicators of personality traits responsible for successful social interaction ('cooperation'), the stability of emotional reactions ('emotional stability') and the desire for self-development ('personal resources') also increased, while indicators of unconstructive coping 'confrontation' and 'avoidance' decreased. At the same time, compared to other clusters, this group of women has an increased indicator of the control scale, conventionally called the 'insincerity' scale, which reveals the respondent's desire to present herself in the most favourable light, to hide existing problems and shortcomings.

On the basis of the obtained data, it is possible to assume that such a favourable self-presentation in answers to questions of psychodiagnostic tests (standardised self-reports) is of compensatory nature, i.e. it is a protective mechanism of the psyche, representing an attempt to overcome any shortcomings - real or apparent (Kotsyubinsky A.P., 2001, 2017). It is also possible that such self-presentation is a habitual way of behaviour (positioning oneself) in significant situations of persons with high social status.

The cluster 'Psychological distress and 'Need for help' included 15. 25% of women whose emotional state, general psychological well-being, satisfaction with the quality of life, attitude to oneself, time perspective, level of internality and

general level of meaningfulness in life were significantly lower (worse). The indicators of non-constructive coping strategies 'confrontation' and 'escape-avoidance' were statistically significantly higher than the corresponding characteristics of patients included in the other two clusters. The indicators of non-constructive coping strategies 'confrontation' and 'escape-avoidance' are statistically significantly higher than the corresponding characteristics of the other two clusters, as well as the average normative test data. The indicator of the control scale 'insincerity' is at the level of low values, which reflects the patients' understanding of their psychological problems and shortcomings, and possibly an exaggerated presentation of them in the answers to psychological tests in order to attract attention and receive sympathy and support.

Thus, the analysis showed that women undergoing cosmetic correction of facial skin defects are not a homogeneous group in terms of their psychological characteristics. Among them, we can distinguish the main (most numerous) group with stable emotionality, which generally has psychological characteristics that reflect the success of psychological and social adaptation and satisfaction with the quality of life, which to some extent refutes the statement of some authors (Maisel A. et al., 2018) that visiting a cosmetologist is a way to overcome existing psychological problems. However, this does not mean that these women do not have such problems and stressful experiences, but the mechanisms of psychological adaptation - strategies, as well as personal and external coping resources - ensure their optimal level.

At the same time, it can be assumed that almost one third of the patients at the cosmetic clinic have difficulties in psychological adaptation, which are masked by a maximally and exclusively favourable (successful) self-presentation. Such behaviour in the course of psychological research may indicate its compensatory (protective) nature against the background of increased vulnerability and problems of adaptation, or have a protective nature against intrusion into one's inner world, or represent a habitual way of behaviour in the society of public, media or high-status individuals (Berezin F.B. et al., 1994).

A small group of patients are at high risk of psychological maladjustment (neuroticism), which is characterised by mood instability, low stress tolerance, low self-esteem and low satisfaction with various aspects of quality of life. However, the study did not find a direct link between these factors and the severity and duration of clinical symptoms, although their triggering and pathogenetic role in the overall psychological picture cannot be excluded.

The presented identification of groups of patients characterised by different sets of psychological characteristics can help the cosmetologist to build an optimal interpersonal interaction with the patient in the treatment process, which is the basis for the implementation of deontological norms and the partnership model of their relations, as well as for the formation of the patient's compliant behaviour. In some cases, this may be the basis for referring the patient for psychotherapeutic help.

At the end of the chapter devoted to the attempt to present a theoretical concept and a structural-functional model of psychological adjustment of women with cosmetic problems. We can conclude that it is a complex dynamic system of integrated interaction of clinical, socio-demographic, social and individual psychological characteristics, the purpose of which is psychological overcoming of stress factors caused by facial skin defects, optimisation of the quality of life in its various spheres and increase in general psychological well-being.

Generalisation of the results of theoretical analysis of empirical research data (results of comparison of psychodiagnostic indicators of the studied women with normative data, results of multivariate regression analysis, which revealed the most informative risk factors for emotional and affective disorders, results of cluster analysis, as well as results of studying the dynamics of psychological characteristics in the treatment process) allows us to conclude that the leading role in the psychological adaptation of patients at a cosmetology clinic is played by the emotional stability of the individual, including the ability to volitionally regulate emotions, as well as effective ways of coping with stress, which involves the

ability to use external (‘search for social support’) and one’s own cognitive (‘problem solution planning’) resource. Personal coping resources play a significant role, among which the internality of the individual and the typological traits ‘self-awareness’ and ‘cooperation’ are of particular importance. On the contrary, factors of increased risk of maladaptation are emotional instability, a set of characteristics united by the concept of ‘neurotization’ (increased emotional excitability and instability, anxiety, uncertainty, fixation on personal and physical shortcomings), external locus of control, as well as dissatisfaction with the support of the social environment.

CHAPTER 6. DISCUSSION OF RESEARCH FINDINGS

Currently, the role of social and psychological factors in the mechanisms of development, course and treatment of dermatological diseases and cosmetic problems is not controversial (Neznanov N.G., Vasilyeva A.V., 2015; Karavaeva T.A., Korolkova T.N., 2018; Bagnenko E.S. et al., 2021). The continuous (non-sampling) nature of the study suggests that the data obtained correspond to the real distribution of the type of complaints, as well as the age, social and psychological status of patients in a cosmetology clinic. The study of social position showed that the majority of women seeking help from cosmetology are educated, socially active women who share family values. Thus, the vast majority of the patients studied were young and middle-aged (the average age of the patients was 39 years), with higher education, constantly working in such socially important fields as science, education and private business. Most of the women studied have a family and children, and their presence is associated with age. The least favourable marital status, according to the data of this study, is observed in the group of younger women with minor cosmetic problems.

The results of the study of the socio-demographic characteristics of women seeking cosmetic help correlate with the results of similar foreign studies. According to N. Mobayed et al. (2020), the main consumers of minimally invasive cosmetic procedures are women born between 1981 and 1996, i.e. 25-40 years old. In a study by S. Dadkhahfar et al. (2021), the majority of patients undergoing cosmetic procedures were women aged 39.6 ± 10.74 years old, married, employed; a study of 199 patients of a private clinic in Gdansk found a high educational level (Dobosz M. et al., 2022). A study by D. Scharschmidt and co-authors (2018) revealed that the majority of patients who received Botox and filler injections in a beauty clinic in Berlin were highly educated, middle-aged women living with a partner, with higher social status and income and higher quality of life indicators than women of the same age who did not seek cosmetic help. It is important to

note that, as the authors point out, this study of 145 women is the first such study of Botox and filler users in Germany. In terms of this parameter, this study is in line with the work of German colleagues, as similar work has not been carried out in our country.

The analysis of the clinical characteristics showed a clear correlation between the symptoms and their severity with the age of the patients, which is confirmed by clinical experience and research findings. According to A. Maisel et al. (2020), patients under 45 were treated for acne, liposuction, tattoo removal, hair removal; the older ones wanted procedures with fillers, removal of wrinkles, improvement of the lower jaw contour.

Among the clinical and psychological characteristics, the results of the study of women's motives for seeking cosmetic care are of particular interest. As might be expected, according to both our data and that of foreign researchers, the main motive for visiting a beauty clinic is the 'desire to have healthy skin'. However, a number of studies have shown that this is not the only motive and not always the most important one. For example, in a study by A. Maisel et al. (2018) of 440 women over the age of 45, it was shown that the main motives for seeking cosmetology help were to improve emotional and psychological mood and quality of life in general. The desire to prevent ageing, correct facial ovalisation and skin quality, and to improve appearance for professional purposes were in second place. M. Dobosz et al. (2022) highlight the desire to look fresh, reduce signs of ageing and invest in oneself as the main motives for consulting a dermatologist-cosmetologist. This corresponds to our analysis of the motives of women seeking cosmetological help, according to which the motive 'increasing success in professional activities' was found in 60.4% of cases, the motive 'increasing success in personal life' - in 74.58%, and these motives were most typical for women over 40 years old.

