

## Are neurotic personality traits and neurotic symptoms intensity associated with suicidal thoughts reported by patients of a day hospital for neurotic disorders?

Jerzy A. Sobański, Katarzyna Cyranka, Paweł Rodziński\*,  
Katarzyna Klasa\*\*, Krzysztof Rutkowski, Edyta Dembińska,  
Michał Mielimąka, Łukasz Müldner-Nieckowski,  
Bogna Smiątek-Mazgaj

Department of Psychotherapy, Jagiellonian University Medical College  
acting Head of the Department: dr hab. n. med. Krzysztof Rutkowski

\* Department of Adult, Juvenile and Adolescent Psychiatry, University Hospital in Krakow  
Head: dr n. med. Maciej Pilecki

\*\* Department of Psychotherapy, University Hospital in Krakow  
Head: dr hab. n. med. Krzysztof Rutkowski

### Summary

**Aim.** Analysis of prevalence and intensity of suicidal thoughts and its associations with neurotic personality traits as well as neurotic symptoms intensity in patients participating in qualification for hospitalization in a day hospital for treatment of neurotic and behavioural disorders.

**Methods.** The results of Symptom Checklist KO"0", Neurotic Personality Questionnaire KON-2006 and Life Inventory of 1063 patients (739 women and 324 men) admitted to psychotherapy in a day hospital because of neurotic, behavioural and personality disorders.

**Results.** In the population of patients coming for treatment in the day hospital, the presence of suicidal ideations (SI) was common (reaching one-third of the respondents) and was regardless of the respondents' gender associated with significantly higher global symptom level (OWK), and significantly greater global neurotic personality disintegration (XKON), as well as significantly higher values of most of the neurotic personality inventory scales. None of the neurotic personality traits reduced the risk of suicidal ideation nor was associated with low SI arduousness.

**Conclusions.** Day hospital patients reporting SI are a subgroup burdened with more severe neurotic disorders and comorbid personality disorders. Thus, the persons reporting willingness to take one's own life in symptom questionnaires, although relatively frequently encountered, deserve special attention due to the greater severity of their symptoms.

**Key words:** personality, suicidal ideations, neurotic symptoms

## Introduction

Suicidal ideations (SI), as well as other manifestations of self-directed aggression are widely prevalent symptoms. Among general population (of US and France) the prevalence of SI within a year before the assessment according to large-group studies was estimated to be 4% (between 2.1% and 6.8%), the prevalence of planning suicide was estimated to be around 1.0% (0.1-2.8%), while risk of attempting suicide (AS) was approximately 0.5% [1, 2]. Occurrence of risk-posing behaviours such as psychoactive substance abuse, involvement into high-risk sexual relationships, both with and without presence of SI, are also related to increased risk of suicide which was determined in studies conducted on French general population [2] and in studies on British adolescents [3]. According to the latter studies encompassing a comparison of adolescents with a history of auto-aggressive behaviour who did not intend to take ones' own life during the last episode of such behaviour with adolescents who have never manifested auto-aggressive behaviour, it was noted that in the first group the frequencies of having SI and suicidal plans were significantly higher i.e. 37.6% vs. 7.8% and 8.7% vs. 0.7% respectively [3].

Among patients suffering from mental disorders who report SI, there is a large number of patients with anxiety disorders. This was demonstrated by Sareen et al.[4], who in a cross-sectional study of 7076 such individuals estimated OR=2.29 for SI (95% CI: 1.85-2.82) and OR=2.48 for suicidal attempts (SA – 95% CI: 1.70-3.62). The same researchers in longitudinal study of 4796 patients also estimated OR=2.32 for SI (95% CI: 1,31-4,11) and OR=3,64 for SA (95% CI: 1,70-7,83). Those findings led them to the conclusion that pre-existing anxiety disorder is an independent risk factor for subsequent onset of SI and SA, and that comorbid anxiety disorders amplify the risk of SA in patients with mood disorders. Similar results were provided by Thibodeau et al.[5] who analyzed data from two surveys (National Comorbidity Survey Replication – NCS-R and National Epidemiologic Survey on Alcohol and Related Conditions – NESARC). They concluded that each anxiety disorder is associated with lifetime risk of SI (NCS-R 95% CI: 2.62-4.87, NESARC 95% CI: 3.34-10.57) and of SA (NCS-R 95% CI: 3.57-6.64, NESARC 95% CI: 3.03-7.00). Other study by Chertrand et al. [6] suggested that anxiety disorders are associated with SA, and especially social phobia and generalized anxiety disorder appear to be associated with the more worrisome patterns of deliberate self-harm including multiple SA. Nepon et al. [7] by conducting a study of more than 34 thousand adults from general population also noted increased risk of SA in patients with anxiety disorders (OR=1.70, 95%CI: 1.40-2.08), especially panic disorder (OR=1.31, 95%CI: 1.06-1.61) and post-traumatic stress disorder (PTSD – OR=1.81, 95%CI: 1.45-2.26). The authors also noticed that comorbidity of personality disorders with panic disorder or with PTSD was associated with considerably increased risk of SA (OR=5.76; 95%CI: 4.58-7.25 and OR=6.90; 95%CI: 5.41-8.79 respectively). Among patients who often present with SI, patients with eating disorders are common [8, 9]. SA are observed in estimated 3-20% of female patients with anorexia nervosa and 25-35% female patients with bulimia nervosa [10]. Moreover, studies confirmed common clinical observations that patients with bor-

