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INTENSITY OF PERSONALITY DISORDER AND BORDERLINE SPECIFICITIES IN PERSONS WITH NEUROTIC AND DEPRESSIVE DISORDERS

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Abstract

Introduction: The intensity of personality disorders conditioned by the degree of self and/or interpersonal functionality is the basic diagnostic criterion for personality disorders according to ICD 11. There is a high prevalence and association of personality disorders with other psychiatric entities, as well as with neurotic and depressive disorders. The aims of this study were to determine the prevalence of personality disorder in neurotic and depressive patients, as well as the correlation with the borderline pattern.

Materials and methods: The study was designed as a monocentric, analytical observational cross-sectional study. It included 108 participants divided in three groups – people with neurotic and/or depressive disorders according to ICD 10 (60 participants), a control group (30 participants), and a group of people with personality disorders according to ICD 10 (18 participants). Scales were used to assess anxiety, depression, severity of personality disorders according to ICD 11 and the borderline pattern scale.

Results: A high prevalence of personality disorders was found in individuals with neurotic and/or depressive disorders; a high correlation of anxiety and depression with the severity of personality disorder, as well as a high correlation between the borderline pattern and the intensity of personality dysfunction.

Conclusion: The study demonstrated a significant difference in personality functionality among the examined groups, which had clinical implications.

Keywords: intensity of personality disorders, borderline pattern, neurotic disorders, depressive disorders

Introduction

Personality disorders, understood as long-lasting maladaptive patterns of behavior that are pervasive and evident in many personal and social contexts, have a high prevalence in both the general population (7.8%-12.16%)[1] and psychiatric patients (40–90% in psychiatric outpatients)[2].

Debates and controversies surrounding their high prevalence, the co-existence of multiple personality disorder categories in the same person, the co-existence of multiple psychiatric diagnoses, and the lack of a common phenomenological and psychopathological basis for the different personality disorder categories have raised the question of the validity of the categorical diagnostic model of personality disorders[3]. For these reasons, new versions of official diagnostic classification systems, such as the International Classification of Diseases (ICD-11) and the Alternative Model of Personality Disorders (AMPD) in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), are moving towards a dimensional, or hybrid, model of diagnosing personality disorders. This dimensional model emphasizes a continuum

of personality pathology, with diagnostic requirements relating to assessments of the intensity of the personality disorder (disorder severity) and trait domains, rather than rigid categorizations[4].

The intensity of a personality disorder is conditioned by the degree of self-functionality (identity coherence, self-esteem, accuracy of self-perception, self-direction) and/or by interpersonal functionality (the ability to develop and maintain close, mutually satisfying relationships, the capacity to appreciate others' perspectives, and to manage conflicts within relationships)[4]. Disturbances in the self and/or in interpersonal relationships manifest in patterns of cognition, emotional experiences, and behavior, as well as across a range of personal and social situations. The degree of intensity of a personality disorder is represented by degrees of severity of the personality disorder: mild, moderate, severe, whereby the assessment of the severity of the personality disorder can be an independent diagnostic category. The second diagnostic element, which further refines the diagnosis, are the domains of personality characteristics and are determined after the initial assessment of severity. Trait domains serve to describe specific modes of personality dysfunction and include the pathological traits: negative affectivity, alienation, dissociality, disinhibition, and anankastia.

Although the borderline pattern can be described through the domains of characteristics (most often – negative affectivity, dissociality and disinhibition), in ICD 11 there is a separate specifier for the borderline pattern, which actually includes the main criteria for borderline personality disorder such as emotional instability, identity problems, instability in relationships, impulsivity. These criteria overlap with the criteria for the severity of a personality disorder and with the domains of characteristics. Despite the achieved consensus on the inclusion of the borderline pattern[5], the debate regarding its necessity remains open. The key questions remain open whether it should be a separate categorical entity or be considered an indicator of more severe personality dysfunction associated with other diagnostic elements and clinical symptoms.