When studying the system of significant relations, special attention was paid to the analysis of the attitude to oneself as the central link of this system, which is important for the psychological stability of the individual as a whole, while its

violation is the main link in the development of neurotic and adaptive disorders (Myasishchev V.N., 1960; Vasilyeva A.V., Karavaeva T.A., 2020). According to the data of this study, the majority of patients were not sufficiently satisfied with their appearance, personal and characterological qualities, and this dissatisfaction was more pronounced in younger women with minor facial skin defects, which was largely oriented on the perception of their members of the reference environment. This corresponds to the results of an instrumental study (using an eye tracker) of self-attitude in the age aspect by N.P. Yarovoy et al. (2021), who showed that in young women the perception of one's own attractive features and shortcomings is associated with components of self-attitude, including the evaluation of others (external mechanism of perception of one's own appearance), whereas in women of mature age an internal mechanism, focused on the internal processes of their 'Self', is more typical.In general, we can agree with E.A. Varlashkina (2015) that insufficiently low self-esteem of the real and overestimated self-esteem of the ideal images of the physical self are the determining factors of dissatisfaction with one's appearance. Dissatisfaction with the image of the physical self is associated with dissatisfaction with family relations, relations with men, development of communication skills and self-doubt. It is also important to note that, according to the results of the structured interview, 7 women expressed complete dissatisfaction with their physical appearance; these women need more in-depth psychological research and possibly specialised psychotherapeutic care due to the risk of neurotic or affective disorders.

Decreased self-esteem and self-satisfaction are distinct, but not the only psychological and diagnostic signs of mood disorders, including subthreshold affective disorders (Krasnov V.N., 2011; Kotsyubinsky A.P., Mazo G.E., 2015). The relationship between depression and the attitude to time perspective has been proved (Taverlaur M., 1992; Shustrova G.P., 2006; Mikirtumov B.E., Ilyichev A.B., 2007), which K. Levin defines as the totality of an individual's views about his psychological past and psychological future existing at a given moment (Mandrikova E.Yu., 2008). Thus, both the attitude to oneself and the attitude to

time perspective can be considered not only in the context of violation of significant personal relationships, but also in the context of emotional and affective disorders, which in turn are the most important factor of mental maladjustment (Illness and health, psychotherapy ..., 2019). Under these conditions, the study of the patients' attitude towards themselves and their time perspective in a cosmetic clinic acquires special importance for the formation of optimal psychotherapeutic tactics in the correction of facial skin defects, in order to provide patients with comprehensive (cosmetic and psychological) treatment, in some cases supplemented by specialised psychotherapeutic assistance.

Attitudes towards the perspective of time were studied in this work using the original 'Semantic Time Differential' (SDT) technique, which is based on the principles of psychosemantics and makes it possible to determine the cognitive and emotional aspects of the subjective perception of the perspective of time (one's present, past and future). The results show that the patients of the beauty clinic, although somewhat worse than the normative sample, positively evaluate the current period of life as a whole and its individual aspects, are satisfied with the lived period of life, perceiving it as quite productive and effective, and also have a positive attitude towards the future, which reflects not only an optimistic background of mood, the presence of goals and plans for the future, but also the possession of good adaptive abilities (personal resources) to overcome stress (Wasserman L.I. et al., 2014). According to the present study, this attitude towards the time perspective is not associated with the severity of the cosmetic problem.

In connection with the information available in the literature on the incidence of mental disorders in patients of the aesthetic medicine clinic (Wang Q. et al., 2016; Sarwer D.B., 2019; Özkur E. et al., 2020; Pikoos T.D. et al., 2021), special attention was paid to this issue in this study. Thus, the tasks were set to determine the level of neuroticism, the level of subjectively perceived emotional stress, social frustration and, conversely, the level of psychological well-being and satisfaction with quality of life of patients in a beauty clinic. Since a number of studies have indicated the psychological trauma caused by facial skin defects, it

was assumed that there is a natural correlation between the severity of a cosmetic defect and a disturbance in the emotional state. Therefore, a comparative psychometric study was carried out on groups of women with different levels of severity (mild, moderate and severe) of the cosmetic problem. In connection with the literature data on the dynamic nature of psychological problems and conditions in women undergoing medical-cosmetological correction, in particular that the elimination of facial skin problems has a positive effect on the emotional state, social success and quality of life in general (Waldman A. et al, 2019; Khademi M. et al., 2021; McKeown D.J., 2021; Weinkle S.H. et al., 2021; Kurtti A. et al., 2022), the psychometric indicators of women of three groups were obtained in the periods 'before the start of treatment' and 'after the end of treatment'.

The results of the study showed that in all groups of women with different severity of cosmetic problems a low level of neuroticism was observed both before and after the treatment (Bagnenko E.S., Grinenko A.O., 2022). According to the authors and developers of the 'Level of Neuroticism' test (Karpova E.B. et al., 2014), this generally reflects emotional stability, frustration tolerance, social confidence, activity, free self-realisation (lack of uncertainty and excessive ('neurotic') self-control). According to the results of a dynamic study, these qualities, which initially characterise patients, reliably increase with the total or partial elimination of the cosmetic problem (after a course of therapeutic correction).

Despite the low level of neuroticism (that is, the risk of developing neurotic and other borderline mental disorders), during a clinical and psychological interview in each group, about a quarter of women noted the presence of a prolonged psychotraumatic situation. 17 patients noted that they were currently experiencing an acute stressful situation. Data on the presence of a history of psychotrauma in women seeking cosmetological help are also presented in the works of J.F. Sobanko et al. (2015) and S. Dadkhahfar et al. (2021).

The analysis of the psychometric indicators of the Perceived Stress Scale-10 (PSS-10) allowed us to conclude that the overall level of subjectively perceived

stress in the last month, as well as the 'overstrain' indicator in the studied groups of women exceed the corresponding normative indicators obtained by the authors of the methodology in the Russian sample (Ababkov V.A. et al., 2016), while the 'resistance to stress' indicator, on the contrary, is lower than in the normative sample. The compared groups of women do not differ significantly in these indicators. This indicates that the studied groups of patients, regardless of the severity of the cosmetic problem, spend less effort to overcome objectively existing and subjectively perceived stressful situations. Thus, the results of this study confirm previously obtained data on the presence of significant personal coping resources (stress management) in the majority of patients of the cosmetic clinic, which together reflect the maturity and adaptability of the individual (Alexandrov A.A., Bagnenko E.S., 2012).

Considering the role of the emotional state in the psychological adaptation of the individual, in addition to the study of its individual aspects, the screening technique 'Test of Neuropsychic Adaptation' (NPA) was used, designed to identify the risk of mental maladjustment by identifying subclinical symptoms of borderline mental disorders, mainly in the emotional-affective sphere.

In accordance with the NPA indicator, the patients studied were divided into 2 groups - with no risk of mental maladjustment and with risk of mental maladjustment. According to the NPA methodology, more than half of the patients (54.1%) fell into the group at risk of maladjustment (at risk of emotional and affective disorders). These data, which we have obtained for the first time in domestic practice, correspond to a certain extent to the data of modern foreign authors, who have shown that among the patients of a cosmetic clinic undergoing minimally invasive treatment there are many people with mental maladjustment, which is manifested by subthreshold affective disorders and an increase in the index of the general severity of the condition (Özkur E. et al, 2020), anxious and narcissistic personality disorders, other personality and behavioural deviations (Loron A.M. et al., 2018; Husain W. et al., 2021), and body dysmorphic disorder (Pikoos T.D. et al., 2021; Dobosz M. et al., 2022). In the context of the risk of

psychological maladjustment, we can also consider research data (Sats E.A., 2015) that in the 25-35 age group, the reasons for consulting a cosmetologist are a negative mood in 78% of cases and a feeling of inferiority in 69% of cases.