derline personality disorders and antisocial personality disorder frequently exhibit SI and are burdened with high risk of auto-aggressive behaviours [11-15]. Also, methods of SA were proved to differ depending on the type of personality disorders. In a study by Blasco-Fontecilla et al. [16] it was demonstrated that suicidal acts attempted by individuals with narcissistic personality disorder are characterized with higher lethality than SA by other patients. At the same time the researchers found that diagnoses of personality disorders of histrionic type, antisocial type and borderline type are not associated with lethality of SA.

As clinical experience shows, personality profile has great significance in assessment of SI and suicidal risk. According to Schaefer et al. [17] high level of anxiety and impulsivity may be important risk factors for SI. In a review by Brezo et al. [18] a conclusion was made that risk factors such as hopelessness, neuroticism, and extroversion hold the most promise in relation to risk screening across all three symptoms i.e. SI, SA and completed suicide. Blüml et al. [19] by conducting a research on 2555 individuals representative for German general population and using Big Five Inventory-10 concluded that neuroticism and openness to experience were associated with suicide risk only in females, while for males extraversion and conscientiousness were protective factors. Study by Sjöström et al. [20] indicated that low level of sense of coherence (assessed using Sense of Coherence Scale) is a risk factor for occurrence of another suicidal behaviour in patients who attempted suicide. In a study by Pompili et al. [21] it was observed that irritable temperament and social introversion were predictive factors for suicidal risk, while the dysthymic, cyclothymic and anxious temperament contributed significantly to the prediction of hopelessness. The authors also noted that patients at risk of suicide tend to use hysterical and schizoid defence mechanisms more often than others. Studies by Handley et al. [22] confirmed co-occurrence of SI with increased intensity of psychological distress (OR=1.30, 95%CI: 1.23–1.37) and neuroticism (OR=1.15, 95%CI: 1.04–1.27), as well as with lowered availability of social support (OR=0.80, 95%CI: 0.69–0.92). Study of adolescents treated in full-time psychiatric ward conducted by Gmitrowicz et al. [23] showed that committing acts of self-harm situates the patients within a group at risk of suicide regardless of their styles of stress-coping and level of their emotional intelligence. It has also been recognized that risk of attempting suicide by patients is associated with their style of attachment. According to Mandal and Zalewska [24, 25] who used Attachment Style Test on 35 female inpatients who attempted suicide within two years before the assessment (the group consisted of 45% of patients with depressive disorders, 21% of patients with personality disorders), women who attempted suicide were most frequently characterized by avoidant attachment style (63%), less frequently by anxious-ambivalent (25%) and secure attachment styles (11%).

The significance of encountering SI in psychiatric patients reaches beyond its usefulness for assessment of health – and life-threatening behaviours. Occurrence of SI may be understood as manifestation of complex constellation of intrapsychic factors which constitute the patient's personality, temperament and defence mechanisms. At the same time by its occurrence we are confronted with a message intended for all those engaged in the interaction. It is especially important in case of patients for whom

psychotherapy is the main form of treatment. Psychotherapeutic treatment involves necessity to interpret patients' behaviours, their symptoms and produced content – including such dramatic reports as having intent to take one's own life [26-29]. In clinical practice of psychotherapeutic day-time ward we are far too often confronted with such difficult situations requiring profound reflection. In such circumstances variety of co-patients' reactions and numerous dilemmas to be dealt with by therapists and supervisors, requiring adequate management [30], selection of psychotherapeutic interventions, as well as ethical and legal issues [31], can be observed.

### **Aim**

The aim of this study was to determine the differences in global severity of neurotic symptoms and in levels of neurotic personality disorders between groups of patients who reported SI and those who did not report SI.