The high prevalence of personality disorders and other psychiatric entities highlights their interconnection and mutual influence. The existence of a personality disorder is a predictor of the persistence of anxiety disorders[6], with a poorer prognosis observed in individuals who also have a co-occurring personality disorder. Notably, the severity of personality pathology is directly related to the severity of neurotic conditions, which, to some extent, supports the dimensional approach. The existence and association with mood difficulties also lead to a worse prognosis[7]. The reason for the connection between anxiety, depression and personality disorders lies in the common biological correlates[8]. The existence of a personality disorder against the background of anxiety and/or depressive symptomatology has an impact on the outcome and course of the disease. All individuals with some personality problems have a worse status in terms of psychopathology, anxiety, depression, and functionality after 30 years, compared to individuals without personality difficulties and with only anxiety and/or depressive symptomatology at baseline[9].

These findings highlight the importance of researching personality disorders according to the new dimensional approach, especially in a population of patients with symptoms of neurotic and depressive disorders, where personality pathology can significantly influence symptom manifestation, course and therapeutic response. This study aimed to contribute to this discussion by examining the role of personality disorders in modern dimensional frameworks, their impact on psychiatric comorbidities and their clinical implications. The specific aims of this study were to examine:

- The prevalence and severity of personality disorders among individuals diagnosed with neurotic and depressive disorders according to ICD-10.
- The correlation between the severity of anxiety and depression symptoms and the severity of personality disorders.

- A comparative analysis of the severity of personality disorders among the general population, individuals with neurotic and depressive disorders, and individuals diagnosed with a personality disorder based on ICD-10 criteria.
- The relationship between the borderline pattern and the severity of personality disorders.

Materials and methods

This study was designed as a monocentric, analytical, observational cross-sectional study aimed to assess the prevalence of personality disorders (based on ICD-11 criteria and severity grading) among individuals diagnosed with neurotic and stress-related disorders and depressive disorders (according to ICD-10). This population was compared with individuals without neurotic and depressive symptoms and without a prior psychiatric history. Additionally, an analytical cross-sectional substudy was conducted to compare levels of functionality among the general population, individuals with neurotic and/or depressive disorders, and individuals with a diagnosed personality disorder. The study included 108 participants divided in three participant groups. Informed consent was obtained from participants and the Ethics Committee for Human Research, Faculty of Medicine – Skopje approved the study.

The first group consisted of 60 individuals (*N* = 60, 73.3% women) aged 18 to 65 years, diagnosed with a neurotic disorder (*F40-F48 according to ICD-10*, excluding *F43*, where a clear etiological factor is present) or a depressive disorder (*F32, F33, F34.1*), excluding individuals who exhibited both depressive and psychotic symptoms.

The second, control, group included 30 individuals (*N* = 30, 53.33% women) aged 18 to 65 years, with no current clinically significant depressive and/or neurotic symptomatology and no prior psychiatric history.

The third group consisted of 18 individuals (*N* = 18, 38.88% women) aged 18 to 65 years, who had an already diagnosed personality disorder based on ICD-10 criteria.

The measurement instruments used to assess the levels of anxiety and depression were the *Hamilton Depression Rating Scale (HAM-D, 17-item version)*[10] and the *Hamilton Anxiety Rating Scale (HAM-A)*[11]**.**

The instruments used to determine the **severity of personality disorder** in this study were:

The ***Level of Personality Functioning Scale – Brief Form 2.0 (LPFS-BF-2.0)*** was used to assess personality functioning. This is a short self-report questionnaire consisting of 12 items with multiple-choice gradient responses, rated on a scale from 1 to 4[12]. The cut-off scores recommended as normative thresholds - 26 and standard deviations - were used as reference points for classification[13].

Personality Disorder Severity - ICD 11 – PDS-ICD 11 – a scale of 14 items, of which the first 10 are double-sided and are scored from 0 to 2, the remaining items are scored from 0 to 3[14]. The total sum gives the personality disorder severity index, and the cut-off values 9, 12, 16, 19, are used in the delineation of the severity of the disorder according to the established cut-off scores[15].