The groups of patients identified on the basis of the NPA method indicator were compared according to all the socio-demographic, clinical and psychological indicators studied. It turned out that these groups of patients do not differ practically in age, educational level, family and work status, in clinical characteristics, including the main symptoms (facial skin defects), severity, duration of the cosmetic problem, effectiveness of treatment, etc., but they differ statistically significantly in most psychological characteristics, such as self-esteem, attitude towards oneself, attitude in the present, past and future, etc., which collectively characterise the emotional state.

In total, during the study, out of 35 quantitative indicators contained in 8 psychological methods, 27 indicators were identified that distinguish, with a high level of statistical significance, groups of patients with and without risk of disturbance of mental adaptation (emotional-affective disorders). Therefore, further analysis of the results of empirical study was designed as a comparison of the psychological characteristics of patients in two groups.

It was found that in the group of women at risk of adjustment disorders, the level of neurotization is significantly higher, which (neurotization) is characterized, first of all, by increased emotional excitability and instability, as well as manifestations of egocentric orientation of the individual - fixation on one's personal failure and somatic illness (Karpova E.B., 2014). Similar data were obtained using the 'Quality of Life' test. It contains nine scales, the ratings of which reflect satisfaction with various aspects of life (work, personal achievements, health, communication with loved ones) and one's psychological state (pessimism, tension, uneasiness, other negative emotional states). Significantly, greater dissatisfaction in various areas of life and in the area of one's own psychological well-being was shown by patients who formed a group at risk of mental adjustment disorders. To a certain extent, this is in line with the data from an analytical review

of 28 studies on the quality of life of patients in an aesthetic medicine clinic, which reflects a decrease in indicators of patients' quality of life compared to standard values before the start of cosmetic procedures (Bensoussan J.C. et al., 2014).

A study of the stable personal and behavioural patterns of patients in the two groups revealed a predominance in the group without mental adjustment disorders of the traits of extraversion, self-awareness and emotional stability, as well as all indicators of life purpose orientation and internal locus of control.

Our data on the psychological characteristics of patients in a cosmetic clinic largely agree with the findings of German authors (Scharschmidt D. et al., 2018), who studied 145 women who applied for botulinum therapy or injectable fillers using the WHO-QoL and Big V questionnaires. According to these data, patients are characterised by high levels of extroversion, benevolence, openness to all things new, as well as high levels of neuroticism. However, unlike this study, the psychological characteristics were not compared in groups of patients with different levels of mental adaptation (with different risks of emotional and affective disorders), but were assessed for the group as a whole.

Since in the present study data were obtained on a significant predominance of indicators of neuroticism, perceived stress, social frustration and traumatic situations in the group of patients with a risk of psychological adjustment disorders in comparison with patients without such a risk, a comparative study of methods and means of psychological coping with stress was of scientific and practical interest, which are considered to be the most important mechanisms of psychological adjustment (Ababkov V.A., Perret M., 2004; Folkman S. et al., 1986). The importance of such a study is also determined by the lack of information about such studies in the available literature, despite the obvious emotional significance and stress-generating nature of facial skin defects. According to the results of this study, the leading strategy in the structure of the coping behaviour of the patients who make up the group at risk of mental adjustment disorders is 'escape-avoidance'. In addition, the indicator of this scale, as well as the indicator of the 'Distancing' scale, exceeds, at a high level of

statistical significance, the corresponding indicators in the group without mental adjustment disorders. The obtained data correspond to the relationship between coping strategies of care (evasion, denial, distancing from the problem) and a decrease in the level of psychosocial adaptation, which has been proved in many studies (Isaeva E.R., 2009; Fedunina N.Yu. et al., 2018; Shindrikov R.Yu. et al., 2020). At the same time, in the group with the presence of risk, in comparison with the group without the risk of adjustment disorders, the predominance of the coping strategies 'self-control' and 'taking responsibility' was revealed.

The analysis of the obtained data is based on the domestic literature devoted to the theoretical problems of psychological overcoming of difficult life situations, which emphasizes the impossibility of studying coping outside the context of the holistic situation in which the subject finds himself (Antsyferova L.I., 1994). Coping is considered as an individual way of dealing with a situation in accordance with one's own logic, significance in one's life and psychological abilities (Nartova-Bochaver S.K., 1997). In accordance with this, it can be assumed that the behavioural patterns characteristic of women with facial skin defects, which are associated with a decrease in the ability of free self-realisation, feelings of guilt and personal inadequacy (coping strategies 'self-control' and 'accepting responsibility'), increase the risk of mental maladjustment. This is consistent with the findings of large-scale empirical research, according to which 'self-criticism and emotional suppression increase the likelihood of resorting to other ineffective coping strategies and also increase the rate of psychopathological symptoms' (Shetche K., 2022, p. 68).

As personal coping resources that provide a psychological background for coping with stress and contribute to the development of coping strategies, this work examined life meaning orientations associated with a time perspective: life goals (future), life richness (present), satisfaction with self-realisation or life 'performance (past), as well as locus of control. This is due to the fact that this integral personality trait, which has a regulatory influence on many aspects of human behaviour (Rotter J.B., 1966), is considered in the literature to be one of

the main coping resources in the structure of coping behaviour (Kochurov M.G., 2020; Ksenofortova E.G. et al., 1966), is considered one of the main coping resources in the structure of coping behaviour (Kochurov M.G., 2020; Ksenofortova E.G. et al., 2021; Brehm S.S. et al., 2005). According to the results of the comparative analysis, all the mentioned psychological characteristics reflected in the indicators of the LSS technique were significantly more frequent in the group without the risk of mental maladjustment (the risk of emotional and affective disorders).

Thus, we can conclude that the level of mental adaptation of the patients of a cosmetic clinic is closely related to the presence or absence of goals and plans for the future, which give life meaning, direction and time perspective; to the extent to which they perceive the process of their life as interesting, emotionally rich and full of meaning; and to the extent to which the past period of life is subjectively assessed as productive. At the same time, the results of the study confirmed the link between the level of mental adjustment and the individual's inner life. This once again confirmed the fact, proven in psychology, that there is a connection of the internal locus of control with the purposeful, transformative activity of a person, the reflection in his consciousness of his own independence, autonomy, self-confidence, responsibility, and, on the contrary, the connection of the external locus of control with anxiety, emotional instability and tension, depression, neuroticism (Ksenofontova E.G. et al., 2021; Rotter J.V., 1966).

Due to the multiplicity and diversity of psychological characteristics that distinguish groups of patients with different risks of mental maladjustment, a multiple regression analysis procedure was used.It showed that such predictors of risk are psychological characteristics reflected in low values of psychometric indicators 'level of neuroticism' (NL method), 'locus of control - self' (LMO method), 'emotional stability' (BIG V method), 'support' (QoL method). In terms of content, this means that an increased risk of mental maladjustment is associated with a high level of neuroticism (anxiety, tension, restlessness, irritability, low

tolerance to stress, tendency to hypochondriacal fixation) and emotional instability. On the contrary, a high level of internalisation of the individual and the presence of emotional and effective support from the immediate social environment are favourable prognostic factors that reduce the risk of mental maladjustment.

Among the new developments presented in the thesis, which have no analogues in the literature, is the identification, based on the use of a cluster analysis procedure, of generalised 'psychological profiles' of patients in a cosmetology clinic, which made it possible to present in an integrated form the emotional, personal and behavioural characteristics of the patients studied - women characterised by 'optimal psychological adaptation', 'complete psychological well-being, social success and its demonstration', as well as 'psychological distress' and a 'call for help'. Acknowledging the conventionality of such a classification, one should also recognise its importance as a guideline for establishing optimal therapeutic contact with patients who differ in their psychological characteristics. It is important to note that the problem of therapeutic alliance and the nature of interpersonal interaction with a cosmetologist was studied by us earlier (Bagnenko E.S., 2010).

