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**GENDER ASPECTS OF DEPRESSIVE DISORDERS FORMATION IN MEN**

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**ГЕНДЕРНІ АСПЕКТИ ФОРМУВАННЯ ДЕПРЕСИВНИХ РОЗЛАДІВ У ЧОЛОВІКІВ**

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**ГЕНДЕРНЫЕ АСПЕКТЫ ФОРМИРОВАНИЯ ДЕПРЕССИВНЫХ РАССТРОЙСТВ У МУЖЧИН**

In order to examine the gender factors and mechanisms of pathogenesis of depressive disorders in men there were explored 117 men with depression. The basic study group included 62 men with adjustment disorder F43.21 and 55 men with depressive episode F32.0, F32.1. There were also examined 98 women with depression: the comparison group included 51 women with depressive reaction F43.21 and 47 women with depressive episode F32.0, F32.1. There were investigated the constitutional biological factors (family history of mental disorders and alcohol dependence, the presence of neuropathic constitution in childhood); exogenous-organic factors (pathology of pregnancy and childbirth, traumatic brain injury, neuroinfections, neurointoxication, somatic illnesses); social factors (education, marital status, character of job, place of residence, upbringing peculiarities); factors of mental trauma, and also pathopsychological factors (characteristic features, the features of premorbid constitutional biological factor "masculinity-femininity", peculiarities of aggressive reactions manifestations and value-requirement sphere). The basic gender-specific factors were established and pathopsychological mechanisms of depressive disorders' pathogenesis in men were described.

**Key words:** gender-specific factors, pathogenesis, pathopsychological mechanisms, depressive disorders.

З метою вивчення гендерних чинників і механізмів патогенезу депресивних розладів у чоловіків обстежено 117 чоловіків з депресіями — основна група дослідження: 62 — із розладом адаптації F43.21 та 55 — з депресивним епізодом F32.0, F32.1. А також 98 жінок з депресіями — контрольна група: 51 — з депресивною реакцією F43.21 та 47 — з депресивним епізодом F32.0, F32.1. Досліджено конституціонально-біологічні чинники (спадкова обтяженість психічною патологією та алкогольною залежністю, наявність невропатичної конституції в дитинстві); екзогенно-органічні чинники (патологія вагітності та пологів, черепно-мозкова травма, нейроінфекції, нейроінтоксикації, соматичні хвороби); соціальні чинники (освіта, сімейний стан, характер праці, місце проживання, особливості виховання); чинники психічної травматизації, а також патопсихологічні чинники (характерологічні особливості, особливості преморбідного конституціонально-біологічного чинника «маскуліність-фемінність», особливості прояву агресивних реакцій та ціннісно-потребової сфери). Встановлено основні гендерно-обумовлені чинники та описано патопсихологічні механізми патогенезу депресивних розладів у чоловіків.

**Ключові слова:** гендерно-орієнтовані чинники, патогенез, патопсихологічні механізми, депресивні розлади.

С целью изучения гендерных факторов и механизмов патогенеза депрессивных расстройств у мужчин обследовано 117 мужчин с депрессиями — основная группа исследования: 62 — с расстройством адаптации F43.21 и 55 — с депрессивным эпизодом F32.0, F32.1. А также 98 женщин с депрессиями — контрольная группа: 51 — с депрессивной реакцией F43.21 и 47 — с депрессивным эпизодом F32.0, F32.1. Изучены конституционально-биологические факторы (наследственная отягощенность психической патологией и алкогольной зависимостью, наличие невропатической конституции в детстве); экзогенно-органические факторы (патология беременности и родов, черепно-мозговая травма, нейроинфекции, нейроинтоксикации, соматические болезни); социальные факторы (образование, семейное положение, характер труда, место жительства, особенности воспитания); факторы психической травматизации, а также патопсихологические факторы (характерологические особенности, особенности преморбидного конституционально-биологического фактора «маскулинность-феминность», особенности проявления агрессивных реакций и ценностно-потребностной сферы). Установлены основные гендерно-обусловленные факторы и описаны патопсихологические механизмы патогенеза депрессивных расстройств у мужчин.

**Ключевые слова:** гендерно-ориентированные факторы, патогенез, патопсихологические механизмы, депрессивные расстройства.

Currently the problem of depressive disorders is topical in most countries of the world. Each year, about 100 million inhabitants of our planet display symptoms of depression and therefore need adequate medical care [8, 11, 13]. Thus according to clinical and epidemiological studies, only 20 % of patients with depression seek treatment, only 30 % of that number of depressions are diagnosed in a timely manner, and only 25 % of patients receive adequate antidepressant treatment [1, 4].