The *Standardized Assessment of Severity of Personality Disorder (SASPD)* is a self-report instrument consisting of 9 items with multiple-choice responses, scored from 0 to 3, with a specific description for each option and recommended cut-off values[16].

To assess the level of the borderline pattern, *Borderline Pattern Scale (BPS)* was used. It is – a 12-item scale (3 for each of the four aspects of functioning in borderline disorders – emotional instability, maladaptive self-functioning, maladaptive interpersonal functioning, maladaptive regulatory strategies), which have gradient responses and are scored from 1 to 5[17].

Descriptive and analytical statistical processing of the data was conducted using SPSS 26. The frequencies of the different levels of personality disorder severity were determined for the three groups. Due to the nonparametric distribution of variables and high standard deviation, the correlation between anxiety and depression levels and personality disorder severity was measured using Spearman's correlation method. A one-way ANOVA was used for comparisons between all participant groups, and a post-hoc analysis with Tukey's HSD was conducted to analyze differences in BPS scale scores among the three groups. Linear regression analysis was performed to examine the relationship and predictive role of the borderline pattern in personality disorder severity. Statistical significance was defined at the level <0.05.

Results

The first participant group consisted of 60 individuals (*N* = 60, 73.33% women) diagnosed with a neurotic and/or depressive disorder according to ICD-10. The mean age of the participants was 42.75 years (SD = 11.35, min = 20, max = 65 years). The control group included 30 individuals (*N* = 30, 53.33% women) with a mean age of 34.07 years (SD = 11.67, min = 19, max = 63 years). The third participant group, consisting of individuals diagnosed with a personality disorder according to ICD 10, included 18 participants (*N* = 18, 38.88% women) with a mean age of 34.00 years (SD = 13.50, min = 19, max = 62 years).

The presence of a certain degree of personality disorder or personality difficulties, as assessed by the three evaluation scales across all three groups, showed differences in prevalence. The marginal values are presented in Table 1.

Table 1. Prevalence by severity of personality disorder

	Individuals with Neurotic and/or Depressive Disorder (ICD 10) (N = 60)	**Control Group (N = 30)**	**Individuals with Personality Disorder (ICD-10) (N = 18)**
Without personality pathology	17-29(28.33%-48.33%)	20-23(66.66%-76.66%)	/
With personality difficulties	10-20(16.66%-33.33%)	3-7(10%-23.33%)	3(16.66%)
With mild personality disorder	9-15(15%-25%)	0-7 (0%-23.33%)	6-8(33.33%-44.44%)
With moderate personality disorder	3-8(5%- 13.33%)	/	3-7(16.66%-38.88%)
With severy personality disorder	3-4(5%-6.66%)	/	2-4(11.11%-22.22%)

Table 1 presents the prevalence of personality disorder severity across the three study groups. The results indicated a progressive increase in severity, with individuals diagnosed with a personality disorder (ICD-10) showing the highest prevalence of moderate and severe cases, while the control group exhibited the lowest prevalence rates.

The mean values of all assessment scales in the individual participant groups differed, and their summary is shown in Table 2.

Table 2 summarizes the differences in the mean scores across the three participant groups on all applied assessment scales. The results suggested significant variations in personality functioning, personality disorder severity, and emotional distress between the groups.

The reliability between LPFS-BF-2.0, PDS-ICD-11, and SASPD was assessed using Cronbach's alpha, yielding a reliability coefficient of $\alpha = 0.857$ across the three scales, indicating a high level of internal consistency.