In the last stage of the empirical study, the psychodiagnostic indicators of the whole group of patients studied, as well as of the groups of patients with and without risk of mental maladjustment (risk of emotional and affective disorders), obtained in the periods 'before the beginning of treatment' and 'at the end of treatment', were compared. It is shown that out of 26 psychodiagnostic indicators assessed before the start of treatment, 16 indicators show statistically significant changes and reflect positive dynamics of emotional state, self-awareness, attitude to time perspective, certain aspects of quality of life, as well as psychological characteristics reflecting the volitional side and maturity of the individual in the whole group of patients in the process of non-surgical correction of facial skin defects.

Thus, the dynamics of the neuroticism indicator, which does not exceed the normative values both before and after treatment, reflects a decrease in the process

of therapeutic correction of the manifestations of emotional excitability and instability, fixation on one's own shortcomings, as well as an increase in self-confidence and stress resistance. The level of perceived stress decreases during the treatment; the positive dynamics of this indicator indicates a decrease in general psycho-emotional stress, the experience of stress in the current situation, as well as an increase in activity and vitality. At the same time, there was a statistically significant increase in the Psychological Well-Being Index for the whole sample. There was also a highly significant increase in the assessment of one's own appearance during the treatment process, while the increase in subjective satisfaction with one's own appearance is consistent with the expert medical assessment of the effectiveness of the cosmetic treatment.

Taken together, these results reflect the positive impact of the treatment not only on the condition of the facial skin, but also on the emotional state of the patients.They are consistent with the results of the study by M. Khademi et al. (2021), which reported a significant decrease in the level of depression in patients after Botox injections, with the data from the work of D. J. McKeown (2021), which shows an improvement in the psychological state of women and a reduction in the level of distress associated with appearance, as well as the results of studies by a number of foreign authors, which show the positive dynamics of self-esteem in the process of cosmetic treatment (Shah P., Rieder E.A., 2021; Weinkle S.H. et al.)

The dynamic study also shows that in the process of therapeutic correction of facial skin defects, patients in a cosmetic clinic increase their satisfaction with various aspects of quality of life, both in terms of social functioning (communication with friends and family, personal achievements) and their own emotional state. These data are in line with what has been reported in the literature on the improvement of social functioning and quality of life of patients after cosmetic treatment (Ribeiro F, Steiner D., 2018; McKeown D.J., 2021; Shah P., Rieder E.A., 2021; Kurtti A. et al., 2022).

The comparative analysis of the dynamics of psychodiagnostic indicators during the treatment of patients with and without the risk of mental maladjustment (risk of emotional and affective disorders) showed their positive changes in both groups, except for the changes in the attitude to the current stage of life in the group with the increased risk of mental maladjustment. It should be noted that the literature sources analysed provide information on the dynamics of psychological indicators in general among patients of a cosmetology clinic, without differentiating them according to any criteria. Thus, the present comparative dynamic study is the first in the field under study and opens the way for individualisation of psychological assistance to patients of a cosmetology clinic with different risks of mental maladjustment.

The generalisation of the results of the analysis of domestic and foreign literature, as well as the results of our own empirical research presented in the dissertation, allowed to formulate the concept of psychological adaptation of women with facial skin defects visiting a beauty clinic. According to this concept, the psychological adaptation of such women is understood as a substructure of a more general system of mental adaptation developed in Russian psychology on the basis of a systems approach and a biopsychosocial paradigm of understanding human development, health and illness. The system of psychological adaptation of patients of a cosmetology clinic in integrated unity and interaction presents demographic, clinical, social and psychological factors that determine the level of psychological well-being, individual character and success of social functioning, as well as the risk of neuroticism, emotional and affective disorders. This understanding of psychological adaptation opens up perspectives and outlines the main directions of individualised psychological assistance to patients of a cosmetic clinic and, in general, contributes to the active implementation of a personalised approach in a medical-cosmetic clinic.

CONCLUSION

In recent years, one of the most important tasks of medical psychology has been the prevention of mental adjustment disorders due to stress factors. Mental adjustment is a complex biopsychosocial system, one subsystem of which is the individual's psychological adjustment, which aims to cope with problematic or stressful conditions without disturbing one's emotional state, personal integration and social functioning.

The presented results of a psychological study of patients in a cosmetology clinic and data from the world literature allow us to conclude that the psychological adaptation of women with cosmetic problems of the facial skin is a dynamic system that integrates demographic, social, psychological, and clinical factors in unity and interaction. Furthermore, an analysis of the presented research results allows us to conclude that psychological adjustment is both a process and a result of such interaction. These conclusions correspond to the classical and modern concepts of the systemic organisation of the human psyche (Anokhin P.K., 1978), the systems approach in general (Ganzen V.A., 1984; Lomov B.F., 2003) and medical psychology (Shchelkova O.Yu., 2008), as well as the systemic concept of mental (physiological, psychological and social) human adaptation (Aleksandrovsky Yu.A., 1976, 2021; F.B. Berezin, 1988; Wasserman L.I. et al., 1994; Wasserman L.I. et al., 2014).

In this work, these concepts were tested and confirmed on a group of patients of a cosmetology clinic, who, unlike patients of a plastic surgery clinic, were practically not psychologically studied. The results of the study proved that, as in the case of patients from other clinics (Mikhailichenko T.G., Shchelkova O.Yu., 2017; Shchelkova O.Yu. et al., 2018), the adaptation system of patients who applied to the cosmetology clinic with various facial skin problems includes such psychological phenomena and concepts as emotional and affective state, personal and characterological features, motivational and semantic organisation of personality, cognitive-behavioural mechanisms for

overcoming stress, as well as significant personal relationships. In this regard, the generalisations presented in the dissertation can be considered as one of the psychological concepts built on various clinical materials and constituting the theoretical basis of modern medical psychology (Bulygina V.G., 2016; Shaboltas A.V., 2018; Morozova E.V., 2023).

In a broader context, the emergence in recent decades of scientific research in the field of psychological and social aspects of cosmetology in relation to clinical characteristics of patients (Bagnenko E.S., 2021a; Bagnenko E.S. et al., 2021; Sachdeva M. et al., 2021; Zhang Q. et al. , 2021; Tan J. et al., 2022; Yang F. et al., 2022) allows us to predict the formation of a new direction of medical science and practice in the near future - psychocosmetology, by analogy with already existing fields: psychocardiology (Smulevich A.B. et al., 2005), psycho-oncology (Holland J., Rivkina N.M., 2014) and oncopsychology (Oncopsychology..., 2017), psychodermatology (Krasnova O.V., 2018) and others. The development of this new scientific direction is the perspective of this dissertation research.

RESEARCH FINDINGS:

1. An analysis of the world literature shows that the mechanisms of psychological adjustment in women with cosmetic problems involve not only individual psychological factors, but also demographic, social, medical-biological and clinical factors; this has served as the basis for a systematic study of these factors in their unity and interaction.

2. A study of the socio-demographic characteristics of the patients of a beauty clinic shows that they represent a social group of women with a high level of education, mainly working in the scientific, teaching or business sectors, most of them with a family (60.6%) and children (71.5%) and, in general, a higher social status, which determines, among other things, the need to improve their appearance, which is a socially accepted way of behaving in their environment.

3. The study of clinical characteristics has shown that, due to the high demands placed on their status, cosmetic defects, most of which are the result of skin ageing, are particularly significant risk factors for psychological maladjustment in women, especially in the middle-aged category. The most distressing of these changes are gravitational ptosis, accompanied by changes in the oval of the face, wrinkles and folds, rosacea and hyperpigmentation of the face and hands. In younger patients, these changes include acne and oily skin. There is a statistically proven correlation between these changes not only with the age and general health of patients, but also with psychodiagnostic indicators characterising emotional state, satisfaction with quality of life and social functioning. The index of satisfaction with quality of life is, of course, related to the severity and duration of the cosmetic problem, as well as to certain methods of cosmetic correction and their results.

4. The following features and problems were identified in the system of significant relationships between patients in a beauty clinic.