The main ways to solve this problem, according to WHO, is to integrate mental health services into primary health care, and maximum individualization of therapeutic and diagnostic programs, considering the gender, age, social and ethnocultural characteristics of patients with depression [2, 11, 15].

Regarding the gender specificity of depression it was noted in the literature that it is caused by a constellation of genetic, hormonal and psychosocial factors that determine the differences in the forms of emotional response and be-

havior in relation to their condition, the course and outcome of depressive disorders [5, 6, 14].

Significant differences of the mechanisms of formation of depressive disorders in men and women determine the specificity of the clinical-psychopathological and pathopsychological manifestations and determine the need to develop differentiated diagnostic and treatment approaches, taking into account gender aspects of the formation of the depression, which led to the relevance of this study.

Work objective — to study the main factors and mechanisms of formation of depressive disorders in men.

The study involved 117 men with depression: 62 patients with exogenous depression (adjustment disorder, prolonged depressive reaction — F43.21) and 55 patients with endogenous depression (affective disorder, depressive episode — F32.0, F32.1), which formed the core group. 98 women were involved as a control group in the study: 51 women with exogenous depression — (F43.21) and 47 women with endogenous depression — (F32.0, F32.1).

The complex of methods included the clinical-psychopathological method and psychodiagnostic method using the following techniques: Leonhard-Schmieschek Characterological Questionnaire [9]; test evaluation of psychological gender identity [10]; Buss-Durkey Inventory [3] and Method for Examination of Value Orientations modified by E. B. Fantalova [12].

In order to study the gender-specific factors in the pathogenesis of depressive disorders there were analyzed the constitutionally-biological factors (family history of mental disorders and alcohol dependence, the presence of neuropathic constitution in childhood); exogenous-organic factors (pathology of pregnancy and childbirth, head injuries, neuroinfections, neurointoxication, somatic illnesses); social factors (education, marital status, character of job, place of residence, specifics of upbringing); as well as factors of mental injury.

In the study of hereditary load it was revealed, that the presence of family history of affective disorders (21.4 % of cases,  $p < 0.05$ ) and alcohol (15.4 % of cases,  $p < 0.01$ ) in men with depression were significantly more frequently observed, compared to women with depression (12.2 % and 4.1 %, accordingly). Women with depression were significantly more likely recorded the presence of family history of neurotic (in 20.4 % of cases,  $p < 0.01$ ) and somatoform disorders (15.3 % of cases,  $p < 0.01$ ), compared with men, in which these disorders were observed in 7.7 % and 2.2 %, respectively.

It should be noted that family history of mental disorders and alcohol dependence was more common in men with depressive episode: in 34.5 % of cases — family history of affective pathology ( $p < 0.01$ ); in 20.0 % of cases — alcohol dependence ( $p < 0.05$ ).

The presence of neuropathic constitution (moodiness, tearfulness, poor sleep and appetite, enuresis, logo neurosis of various forms, fears, etc.) was more typical for women with depression (27.6 % of patients,  $p < 0.01$ ), while in men the neuropathic constitution in childhood was observed in 12.8 % of cases.

Among the exogenous-organic factors in the development of depression in men a history of pathology of pregnancy and childbirth (in 31.6 % of cases,  $p < 0.05$ ) as well as somatic pathology in the form of chronic diseases of the genitourinary system (26.5 % of cases,  $p < 0.01$ ) and chronic diseases of the gastrointestinal tract (in 14.5 % of cases,  $p < 0.05$ ) were mentioned much more often compared with women who had these types of abnormalities in 18.4 % 10.2 % and 6.1 % cases, accordingly. In women with depression the comorbid somatic pathology in the form of chronic cardiovascular diseases (31.6 % of cases,  $p < 0.05$ ) was significantly more likely observed, as compared to men (20.5 % of cases).

With that, the factors of pregnancy pathology and childbirth (in 37.1 % of cases,  $p < 0.05$ ) and concomitant somatic pathology in the form of chronic diseases of the genitourinary system (32.7 % of cases,  $p < 0.05$ ) were detected more frequently in men with depressive episode. While men with depressive reaction were more characterized by the presence of the concomitant chronic diseases of the gastrointestinal tract (in 17.7 % of patients,  $p < 0.05$ ).

The significant differences between men and women with depression, as for the history of traumatic brain injury, neuroinfections and neurointoxications, were not found.