Table 2. Differences in the results of the assessment scales

Assessment Scale	Individuals with Neurotic and/or Depressive Disorder (ICD 10) (N = 60)	Control Group (N = 30)	Individuals with Personality Disorder (ICD-10) (N = 18)
HAM-D	22.46(5.93)	4.66(3.88)	20.44(6.62)
HAM-A	34.08(6.92)	8.53(7.14)	32.55(8.62)
LPFS-BF-2.0	23.55(7.30)	17.06(4.12)	30.05(4,84)
PDS-ICD 11	911(5.59)	5.00(3.59)	14.77(4.45)
SASPD	7.33 (3.24)	5.23(2.66)	10..22(2.96)
BPS	28.30(8.87)	19.43(595)	37.94(7.10)

HAM-D - ***Hamilton Depression Rating Scale,*** **HAM-A** - ***Hamilton Anxiety Rating Scale,*** **LPFS-BF-2.0** - ***Level of Personality Functioning Scale – Brief Form 2.0,*** **PDS-ICD-11** - *Personality Disorder Severity - ICD 11,* SASPD - *Standardized Assessment of Severity of Personality Disorder,* BPS - *Borderline Pattern Scale*

Due to the nonparametric distribution of the variables and high standard deviation, correlations were measured using Spearman's correlation method to ensure a more accurate assessment of the relationships between the variables. These correlations are presented in Table 3.

Table 3. Correlations between variables

	LPFS-BF-2.0	PDS-ICD-11	SASPD	BPS
HAM-D	r(108)=0.61, p=0.000	r(108)=0.56, p=0.000	r(108)=0.39, p=0.00004	r(108)=0.61, p=0.000
HAM-A	r(108)=0.54, p=0.000	r(108)=0.46, p=0.000	r(108)=0.36, p=0.00012	r(108)=0.57, p=0.000
BPS	r(108)=0.81, p=0.000	r(108)=0.78, p=0.000	r(108)=0.68, p=0.000	/

HAM-D - ***Hamilton Depression Rating Scale,*** **HAM-A** - ***Hamilton Anxiety Rating Scale,*** **LPFS-BF-2.0** - ***Level of Personality Functioning Scale – Brief Form 2.0,*** **PDS-ICD-11** - *Personality Disorder Severity - ICD 11,* SASPD - *Standardized Assessment of Severity of Personality Disorder,* BPS - *Borderline Pattern Scale*

Table 3 presents Spearman's correlation coefficients between the measured variables. The results indicated significant positive correlations between LPFS-BF-2.0, PDS-ICD-11, and SASPD with HAM-D and HAM-A**,** suggesting that higher levels of depressive and anxiety symptoms were associated with greater impairments in personality functioning and personality disorder severity indicating their potential interconnectedness.

Additionally, the results indicated that higher scores on the borderline pattern scale were strongly correlated with increased severity of personality disorder, highlighting a potential link between borderline traits and the overall severity of personality pathology. The strong correlations between BPS and LPFS-BF-2.0 (r = 0.81) and PDS-ICD-11 (r = 0.78) suggest that borderline personality features play a key role in personality dysfunction. These findings emphasize the interrelation of personality pathology with emotional distress, reinforcing the dimensional approach to personality disorders.

Due to the high correlation between the borderline pattern (measured with the BPS) and the severity of personality disorder (measured with the LPFS-BF-2.0 and PDS-ICD 11), an additional regression analysis was performed on the association and predictive role of the borderline pattern on the severity of personality disorder. Results of this analysis are presented in Table 4.

Linear regression analysis between BPS level and LPFS-BF-2.0 level showed a statistical significance explaining 68.9% of the variance in LPFS-BF-2.0, indicating a strong relationship between the variables. The regression equation revealed that for every one-unit increase in BPS, LPFS-BF-2.0 increased by 0.628. Diagnostic tests confirmed that the regression model met key statistical assumptions. The residuals followed an approximately normal distribution and independence.