4.1. The women's relationships with the reference social environment (husbands, children, parents and men) are not marked by conflict, tension,

coldness or distance. However, in 13% of patients, mostly young, relationships with men are ‘difficult’, although their cosmetic problems are mild.

4.2. The attitude to oneself is characterised by insufficient satisfaction with one's appearance and personal-characteristic qualities, 66.2% of women are not confident of their external attractiveness. These indicators (dissatisfaction and insecurity) are not related to the severity of the cosmetic problem, as well as to the expressed or total decrease in self-esteem, which would have diagnostic significance in relation to a pathological decrease in the emotional background (depression).

4.3. In terms of time perspective, regardless of the severity of the cosmetic problem, there is a positive, albeit somewhat reduced, assessment of the current period of life ('present') and a higher assessment of the lived period of life ('past') than in the normative sample.) and a high, above average normative, optimistic assessment of the future, which is perceived as dynamic, structured and emotional.

4.4. The 'internal picture of the disease' (in relation to the cosmetic defect and the treatment) is objective. A positive statistical relationship was found between the subjective assessment and the objective assessment by the cosmetologist, both of the severity of the problem and of the result of the treatment, although the latter is assessed less strictly by the patients than by the doctors. There is a direct relationship between the severity of a cosmetic problem and the subjective assessment of its impact on life activity, as well as a relationship between the effectiveness of treatment and personality factors that determine compliance - 'self-confidence' (organisation) and 'cooperation', a relationship between the motives for consulting a cosmetologist and the age of the patient. The motives 'to be more successful in personal life' and 'to be more successful in professional activities' dominate among women over 40 years of age.

5. The emotional and affective status of patients in a cosmetic clinic is heterogeneous: high psychometric indicators of subjectively perceived stress, data

from a structured interview that 22.6% of patients are in a prolonged psychotraumatic situation. 9. 1% experience an acute stressful situation during a visit to a cosmetologist. Increased (above average normative values) indicators of emotional instability in the personality structure on the one hand are combined with a high level of frustration tolerance, a low level of neuroticism and a low (compared to normative data) level of efforts aimed at counteracting stress on the other hand.

6. The most informative psychodiagnostic indicators of the risk of emotional and affective disorders, according to multiple regression analysis, are a high 'level of neuroticism' (NL method) and low scores on the scales 'Locus of Control - Self' ('Meaning in Life Orientations' method), 'Emotional Stability' ('Big V' method). From a theoretical point of view, the results of the empirical study cover various aspects of personality (emotional-affective, characterological, behavioural, motivational-semantic), as well as the system of their significant relationships. In the relation to clinical and socio-demographic factors, they allow us to consider the psychological adaptation of cosmetology patients from the perspective of a systems approach in psychology and the biopsychosocial paradigm of modern medicine as a dynamic system of integrated interaction of these factors. From the perspective of the systems approach in psychology and the biopsychosocial paradigm of modern medicine, they allow us to consider the psychological adaptation of cosmetic patients as a dynamic system of integrated interaction of these factors, as a process and as a result of such interaction, and also to present it in the form of a structural-functional model. In practical terms, such an approach allows us to outline ways of psychological support and prevention of psychological maladjustment in women with facial skin defects.

7. A cumulative analysis, using mathematical-statistical methods, of all the psychodiagnostic indicators studied made it possible to identify 3 clusters grouping together patients with similar ‘psychological profiles’. They are ‘optimal psychological adaptation’ (57.6%), ‘complete psychological well-being, social success and its demonstration’ (27.1%), ‘psychological distress’ and ‘call for help’

(15.3%), whose content characteristics served as a basis for identifying ‘targets’ and ‘resources’ for psychological assistance to patients of a cosmetology clinic.

8. The dynamics of psychodiagnostic indicators during the treatment process shows that non-surgical correction of cosmetic problems in women has a positive effect on 1) emotional state (decrease in the level of emotional excitability and instability, general emotional stress, experience of the stressfulness of the current situation), 2) self-perception (increased assessment of one's own appearance and self-confidence), 3) satisfaction with various aspects of the quality of life, related both to the sphere of social functioning and to one's own emotional state. The nature of the dynamics of psychological characteristics during the treatment differs in groups of patients with different emotional-affective status. In the group with increased risk of its disorders there are no changes in the attitude to the time perspective (to their 'present', 'past' and 'future'), unlike in the group of patients with high level of emotional stability, who showed a significant improvement in their attitude to the present period of life.

9. From a theoretical point of view, the results of the empirical study cover various aspects of personality (emotional-affective, characterological, behavioural, motivational-semantic), as well as the system of their significant relationships. In their relation to clinical and socio-demographic factors, they allow us to consider the psychological adaptation of cosmetology patients in the perspective of a systems approach in psychology and the biopsychosocial paradigm of modern medicine as a dynamic system of integrated interaction of these factors. From the perspective of the systems approach in psychology and the biopsychosocial paradigm of modern medicine, they allow us to consider the psychological adaptation of cosmetic patients as a dynamic system of integrated interaction of these factors, as a process and as a result of such interaction, and also to present it in the form of a structural-functional model. In practical terms, such an approach allows us to outline ways of psychological support and prevention of mental maladjustment in women with facial skin defects.

PRACTICAL RECOMMENDATIONS

Based on the results of the dissertation research and clinical experience in the field of medical cosmetology, it is possible to determine the main tasks of psychological diagnostics and the main directions of psychological assistance to women with facial skin defects.

Recommendations for psychological diagnostics of patients in a beauty clinic

1. Psychological diagnostics in a cosmetic clinic should be based on the principles of medical psychodiagnostics and be aimed at the comprehensive identification of stress factors associated with facial skin disorders as an important component of interpersonal communication, as well as at the identification of personal and environmental resources for coping with stress, in order to prevent psychological adjustment disorders and optimise the patient's quality of life.

2. Due to the likely stressful nature of facial skin defects, a psychological study in a beauty clinic should be aimed at identifying 1) disturbances in the patient's emotional state, including the severity of symptoms of depression, anxiety, hypochondria, dysphoria, etc., the general level of neuroticism and perceived stress; 2) maladaptive strategies for coping with stress, forms of behaviour; 3) violations of social functioning and the system of significant relationships, as well as the central nervous system, 2) maladaptive strategies for coping with stress, unconstructive forms of behaviour; 3) violations of social functioning and the system of significant relationships, as well as the central link of this system - the attitude to oneself; 4) motives for seeking cosmetological help, including dysfunctional cognitive beliefs (including body dysmorphic), as well as a number of other psychological constructs, the relevance of which is determined at the preliminary stage of the study (clinical interview stage).

3. In order to verify the personal and social resources for coping with stress, optimising the emotional state, behaviour and quality of life of patients in a beauty clinic, psychological research should aim to identify the level of psychological well-being, satisfaction in different areas of life, individual psychological characteristics

and the motivational and semantic sphere of the individual, as well as constructive coping strategies.

4. In order to determine the most unfavourable factors of disturbance of psychological adaptation of patients in a beauty clinic, as well as to identify personal resources for their compensation, the optimal (informative and sufficient) psychodiagnostic complex should consist of test questionnaires 'Level of neuroticism', 'Life meaning orientations', 'Big V' and 'Questionnaire of satisfaction with quality of life'.

5. For in-depth psychodiagnostic work aimed at identifying areas of greatest psychological dissatisfaction in the individual's system of significant relationships, level of compliance, motives and satisfaction with the results of treatment, a dermatologist-cosmetologist or a psychologist working in an aesthetic medicine clinic can use a structured interview specialised for women with cosmetological facial skin problems (Appendix 1).

Recommendations for the interaction of a dermatologist-cosmetologist with patients in a beauty clinic

1**.**In order to optimise the process and outcome of therapeutic correction, it is advisable for dermatologists and cosmetologists to rely on a modern biopsychosocial approach to understanding human health and disease, the person-centred paradigm of modern medicine, a modern partnership (not paternalistic) model of the doctor-patient relationship, the concept of 'treatment adherence' introduced by the WHO and ideas about the factors that determine it, and the 'Health Belief Model' developed within the framework of social psychology.