Among the social factors in the development of depressive disorders in men the following predominated: the mental character of job (in 56.4 % of patients) and the status of pensioner — (20.5 %), whereas for women, these factors were less specific and occurred in 44.9 % and 12.2 % of women, accordingly,  $p < 0.05$ . With that, engagement in mental job and the availability of the pensioner status were often detected in men with adjustment disorder (64.5 % and 29.0 % of patients,  $p < 0.05$ ,  $p < 0.01$ ).

According to such social factors as place of residence (urban, rural), marital status (single, married), educational level and living conditions, the significant differences between men and women were not found, i.e. these factors are not determined the gender specificity.

The factor of education in a single-parent family was more frequent in men with depression (23.1 % of patients,  $p < 0.05$ ) compared with women (13.3 % of patients).

Thus the factor of education in a single-parent family was more frequently reported in men with depressive episode (30.9 % of patients with this affective disorder,  $p < 0.05$ ).

As gender-based psychogenic factors in the formation of depressive disorders in men there were identified: loss or the threat of losing of social status (in 37.6 % of cases,  $p < 0.01$ ); loneliness, unsatisfied need for love (in 31.6 % of cases,  $p < 0.05$ ); retirement (the prospect of dismissal due to retirement age) (in 23.1 % of cases,  $p < 0.05$ ); sexual problems (in 22.2 % of cases,  $p < 0.01$ ); unemployment (the fear of unemployment) (in 21.4 % of cases,  $p < 0.01$ ), which were observed in women more frequently (13.3 %, 19.4 %, 13.3 %, 10.2 % and 8.2 %, accordingly). At the same time the main factors forming psychogenic depressive disorders in women were: family conflicts, jealousy, betrayal of a spouse, divorce (in 33.7 % of cases); deterioration of material and social status (in 31.6 % of cases); own illness or injury (in 29.6 % of cases); dissatisfaction with the job (in 20.4 % of cases); professional conflict (in 18.4 % of cases) ( $p < 0.05$ ), the representation of these factors in men amounted to — 19.7 %, 20.5 %, 16.2 %, 11.1 %, 9.4 %.

It should be noted that such psychogenic factors as loneliness and unsatisfied need for love (in 50.9 % of cases,  $p < 0.01$ ) were more specific in men with depressive episode, and the threat of loss of social status (in 46.8 % of cases,  $p < 0.05$ ); sexual problems (in 29.0 % of cases,  $p < 0.05$ ); unemployment (the fear of unemployment) (in 29.0 % of cases,  $p < 0.01$ ) and retirement (prospect of dismissal due to retirement age) (in 27.4 % of cases,  $p < 0.05$ ) — for men with adjustment disorder.

Distribution of psychogenic factors according to the duration of stress showed that in men the psychogenic factors of chronic stresses dominated in the genesis of depressive disorders apart from nosology (72.7 % of cases in F32.0, F32.1 and in 69.4 % of cases with F43.21,  $p < 0.01$ ), whereas in women the psychogenic factors of chronic stresses dominated in the pathogenesis of depression (80.6 % cases).

Thus, the main gender-related psychogenic factors in the formation of depressive disorders in men are: chronic exposure to stresses associated with threat or loss of social status; loneliness, unfulfilled need for love; retirement (the prospect of retirement); sexual problems; unemployment (fear of unemployment).

To study the formation of pathopsychological factors for depressive disorders in men there were analyzed personality traits, features of premorbid constitutional-biological

factor "masculinity-femininity", especially manifestations of aggressive reactions and value-need sphere of personality men with depression.

According to the obtained data, among personality traits of men with depression prevailed the accentuated ( $21.9 \pm 0.9$  points,  $p < 0.05$ ), dysthymic (in 41.9 % of cases,  $p < 0.01$ ) and accented ( $20.4 \pm 1.5$  points,  $p < 0.01$ ) pedantic (in 26.5 % of cases,  $p < 0.01$ ), personality traits, as well as affective-rigid (in 24.8 % of cases, with  $p < 0.01$ ) personality traits that tend to accentuation ( $18.5 \pm 2.0$  points,  $p < 0.05$ ). Such combination of personality characteristics testified about the predominance of such character traits as solidity, passivity, rigidity, inertia, pessimistic inclination fixed on the dark side of life and failures, poor communication skills in men with depression, coupled with excessive demands for themselves and others, increased resentment, suspicion, vulnerability, excessive resistance of affect and tendency to the formation of overvalued ideas.