Table 4. Results of regression analysis between the borderline pattern scale and the personality disorder severity scales

Dependent Variable	LPFS-BF-2.0	PDS-ICD-11
Intercept	5.59	-3.93
BPS Coefficient (β)	0.63	0.47
SE (β)	0.04	0.03
t-value	15.31	13.45
p-value	<0.001	<0.001
R^2	0.68	0.63
Adjusted R^2	0.69	0.63
F-statistic	234.4	181.0
Durbin-Watson	1.97	1.74
Shapiro-Wilk (p)	0.53	0.16
Skewness	0.20	0.40
Kurtosis	0.17	0.58

The linear regression model between BPS scores and PDS-ICD-11 scores was also statistically significant, explaining 63.1% of the variance in PDS-ICD-11, indicating a strong relationship between the variables. The regression equation revealed that for every one-unit increase in BPS, PDS-ICD-11 increased by 0.468 units. Diagnostic tests confirmed that the regression model met key statistical assumptions. The residuals followed an approximately normal distribution and independence.

Overall, these results indicated that more intense borderline characteristics were significantly associated with a greater impairment in personality functioning and a higher severity of personality disorder. The strong predictive power of BPS highlights its clinical relevance in assessing personality pathology.

For comparison between all groups of participants, a one-way ANOVA was used, which indicated a significant difference between the groups of participants, resulting in: LPFS-BF-2.0 $F(2, 105) = 25.568$, $p < 0.001$, PDS-ICD 11 $F(2, 105) = 22.157$, $p < 0.001$, SASPD $F(2, 105) = 15.162$, $p < 0.001$, BPS $F(2, 105) = 31.793$, $p < 0.001$, with a statistical significance of $p<0.05$. This suggests that the different groups of participants - people with neurotic and depressive disorders, the control group, and people with personality disorders - differed in terms of their level of personality functioning, i.e. the severity of personality pathology, as well as the presence of borderline characteristics.

For further analysis of the differences in BPS, post-hoc analysis with Tukey's HSD was applied, which determined statistically significant differences between all three groups:

- Group with neurotic/depressive symptoms *vs*. Control group (Mean Difference = -8.867, SE = 1.448, $p < 0.001$)
- Control group *vs*. Personality disorder (PD) group (Mean Difference = 18.511, SE = 5.893, $p < 0.001$)
- Group with neurotic/depressive symptoms *vs*. Personality Disorder (PD) Group (Mean Difference = 9.644, SE = 3.490, $p < 0.001$)

These findings confirmed that the values for the borderline pattern differed significantly between groups, with the highest results observed in the personality disorder group, while the control group had the lowest values, indicating its role in generating personality difficulties and in the genesis of anxiety and depression symptoms.

Discussion

Although the scales used to assess personality disorder severity demonstrated high reliability, differences in their conceptual focus and psychometric properties contributed to variability in the observed prevalence rates. The LPFS-BF, with its strong emphasis on self-

functioning and identity coherence, showed greater sensitivity for detecting core features of personality pathology, particularly those related to internal experiences and structural deficits. In contrast, the SASPD was more specific in identifying externalizing features such as aggression and behavioral dysregulation[18], reflecting its alignment with symptom-based manifestations of personality disturbance. The PDS-ICD-11, designed to reflect the ICD-11 dimensional model, incorporates both internalizing and externalizing domains, offering a more integrative assessment of personality disorder severity. These scale-specific emphases, despite their overall convergence, likely influenced the distribution of severity scores and diagnostic classifications within the sample. The higher prevalence of personality disorders together with personality difficulties in people with neurotic and/or depressive disorders compared to the healthy population is confirmed according to ICD 11 criteria and correlates with data from previous studies on increased risk and comorbidity of personality disorders in people with depressive spectrum symptoms [19,20], higher prevalence of personality disorders in people with anxiety disorders[6,21,20] and higher prevalence of personality disorders in psychiatric outpatients[2,22]. In all participants from the personality disorder group classified according to ICD-10, some degree of personality pathology was detected, whereas no severe forms of personality disorder were identified in the control group.

The data confirmed a high degree of correlation between the levels of depression and anxiety and the intensity of personality disorder. The strongest association between these levels of depression and anxiety was observed with the borderline pattern, while the lowest, yet still highly significant correlation, was found with the SASPD scale, which predominantly measures externalizing and interpersonal aspects of personality dysfunction. These results may indicate the role and interrelation of internalized *versus* externalized manifestations of aggression in the development of anxiety and depressive symptomatology, warranting further research. Overall, these findings support the connection between personality-related problems and the development of anxiety and depressive symptomatology, an issue already explored in several studies[23-25] regarding their mutual causality and implications for clinical course and treatment.