2. The modern partnership model of the doctor-patient relationship should be implemented by the attending physician, taking into account not only clinical factors, but also the social and psychological characteristics of the patient. According to the results of this study, the most important 'patient-related factors' in relation to the risk of mental maladjustment are emotional instability; on the contrary, internalisation, cooperation and organisation, as well as the coping strategies of 'seeking social support' and 'planning a solution to a problem' have the

greatest protective significance. It is these psychological characteristics of the patient that the clinician should take into account in order to establish a productive relationship with the patient.

3. The modern partnership model of the doctor-patient relationship involves the active and responsible participation of the patient in the treatment process, based on knowledge, attitudes, beliefs and motivation. An important factor in correcting dysfunctional beliefs and motivation is informing the patient about all aspects of the forthcoming treatment. At the same time, education is a factor in strengthening motivation and adherence to treatment, as well as a factor in emotional support.

4. It is optimal (necessary and sufficient) for the doctor to provide the following information at the initial stage of treatment: about the results of visual assessment, including the severity of changes in the facial skin, about the programme of therapeutic correction (complex or targeted), including the use of hardware methods of influence, injection methods, external remedies, methods of dermatological and cosmetological home care, per os. medication, the need to draw up an individual schedule of visits, and the expected prognosis of the effectiveness of treatment.

5. Communication between a doctor and a patient should take into account the three conditional 'psychological profiles' of patients (clusters) identified in this study.

5.1. If a patient is assigned (by expert observation) to the 'Optimal psychological adjustment' cluster, informing the patient about the purpose and programme of the study is usually sufficient to shape compliant behaviour and satisfaction with the process and outcome of treatment.

5.2. When assigning a patient to the cluster 'Complete psychological well-being, social success and its demonstration', in the initial stages of treatment the doctor should convey to the patient his acceptance and positive assessment, which he needs, since the basis of demonstrative behaviour is often personal immaturity, insecurity and dependence. In the future, when a compliant relationship is

established, the doctor should maintain emotional neutrality so as not to encourage demonstrative (egocentric, pretentious) forms of behaviour.

5.3. When classifying a patient into the 'Psychological distress' and 'Call for help' cluster, the doctor should be especially attentive to the patient’s behavioral characteristics and statements. They may be situational, transient in nature, or be a manifestation of personal (typological) anxiety, insecurity, subdepression, which can be effectively eliminated during a clinical interview using methods of information and emotional support.

In some cases, with persistent manifestations of stress, severe anxiety, depression, in the presence of uncorrectable pathological attitudes that disorganise the patient's behaviour (i.e. if there are doubts about his mental health), it is advisable to recommend a consultation with a psychotherapist.

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APPENDICES

Appendix 1

Information card

FULL NAME.

Sociodemographic characteristics

1. Age
2. Education
    1. Secondary
    2. Incomplete higher
    3. Higher
3. Current professional status
    1. Works
    2. Doesn’t work
    3. Works sporadically
4. Field of work
    1. Science and education
    2.Industry
    3. Economic and financial sphere
    4.Commerce
    5. Employee
    6. Private business
5. Marital status
    1. Married
    2. Single
    3. Divorced
    4. Widow
6. Children
    1. 1
    2. 2
    3. 3 and more
    4. No children
7. Living
    1. Own family
    2. Alone
    3. With parents

Clinical characteristics

8. Clinical symptoms
    1. Gravitational ptosis
    2.Devolumisation
    3. Expression wrinkles
    4. Furrows and folds
    5. Decreased skin turgor

6.Inflammatory elements
7.Skin dehydration
8. Connective tissue dysplasia
9. Vascularpathologyoftheskin
10. Rosacea
11. Hyperpigmentation
12.Hypertrichosis

9. Comorbidities
    1. Endocrine
    2. Dermatological
    3. Somatic pathology
    4. Oncological diseases
10. Severity of the cosmetic problem
    1. Mild
    2. Moderate
    3. Severe
11. Duration of the problem
    1. Less than 1 month
    2. From 1 month to 1 year
    3. From 1 year to 3 years
    4. From 3 to 5 years
    5. More than 5 years
12. Impact on life activities
    1. Rather has no effect
    2. Rather influences
    3.Significantly influences
13. Morphotypes of ageing
    1. Deformation
    2. Muscular
    3. Finely wrinkled
    4. Tired
    5. Combined
14. Facial isotype
    1. Diamond
    2. Rectangle
    3. Square
    4. Trapezium
    5. Heart shape
    6. Oval
15. Skin type
    1. Very oily
    2. Oily
    3. Dry
    4. Combined

16. Fitzpatrick phototypes
    1. 1
    2. 2
    3. 3
    4. 4
    5. 5
    6. 6
17. Relationship between clinical presentation and genotype
    1. Traceable
    2. Absent
18. Relationship between clinical presentation and phenotype
    1. Traceable
    2. Absent

Cosmetic corrections

19. Scope of cosmetology care
    1. Targeted (we treat a specific symptom)
    2.Comprehensive
20. Home remedies for external use
    1. Cream
    2. Serums
    3. Lotions
    4. Tonics
    5. Cleansers
    6. Patches
    7. Masks
    8. Not used
21. Professional external care products
    1. Peels
    2. Masks
    3. Massages
    4. Not used
22. Hardware treatment methods
    1. Focused ultrasound
    2.RF lifting
    3. IR photothermolysis
    4. Fractional photothermolysis
    5.Needle RF Therapy
    6. CO2 grinding
    7. IPL-technology
    8. Vascular laser destruction
    9.Laser hair removal
    10. Photodynamic therapy
    11.Non-injection biorevitalisation

12. Cryolipolysis
13.Not used

23. Injection treatments
    1. Botulinum toxin A
    2. HA fillers
    3. Calcium hydroxylapatite fillers
    4. Collagen and elastinogenesis stimulators
    5. Bio-revitalisers
    6. Mesotherapy
    7. PRP therapy
    8. Thread lifting
    9. Not used
24. Medicines for internal use at home
    1. Yes
    2. No
25. Combination of cosmetic correction techniques used
    1. External care only
    2.Injections only
    3. Devices only
    4. External care + injections
    5.External care + hardware techniques
    6. Externalcare + injections + hardware techniques
    7. Injections + hardware techniques
26. The effectiveness of the treatment, according to the doctor
    1. No effect
    2. Minimal effect
    3. The problem is partially resolved, further treatment is indicated
    4. The problem is partially resolved, no further treatment is indicated
    5.The problem is completely fixed

Social and psychological characteristics, system of meaningful relationships

27. Relationships in one's own family
    1. Open conflict, tense
    2. Cold, distant
    3. Warm, emotionally pleasant
28. Relationships in parental family (in childhood or now, if you live together)
    1. Overprotection
    2. Suppression
    3. Rejection
    4. Full acceptance and support
29. Relationship with children
    1. Cold, aloof
    2. Neutral

3. Warm, trusting

30. Relationships with people of the opposite sex
    1. I don't communicate, I avoid
    2. Difficult
    3. Simple
31. Treating yourself as an individual
    1. Complete dissatisfaction
    2. Some dissatisfaction
    3. Complete acceptance and satisfaction
32. Relationship with your physical self
    1. Complete dissatisfaction
    2. Some dissatisfaction
    3. Complete acceptance and satisfaction
33. Confidence in your external attractiveness
    1. Absent
    2. Incomplete
    3. Complete
34. The desire to change a lot about your appearance
    1. Slightly expressed
    2. Moderately expressed
    3. Significantly expressed
35. The presence and specificity of a current psychotraumatic situation:
    1. There are currently no traumatic situations
    2. Presence of acute stress
    3. Prolonged psychotraumatic situation