Thus in women with depression prevailed accentuated ( $20.9 \pm 1.5$  points,  $p < 0.01$ ), demonstrative (in 38.8 % of cases,  $p < 0.01$ ) and accentuated ( $21.2 \pm 1.2$  points,  $p < 0.05$ ) anxiety (32.7 % of cases,  $p < 0.05$ ), as well as cyclothymic (in 30.6 % of cases,  $p < 0.01$ ) personality characteristics with a tendency to accentuation ( $18.1 \pm 1.7$  points,  $p < 0.05$ ) and affective-exalted (in 16.3 % of cases,  $p < 0.01$ ) personality traits with a tendency to accentuation ( $18.7 \pm 1.2$  points,  $p < 0.05$ ). That is, women with depression were characterized by a demonstrative, persistence, combined with insecurity, indecision, prone to anxiety, fears and doubts, excessive sensitivity, susceptibility to despair and panic.

The analysis of character traits in men with various forms of depression showed that men with a depressive episode prevailed accentuated ( $22.2 \pm 0.7$  points,  $p < 0.05$ ), dysthymic personality traits that reflect that they have a tendency to seat on the negative aspects of life, depressed mood, slow thinking, ideomotor lethargy, decreased communication capabilities.

Men with depressive reaction of personality traits often recorded pedantic personality traits, reaching the level of accentuation ( $21.1 \pm 0.6$  points,  $p < 0.01$ ) and affective-rigid personality characteristics with a tendency to accentuation ( $18.7 \pm 0.6$  points,  $p < 0.05$ ), i.e. it was noted the predominance of personality traits such as thoroughness, rigidity in thinking and behavior, the inertia of mental processes in combination with increased emotional vulnerability, resentment, suspicion, resistance affect.

Regarding the characteristics of the psychological gender identity in men with depression there was recorded the domination of masculine (in 47.0 % of cases,  $p < 0.01$ ) and undifferentiated (in 32.5 % of cases,  $p < 0.05$ ) types of psychological gender.

In women with depressive disorders the feminine personality traits (in 51.0 % of cases,  $p < 0.01$ ) have been predominated, corresponding to the female gender role and were expressed as passivity, dependence, sensitivity and emotionality.

It is also necessary to emphasize that men with depressive episode dominated by masculine personality traits (67.3 % of cases,  $p < 0.01$ ), and men with depressive reaction dominated by personal characteristics of undifferentiated psychological gender (46.8 % of cases,  $p < 0.01$ ).

That is, men with depressive episode were characterized by the predominance of features corresponding to the male

gender role, such as individualism, activity, dominance, independence, ambition, the need for competition, defending their beliefs and positions. In men with depressive reaction it was mainly noted the existence of the features of undifferentiated psychological gender, that reflected the failure of both masculine and feminine individual qualities manifestations and caused significant difficulties in social and cultural adaptation, the mismatch of deep sex-role attitudes of the subject to the ideal images of masculinity and femininity.

Among the features of manifestations of aggressive responses in men with depressive disorders there were more frequent aggressive behavior in the form of self-aggression (in 38.5 % of cases,  $p < 0.01$ ) and negativity (in 26.5 % of cases,  $p < 0.01$ ) reflecting a tendency to indirect expression of aggression, its peculiar object substitution.

The women with depressive disorders characterized by a predominance of aggressive behavior in the form of resentment (in 27.6 % of cases,  $p < 0.01$ ), verbal aggression (in 21.4 % of cases,  $p < 0.01$ ) and indirect aggression (in 17.3 % of cases,  $p < 0.05$ ), which allows us to express the aggressive impulses directed proximately to another object.

Among the forms of expression of aggression in men with depressive episode self-aggression has prevailed ( $79.2 \pm 3.1$  points,  $p < 0.05$ ) and in men with adjustment disorder, depressive reactions — negativism ( $80.1 \pm 6.9$  points,  $p < 0.01$ ). That is, the men with depressive episode were tended to suppress the direct expression of aggression and guide the aggressive impulses on themselves; men with a depressive reaction were characterized by a tendency for oppositional behavioral pattern from the passive resistance to active struggle against the situation, against prescribed rules and regulations.

The analysis of value-motivational sphere of patients with depressive disorders had demonstrated the presence in men with depressive disorders the high importance and low availability in the implementation of such values as "freedom" and "independence in actions" (in 63.2 % of cases,  $p < 0.05$ ), "active life" (58.9 % of cases,  $p < 0.01$ ), "interesting work" (in 55.6 % of cases,  $p < 0.01$ ), "confidence" (in 48.7 % of cases,  $p < 0.01$ ) and "love" (47.0 % of cases,  $p < 0.05$ ), i.e. the values of social realization and personal relevance.