The study revealed a significant difference in personality functioning among the examined groups, which had clinical implications in terms of the necessity for assessing personality pathology even in individuals who were not initially diagnosed with a personality disorder, as well as for the development of therapeutic plans. This need for assessment should be emphasized, as clinical practice often overlooks personality dysfunction while focusing on manifested symptoms[23]. The treatment of personality disorders also impacts remission and relapse rates, as well as the use of medication in patients with anxiety and depressive disorders[24,26].

The strong correlation between the borderline pattern and the severity of personality disorder suggests that the borderline pattern itself serves as an indicator of the intensity of personality dysfunction. Furthermore, it has significant predictive power for the severity of personality disorder, explaining a substantial portion of its severity. Its correlation with the domains of negative affectivity, dissociality, and disinhibition, as well as its association with the severity of personality disorder[27,28], raises questions about its fundamental role in personality disorders. Supporting its foundational nature are the observed differences in the borderline pattern across various participant groups, which correlate with the severity of symptoms and dysfunctionality. Additionally, studies on the borderline pattern as a g-factor of personality pathology align with other diagnostic criteria in the dimensional model[28,29]. The differences in borderline pattern severity among participant groups further support the continuum of personality pathology, validating the dimensional diagnostic approach. Patients with neurotic and depressive disorders exhibited more pronounced borderline characteristics compared to the control group, suggesting that certain borderline features-such as emotional

instability, impulsivity, and difficulties in interpersonal relationships-may play a modulatory role in the clinical manifestations of neurotic and depressive disorders. This finding aligns with research highlighting emotional dysregulation as a contributing factor to multiple disorders[30,31]. The significant differences observed in the intensity of borderline patterns make its assessment valuable not only for evaluating personality dysfunction but also as a differential diagnostic tool in individuals presenting with anxiety, affective, and other symptoms.
A major limitation of this study is the relatively low number of individuals in all study groups, as well as their heterogeneity. The use of multiple assessment scales strengthens the study and the results obtained. Research can continue in the direction of discovering the connection between self-pathologies and interpersonal dysfunction with levels of anxiety and depression.

Conclusion

The assessment of personality disorder severity is the primary criterion for its diagnosis according to ICD-11. The high prevalence of this disorder, as confirmed by this study among individuals with neurotic and/or depressive disorders, underscores the necessity of evaluating personality functioning even in individuals with initially different diagnoses. The initial phenomenological and clinical manifestation of symptoms from the neurotic and/or depressive spectrum may indicate the presence of a personality disorder or a certain degree of personality difficulties due to their strong correlation. The currently developed scales for assessing personality disorder severity according to ICD-11 serve as both effective screening and diagnostic tools for personality disorders. The degree of expression of the borderline pattern is closely related to the severity of personality disorder and highlights the fundamental characteristics of personality pathology, which is significant for differential diagnosis.

Conflict of interest statement. None declared.