Subjective cosmetic complaints

36. Pigmentation
    1. Yes
    2. No
37. Wrinkles
    1. Yes
    2. No
38. Changing the oval of the face
    1. Yes
    2. No
39. Inflammatoryelements
    1. Yes
    2. No
40. Dry skin
    1. Yes
    2.No
41. Skin laxity
    1. Yes

2. No

42. Facial redness (visibility of blood vessels)
    1. Yes
    2. No
43. Unwanted facial hair
    1. Yes
    2. No

Motives for seeking cosmetic help

44. Dissatisfaction with skin appearance
    1. Yes
    2. No
45. Desire to have healthy skin
    1. Yes
    2. No
46. Improving your appearance can make you more successful in your career.
    1. Yes
    2. No
47. Improving your appearance will allow you to be more successful in your personal life.
    1. Yes
    2. No
48. Fashion trend
    1. Yes
    2. No
49. Effectiveness of treatment as assessed by the client
    1. Minimum
    2. Medium (partial elimination of a cosmetic problem)
    3. Maximum (complete elimination of a cosmetic problem)

Psychodiagnostic indicators
'Neuropsychological Adaptation Test' (pre-treatment)

50. Overall score (Z)
51. Level of adjustment
    1. Health
    2. Optimal adaptation
    3. Non-pathological psychological maladjustment
    4. Pathological mental maladjustment
    5. Probably a painful condition

'Test of neuropsychological adaptation' (post-treatment)

52. Overall score (Z)
53. Level of adjustment

1. Health
    2. Optimal adjustment
    3. Non-pathological mental maladjustment
    4. Pathological mental maladjustment
    5. Probably a painful condition

‘Level of neuroticism’ (Before treatment)

54. Lie (Score)
55. Level of neuroticism (score)
56. Level of neuroticism
    1. Very high
    2. High
    3. Increased
    4. Uncertain
    5. Decreased
    6. Low
    7. Very low

‘Level of neuroticism’ (After treatment)

57. Lie (score)
58. Level of neuroticism (score)
59. Level of neuroticism
    1. Very high
    2. High
    3. Increased
    4. Uncertain
    5. Decreased
    6. Low
    7. Very low

'Perceived Stress Scale-10' (Before treatment)

60. Overstrain (score)
61. 61.Counteracting stress (score)
62. PSS total score

'Perceived Stress Scale-10' (After treatment)

63. Overstrain (score)
64. Counteracting stress (score)
65. PSS total score

'Level of social frustration', satisfaction (Before reatment)

66. Relationships with wife (husband)
67. Relationships with parents
68. Relationships with children

69. Relationships with relatives
70. Relationships with friends
71. Relationships with the opposite sex
72. Relationships with people at work
73. Relationships with superiors at work
74. my education
75. level of professional training
76. field of work
77. your job in general
78. financial situation
79. living conditions
80. how you spend your free time
81. your physical condition
82. your psycho-emotional state
83. working efficiency
84. way of life

By block:

85. Satisfaction with relations with family and friends
86. Satisfaction with immediate social environment
87. Satisfaction with social status
88. Socio-economic status
89. Satisfaction with your health and performance

‘Level of social frustration', satisfaction (After treatment)

90. Relations with wife (husband)
91. Relationships with parents
92. Relationships with children
93. Relationships with relatives
94. Relationships with friends
95. Relationships with the opposite sex
96. Relationships with people at work
97. Relationships with superiors at work
98. with your education
99. level of education
100. field of work
101. your job in general
102. financial situation
103. living conditions
104. leisure time activities
105. your physical condition
106. your psycho-emotional state
107. working efficiency
108. way of life

By block:

109. Satisfaction with relations with family and friends
110. Satisfaction with immediate social environment
111. Satisfaction with social status
112. Socio-economic situation
113. Your health and performance

'Index of general (good) health'/WHO (Before treatment)

114. Total score

'Index of general (good) health'/WHO (After treatment)

115. Total score

'Quality of Life Satisfaction Questionnaire' (before treatment)

116. Quality of life index (QoL), score
117. Quality of life index, level
    1. Very low (depressive)
    2. Low
    3. Average
    4. High
118. Job (career) – scale rating
119. Job (career) – level
    1. Low
    2. Average
    3. High
120. Personal achievements – scale rating
121. Personal achievements – level
    1. Low
    2. Average
    3. High
122. Health – scale rating
123. Health – level
    1. Low
    2. Average
    3. High
124. Communication with friends and relatives - scale rating
125. Communication with friends and relatives – level
    1. Low
    2. Average
    3. High
126. Support – scale rating
127. Support – level
    1. Low

2. Average
3. High

128. Optimism – scale rating
129. Optimism – level
    1. Low
    2. Average
    3. High
130. Stress – scale rating
131. Stress – level
    1. Low
    2. Average
    3. High
132. Self-control – scale rating
133. Self-control – level
    1. Low
    2. Average
    3. High
134. Negative emotions – scale rating
135. Negative emotions – level
    1. Low
    2. Average
    3. High

'Quality of Life Satisfaction Questionnaire' (After treatment)

136. Quality of life index (QoL), score
137. Quality of life index, level
    1. Very low (depressive)
    2. Low
    3. Average
    4. High
138. Job (career) – scale rating
139. Job (career) – level
    1. Low
    2. Average
    3. High
140. Personal achievements– scale rating
141. Personal achievement – level
    1. Low
    2. Average
    3. High
142. Health – scale rating
143. Health – level
    1. Low
    2. Average

3. High

144. Communication with friends and relatives – scale rating
145. Communication with friends and relatives – level
    1. Low
    2. Average
    3. High
146. Support – scale rating
147. Support – level
    1. Low
    2. Average
    3. High
148. Optimism – scale rating
149. Optimism – level
    1. Low
    2. Average
    3. High
150. Stress – scale rating
151. Stress – level
    1. Low
    2. Average
    3. High
152. Self-control – scale rating
153. Self-control – level
    1. Low
    2. Average
    3. High
154. Negative emotions – scale rating
155. Negative emotions – level
    1. Low
    2. Average
    3. High

'Visual Analogue Scale of Self-Esteem' (Before treatment)

156. Mental ability
157. Beauty
158. Health
159. Character

'Visual Analogue Scale of Self-Esteem' After treatment)

160. Mental ability
161. Beauty
162. Health
163. Character

‘Semantic time differential’ (Before treatment) The present

164. Final indicator, (average assessment of the future), score
165. Final indicator, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
166. Activity, score
167. Activity, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
168. Emotional coloring, score
169. Emotional coloring, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
170. Value, score
171. Value, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
172. Structure, score
173. Structure, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
174. Sensitivity, score
175. Sensitivity, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased

Past

176. Final indicator, (average assessment of the future), score
177. Final indicator, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased

4. Increased

178. Activity, score
179. Activity, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
180. Emotional coloring, score
181. Emotional coloring, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
182. Value, score
183. Value, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
184. Structure, score
185. Structure, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
186. Sensitivity, score
187. Sensitivity, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased

Future

188. Final indicator, (average assessment of the future), score
189. Final indicator, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
190. Activity, score
191. Activity, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased

4. Increased

192. Emotional coloring, score
193. Emotional coloring, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
194. Value, score
195. Value, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
196. Structure, score
197. Structure, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
198. Sensitivity, score
199. Sensitivity, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased

Semantic time differential (After treatment)
The present

200. Final indicator, (average assessment of the future), score
201. Final indicator, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
202. Activity, score
203. Activity, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
204. Emotional coloring, score
205. Emotional coloring, level
    1. Reduced
    2. Slightly reduced

3. Slightly increased
4. Increased

206. Value, score
207. Value, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
208. Structure, score
209. Structure, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
210. Sensitivity, score
211. Sensitivity, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased

Past

212. Final indicator, (average assessment of the future), score
213. Final indicator, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
214. Activity, score
215. Activity, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
216. Emotional coloring, score
217. Emotional coloring,level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
218. Value, score
219. Value, level
    1. Reduced
    2. Slightly reduced

3. Slightly increased
4. Increased

220. Structure, score
221. Structure, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
222. Sensitivity, score
223. Sensitivity, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased

Future

224. Final indicator (average assessment of the future), score
225. Final indicator, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
226. Activity, score
227. Activity, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
228. Emotional coloring, score
229. Emotional coloring, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
230. Value, score
231. Value, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased
232. Structure, score
233. Structure, level
    1. Reduced
    2. Slightly reduced

3. Slightly increased
4. Increased

234. Sensitivity, score
235. Sensitivity, level
    1. Reduced
    2. Slightly reduced
    3. Slightly increased
    4. Increased

End-to-end bipolar list personality test questionnaire

236. Extraversion (score)
237. Extraversion (level)
    1. Low
    2. Below average
    3. Average
    4. Above average
    5. High
238. Self-awareness (score)
239. Self-awareness (level)
    1. Low
    2. Below average
    3. Average
    4. Above average
    5. High
240. Cooperation (score)
241. Cooperation (level)
    1. Low
    2. Below average
    3. Average
    4. Above average
    5. High
242. Emotional stability (score)
243. Emotional stability (level)
244. Personal resources (score)
    1. Low
    2. Below average
    3. Average
    4. Above average
    5. High
245. Personal resources (level)
    1. Low
    2. Below average
    3. Average
    4. Above average

5. High

‘Coping methods' test questionnaire

246. Confrontation
247. Distancing
248. Self-control
249. Search for social support
250. Taking responsibility
251. Avoidance
252. Planning to solve a problem
253. Positive revaluation

Test-questionnaire ‘Life Meaning Orientations’

254. Goals in life
255. Process (interest and emotional intensity) of life
256. Life effectiveness (satisfaction with self-realization)
257. Locus of control – Self
258. Manageability of life
259. General indicator

Приложение 2

Локальный этический комитет
федерального государственного бюджетного образовательного учреждения высшего образования «Первый Санкт-Петербургский государственный медицинский университет имени академика И.П. Павлова» Министерства здравоохранения Российской Федерации

197022, г. Санкт-Петербург,
ул. Льва Толстого 6-8, лит. Ч
Тел/факс: (812) 338-66-17

Выписка из протокола № 262
заседания Локального этического комитета
ФГБОУ ВО ПСПбГМУ им. И.П. Павлова Минздрава России
от «30» мая 2022 г.

1. Заседание состоялось по адресу: Санкт-Петербург, ул. Льва Толстого 6-8, лит. Ч
2. Присутствовали члены Этического комитета:

1. **Звартау Э.Э.**
2. **Трофимов В.И.**
3. **Черевкова М.В.**
4. **Гнедова С.В.**
5. **Егорова Н.В.**
6. **Есаян А.М.**
7. **Кетова Т.Н.**
8. **Лазарев С.М.**
9. **Старцева Я.И.**
10. **Цибин А.Ю.**
11. **Эмануэль Ю.В.**

3.Слушали:

Рассмотрение вопроса об одобрении инициативного научного исследования, проводимого по протоколу: **«Психологическая адаптация женщин с косметологическими проблемами кожи»** (ООО СП плюс (Институт красоты «Галактика»).

Дело № 14/22-н (Багненко Е.С.)

Представленные документы:

- Заявка на проведение этической экспертизы, версия от 23.05.2022г.
- Резюме на главного исследователя (Багненко Елена Сергеевна), версия от 23.05.2022г
- Список исполнителей, версия от 23.05.2022г
- Аннотация научной работы по протоколу "Психологическая адаптация женщин с косметологическими проблемами кожи", версия от 23.05.2022.
- Информационный листок пациента и форма информированного согласия, версия от 23.05.2022.
- Письмо от руководителя ИК Галактика от 24.05.2022.

Выступили:

Эксперт этического комитета с информацией об исследовании и предложением одобрить данное научное исследование.

Путем консенсуса постановили:

Одобрить инициативное научное исследование, проводимое по протоколу: **«Психологическая адаптация женщин с косметологическими проблемами кожи»** (ООО СП плюс (Институт красоты «Галактика»).

Председатель
Локального этического комитета
ФГБОУ ВО ПСПбГМУ им. И.П. Павлова
Минздрава России, д.м.н., профессор — Э.Э. Звартау

Ответственный секретарь
Локального этического комитета
ФГБОУ ВО ПСПбГМУ им. И.П. Павлова
Минздрава России — М.В. Черевкова

Appendix 2

Local Ethics Committee of the Federal State Budgetary Educational Institution of Higher Education PAVLOV FIRST STATE MEDICAL UNIVERSITY OF ST. PETERBURG of the Ministry of Health of the Russian Federation

6-8, build. H, Lev Tolstoy st., St Petersburg, 197022

Tel/Fax (812) 338-66-17

Extract from the Protocol No. 262 of the Meeting of the Local Ethics Committee of PAVLOV FIRST STATE MEDICAL UNIVERSITY OF ST. PETERBURG of the Ministry of Health of Russia of 30 May 2022

1. The meeting was held at: 6-8, build. H, Lev Tolstoy st., St Petersburg, 197022
2. Members of the Ethics Committee present:
    1. Zvartau E.E.
    2. Trofimov V.I.
    3. Cherevkova M.V.
    4. Gnedova S.V.
    5. Egorova N.V.
    6. Yesayan A.M.
    7. Ketova T.N.
    8. Lazarev S.M.
    9. Startseva Ya. I.
    10. Tsybin A. Yu.
    11. Emanuel Yu.V.
3. Followed:

    Consideration of the approval of an initiative of scientific research carried out according to the protocol: 'Psychological adaptation of women with cosmetological skin problems' (SP Plus LLC, Galaxy Beauty Institute)

    Case No. 14/22-n (Bagnenko E.S.)

    Submitted documents:

- Application for ethical review, version dated 23 May 2022
- Curriculum vitae of the principal investigator (Elena Sergeevna Bagnenko), version dated 23 May 2022
- List of performers, version dated 23 May 2022
- Abstract of the scientific work on the protocol ‘Psychological adaptation of women with cosmetological skin problems’, version from 23 May 2022
- Patient information sheet and informed consent form, version from 23 May 2022
- Letter from the director of Galaxy Beauty Institute 24 May 2022

It was decided by consensus:

To approve the initiative of scientific research carried out according to the protocol: ‘Psychological adaptation of women with cosmetological skin problems’ (SP Plus LLC, Galaxy Beauty Institute).

Chairman of the Local Ethics Committee of the Federal State Budgetary Educational Institution of Higher Education PAVLOV FIRST STATE MEDICAL UNIVERSITY OF ST. PETERBURG of the Russian Ministry of Health, Doctor of Medical Sciences, Professor E.E. Evartau

Executive Secretary of the Local Ethics Committee of the Federal State Budgetary Educational Institution of Higher Education PAVLOV FIRST STATE MEDICAL UNIVERSITY OF ST. PETERBURG of the Ministry of Health of Russia, Doctor of Medical Sciences, Professor M.V. Cherevkova

Appendix 3

Informed consent for participation in psychological research

Doctor's full name_____

Patient's full name _____

With this agreement, I authorise the doctor _____

to carry out a psychological study (interviews, questionnaires, completion of test forms) aimed at identifying various aspects of health-related quality of life, psychological aspects of cosmetological treatment and characteristics of the emotional state of women who visit a cosmetologist.

I understand that psychological research is conducted for scientific purposes.

I was told that the data collected would be statistically processed, analysed and summarised as the results of a scientific study. The psychological research process is completely voluntary and the data is kept strictly confidential. It is possible to complete the psychological tests anonymously.

The doctor discussed the following questions with me:

- The need for this psychological research;
- The need for pre- and post-treatment testing;
- The tests used are published, officially recognised professional methods of medical psychodiagnostics;
- The patient has the right not to answer all the questions.

By signing below, I confirm that I have read and fully understand the contents of this Psychological Research Consent Form and that all questions have been explained to me.

Patient signature _____

Consulting physician _____

Date _____