Women with depression had predominant values of "health" (73.5 % of cases,  $p < 0.05$ ), "happy family life" (in 65.3 % of cases,  $p < 0.05$ ), and "financially secure life" (55.1 % of cases,  $p < 0.05$ ).

At the same time in men with depressive episode there was prevailed the need for the implementation of such values as: "love" (in 67.3 % of cases,  $p < 0.01$ ) and "self-confidence" (in 60.0 % of cases,  $p < 0.05$ ), that is, the value of personal-social orientation, and in men with adjustment disorder, depressive reaction — the value of social actualization, such as "freedom and independence in behavior and actions" (in 79.0 % of cases,  $p < 0.05$ ), "active work life" (72.6 % in cases,  $p < 0.05$ ) and "interesting work" (in 66.1 % of cases,  $p < 0.05$ ).

Overall, the results of the study allowed us to identify the gender-specific factors of development of various depressive disorders in men and describe the mechanisms of their formation.

It has been established that gender-specific risk factors for the formation of a depressive episode in men were the following: chronic diseases of the genitourinary system, comorbid personality disorders, affective disorders and

burdened with alcohol dependence heredity, upbringing in a single-parent family, the impact of stress associated with loneliness and unmet need for love.

The main gender-related output factors in the formation of episode of depression in men are: accentuated dysthymic personality traits; the predominance of masculine personal gender; aggressive behavior in the form of auto-aggression, as well as high demand and low availability in the implementation of the values of personal realization and demand, such as "love" and "confidence".

The highlighted factors of etiopathogenesis allowed us to describe the mechanism of formation of a depressive episode in men, which, according to our data is constitutionally-related. For example, in men with dysthymic accentuation of personality characteristics the basic constitutionally-induced demand is the affiliative need for understanding, love and self-confidence. In case of difficulties with their implementation the personality with masculine features (autonomy, independence, assertiveness, dominance, activity, etc.) make all possible efforts to achieve them, and only after exhaustion of these efforts he responds by constitutionally-caused affective (depressive) mechanism of acting in the form of refusing from self-actualization, limiting contact, isolation, the formation of an inferiority complex, a sense of guilt and auto-aggressive behavior.

Gender-specific etiopathogenetic risk factors for the formation of depressive reaction include: intellectual character of job, the status of the pensioner, the presence of chronic digestive diseases, comorbid alcohol dependence, pathology of pregnancy and childbirth, the impact of stress-related threat or loss of social status, sexual problems, unemployment and retirement (prospect for retirement). The main gender-related output factors of formation of depressive reactions in the adjustment disorders in men are: accentuate pedantic and affective-rigid personality traits, which have a tendency to the accentuation; personality traits of undifferentiated psychological gender; prevalence of negativism among expressions of aggression; high demand and low availability in the implementation of values of social actualization, such as "freedom and independence in actions and actions", "active life" and "interesting work".

The main mechanism of formation of depressive reactions in adjustment disorder in men is constitutionally-reactive mechanism. Thus, on the one hand, constitutionally-related affective-rigid personality traits (with a tendency to accentuation) create a persistent high motivation to sell (up to formation of overvalued ideas) of such universal values as freedom and independence in actions and actions, "active life" and "interesting work". On the other hand, constitutionally — induced accentuation pedantic personal characteristics (formalism, inertia in thinking and behavior, the duration of the experience of traumatic events, passivity, and so on) and personal characteristics of undifferentiated psychological gender (low level of self-reliance, independence, dominance, ability to assert themselves, low willingness to make decisions, difficulties in socio-cultural adaptation, the mismatch deep sex-role attitudes of the ideal images of masculinity and femininity and so on) reduces the probability of realization of these important life values and thus further exacerbate the necessity for them. The intrapersonal conflict between the high level requirements for implementing of the above values and

low personal resources in their implementation is causes the non-adaptive aggressive behavior in the form of negativism (an opposition form of behavior directed against the authorities, requirements, rules and laws). This form of behavior exacerbates social and psychological conflict and leads to an adjustment disorder, which manifests itself in the form of prolonged depressive reaction.

The results obtained in the study may be the main targets in the development of gender-sensitive programs, psychotherapy of depressive disorders in men.

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