References

1. Volkert J, Gablonski TC, Rabung S. Prevalence of personality disorders in the general adult population in Western countries: systematic review and meta-analysis. *Br J Psychiatry* 2018; 213(6): 709-715. doi: 10.1192/bjp.2018.202.
2. Beckwith H, Moran PF, Reilly J. Personality disorder prevalence in psychiatric outpatients: a systematic literature review. *Personal Ment Health* 2014; 8(2): 91-101. doi: 10.1002/pmh.1252.
3. Geddes, John R., Nancy C. Andreasen, and Guy M. Goodwin (eds), *New Oxford Textbook of Psychiatry*, 3 edn, Oxford Textbook (Oxford, 2020; online edn, Oxford Academic, 1 Mar. 2020), available from https://doi.org/10.1093/med/9780198713005.001.0001
4. ICD-11 for Mortality and Morbidity Statistics (who.int) available from https://icd.who.int/browse/2024-01/mms/en
5. Tyrer P, Mulder R, Kim YR, Crawford MJ. The Development of the ICD-11 Classification of Personality Disorders: An Amalgam of Science, Pragmatism, and Politics. *Annu Rev Clin Psychol* 2019; 15: 481-502. doi: 10.1146/annurev-clinpsy-050718-095736.
6. Skodol AE, Geier T, Grant BF, Hasin DS. Personality disorders and the persistence of anxiety disorders in a nationally representative sample. *Depress Anxiety* 2014; 31(9): 721-728. doi: 10.1002/da.22287.
7. Tyrer P, Seivewright H, Johnson T. The Nottingham Study of Neurotic Disorder: predictors of 12-year outcome of dysthymic, panic and generalized anxiety disorder. *Psychol Med* 2004; 34(8): 1385-1394. doi: 10.1017/s0033291704002569.

8. Middeldorp CM, Cath DC, Van Dyck R, Boomsma DI. The co-morbidity of anxiety and depression in the perspective of genetic epidemiology. A review of twin and family studies. *Psychol Med* 2005; 35(5): 611-624. doi: 10.1017/s003329170400412x.
9. Tyrer P, Tyrer H, Johnson T, Yang M. Thirty-year outcome of anxiety and depressive disorders and personality status: comprehensive evaluation of mixed symptoms and the general neurotic syndrome in the follow-up of a randomised controlled trial. *Psychol Med* 2021: 12:1-10. doi: 10.1017/S0033291721000878.
10. Hamilton M. A rating scale for depression. *J Neurol Neurosurg Psychiatry* 1960; 23(1): 56-62. doi: 10.1136/jnnp.23.1.56.
11. Hamilton M. *The Assessment of Anxiety States by Rating. 32 Br J Med Psychol* 50-55.1959
12. Weekers LC, Hutsebaut J, Kamphuis JH. The Level of Personality Functioning Scale-Brief Form 2.0: Update of a brief instrument for assessing level of personality functioning. *Personal Ment Health* 2019; 13(1): 3-14. doi: 10.1002/pmh.1434.
13. Weekers LC, Sellbom M, Hutsebaut J, Simonsen S, Bach B. Normative data for the LPFS-BF 2.0 derived from the Danish general population and relationship with psychosocial impairment. *Personal Ment Health* 2023; 17(2): 157-164. doi: 10.1002/pmh.1570.
14. Bach B, Brown TA, Mulder RT, Newton-Howes G, Simonsen E, Sellbom M. Development and initial evaluation of the ICD-11 personality disorder severity scale: PDS-ICD-11. *Personal Ment Health* 2021; 15(3): 223-236. doi: 10.1002/pmh.1510.
15. Bach B, Simonsen E, Kongerslev MT, Bo S, Hastrup LH, Simonsen S, Sellbom M. ICD-11 personality disorder features in the danish general population: Cut-offs and prevalence rates for severity levels. *Psychiatry Res* 2023; 328:115484. doi: 10.1016/j.psychres.2023.115484.
16. Olajide K, Munjiza J, Moran P, O'Connell L, Newton-Howes G, Bassett P, Akintomide G, Ng N, Tyrer P, Mulder R, Crawford MJ. Development and Psychometric Properties of the Standardized Assessment of Severity of Personality Disorder (SASPD). *J Pers Disord* 2018; 32(1): 44-56. doi: 10.1521/pedi_2017_31_285.
17. Oltmanns JR, Widiger TA. Evaluating the assessment of the ICD-11 personality disorder diagnostic system. *Psychol Assess* 2019; 31(5): 674-684. doi: 10.1037/pas0000693.
18. Bach B, Anderson JL. Patient-Reported ICD-11 Personality Disorder Severity and *DSM-5* Level of Personality Functioning. *J Pers Disord* 2020; 34(2): 231-249. doi: 10.1521/pedi_2018_32_393.
19. Friborg O, Martinsen EW, Martinussen M, Kaiser S, Overgård KT, Rosenvinge JH. Comorbidity of personality disorders in mood disorders: a meta-analytic review of 122 studies from 1988 to 2010. *J Affect Disord* 2014; 152-154: 1-11. doi: 10.1016/j.jad.2013.08.023.
20. Asp M, Lindqvist D, Fernström J, Ambrus L, Tuninger E, Reis M, Westrin Å. Recognition of personality disorder and anxiety disorder comorbidity in patients treated for depression in secondary psychiatric care. *PLoS One* 2020; 15(1): e0227364. doi: 10.1371/journal.pone.0227364.
21. Friborg O, Martinussen M, Kaiser S, Overgård KT, Rosenvinge JH. Comorbidity of personality disorders in anxiety disorders: a meta-analysis of 30 years of research. *J Affect Disord* 2013; 145(2): 143-155. doi: 10.1016/j.jad.2012.07.004.
22. Zimmerman M, Rothschild L, Chelminski I. The prevalence of DSM-IV personality disorders in psychiatric outpatients. *Am J Psychiatry* 2005; 162(10): 1911-1918. doi: 10.1176/appi.ajp.162.10.1911.

23. Tyrer P, Reed GM, Crawford MJ. Classification, assessment, prevalence, and effect of personality disorder. *Lancet* 2015; 385(9969): 717-726. doi: 10.1016/S0140-6736(14)61995-4.
24. Latas M, Milovanovic S. Personality disorders and anxiety disorders: what is the relationship? *Curr Opin Psychiatry* 2014; 27(1): 57-61. doi: 10.1097/YCO.0000000000000025.
25. Vittengl JR, Jarrett RB, Ro E, Clark LA. How can the DSM-5 alternative model of personality disorders advance understanding of depression? *J Affect Disord* 2023; 320: 254-262. doi: 10.1016/j.jad.2022.09.146.
26. di Giacomo E, Colmegna F, Biagi E, Zappa L, Caslini M, Dakanalis A, Clerici M; UnimibPsychiatricResearch-Group (Martina Tremolada,‡ Giulia Gamba,‡ Francesca Pescatore,‡ Rodolfo Pessina,‡ Valeria Placenti,∗ Jacopo Santambrogio,‡ Francesca Costantini‡). Anxiety and Depression: A Key to Understanding the Complete Expression of Personality Disorders. J Nerv Ment Dis. 2021;209(3):188-195. doi: 10.1097/NMD.0000000000001279. PMID: 33273394.
27. Mulder RT, Horwood LJ, Tyrer P. The borderline pattern descriptor in the International Classification of Diseases, 11th Revision: A redundant addition to classification. *Aust N Z J Psychiatry* 2020; 54(11): 1095-1100. doi: 10.1177/0004867420951608.
28. Clark LA, Nuzum H, Ro E. Manifestations of personality impairment severity: comorbidity, course/prognosis, psychosocial dysfunction, and 'borderline' personality features. *Curr Opin Psychol* 2018; 21: 117-121. doi: 10.1016/j.copsyc.2017.12.004.
29. Sharp C, Wright AG, Fowler JC, Frueh BC, Allen JG, Oldham J, Clark LA. The structure of personality pathology: Both general ('g') and specific ('s') factors? *J Abnorm Psychol* 2015; 124(2): 387-398. doi: 10.1037/abn0000033.
30. Sloan E, Hall K, Moulding R, Bryce S, Mildred H, Staiger PK. Emotion regulation as a transdiagnostic treatment construct across anxiety, depression, substance, eating and borderline personality disorders: A systematic review. *Clin Psychol Rev* 2017; 57: 141-163. doi: 10.1016/j.cpr.2017.09.002.
31. Paulus DJ, Vanwoerden S, Norton PJ, Sharp C. Emotion dysregulation, psychological inflexibility, and shame as explanatory factors between neuroticism and depression. *J Affect Disord* 2016; 190: 376-385. doi: 10.1016/j.jad.2015.10.014.