### **Material and method**

Symptom Checklist KO"0" designed by J.W. Aleksandrowicz [32] was used as a source of information about presence and severity of symptoms. The checklist contained information concerning 135 symptoms experienced within the last week before examination. The global severity of symptoms was reflected by values of OWK coefficient. In order to determine presence of SI, we used patients' answers to the questions about "arduousness of willingness to take one's own life within the last week" (question 62 in KO "0"). The positive answer required from the patients to choose one of three Likert type options that enabled us to differentiate levels of severity of SI. The gradation included three levels of SI arduousness: (a) mild, (b) moderate, (c) severe. By summing up the positive answers to the above-mentioned question, we determined the general percentages of patient reporting SI.

Information about the severity of personality disorders that are typical for neurotic disorders ("neurotic personality disorders") was obtained using Neurotic Personality Questionnaire KON-2006 [33-36] which is also suitable for evaluation of effectiveness of psychotherapy [37-39].

Except for examining with above-mentioned questionnaires the qualification for the treatment included at least two psychiatric examinations, psychological examination and a set of other questionnaires. This enabled to exclude patients suffering from other disorders (e.g. affective disorders, psychotic disorders, exogenous disorders and pseudoneurotic disorders and severe somatic illnesses) which rendered participation in psychotherapy in the day hospital impossible [40].

The group was composed of 1063 individuals with diagnosis of neurotic, behavioural or personality disorder (Table 1 and 2). Mean age of 739 women, as well as 324 men was 30.

Table 1. **Global severity of symptoms (OWK), level of neurotic personality disintegration (XKON), and type of disorders (according to ICD-10).**

		Women	Men
Global severity of symptoms (OWK)	Mean score $\pm$ standard deviation	381.3 $\pm$ 154.5	338.9 $\pm$ 141.4
	Median	379	318
Level of neurotic personality disintegration (XKON)	Mean score $\pm$ standard deviation	36.8 $\pm$ 22.9	34.6 $\pm$ 22.6
	Median	36	34
Diagnosis	F34 Dysthymia <sup>1</sup>	4%	3%
	F40 Phobic anxiety disorders	10%	11%
	F41 Other anxiety disorders	27%	22%
	F42 Obsessive-compulsive disorder	3%	9%
	F43 Reaction to severe stress, and adjustment disorders	12%	8%
	F44 Dissociative disorders	3%	1%
	F45 Somatoform disorders	9%	15%
	F48 Neurasthenia	1%	2%
	F50 Eating disorders	7%	0%
	F60 Specific personality disorders	22%	23%
	Other <sup>1</sup>	2%	6%
No data	0.3%	0.3%	

<sup>1</sup> – comorbid with at least one diagnosis from the range of F40-F61

Table 2. **Sociodemographic characteristic of the studied group.**

		Women	Men
Age (years)	Mean age $\pm$ standard deviation	29.9 $\pm$ 8.9	29.6 $\pm$ 7.9
	Median	27.0	27.0
Education	No /primary education	4%	5%
	Secondary education (including academic students)	64%	58%
	Higher education	32%	37%
Occupation	Employed	42%	48%
	Not working	58%	52%
	Social benefit	2%	2%
	Unemployed	11%	10%
	Academic student	34%	29%

*table continued on the next page*

Marital status	Never married	61%	68%
	Married	30%	25%
	Divorced or separated	8%	6%
	Widow or widower	1%	1%

The data gathered during routine diagnostic procedures (between 2004 and 2008) were used with patients' permission, stored and processed anonymously with licensed software package STATISTICA PL. Comparisons between groups were conducted depending on distribution type (parametric or non-parametric) using tests for one or more unrelated variables, as well as using suitable post hoc tests.

## Results

Information about prevalence of SI among the studied group of the day hospital patients, for women and men separately are presented below in Table 3.

Table 3. **General prevalence of SI and of severe SI in women and men.**

		Women	Men
SI	Prevalence of severe SI	*8%	*3%
	General prevalence of SI	34%	34%

\*p<0.05

General prevalence of SI (of "willingness to take one's own life") proved to be similar in women and in men (34%). However prevalence of severe SI was (significantly) greater in women than in men (8% vs. 3%).

Table 4. **Differences in levels of neurotic personality disorders between patients with and without SI.**

	Women			Men		
	no SI	SI	p	no SI	SI	p
Global neurotic personality disintegration (XKON coefficient)	32.1±21.9	45.9±21.9	***	30.2±21.5	43.2±22.2	***
1. Feeling of being dependent on the environment	8.5±4.7	10.6±4.5	***	*7.8±4.4	*9.6±4.4	*
2. Asthenia	9.4±3.1	11.1±2.3	***	9.0±3.6	10.7±2.7	***
3. Negative self-esteem	5.1±3.3	7.6±3.3	***	3.9±2.9	6.6±3.6	***
4. Impulsiveness	7.5±4.0	9.4±3.9	***	*6.5±3.9	*7.8±3.7	*
5. Difficulties with decision making	7.4±2.7	7.6±2.9		7.1±2.7	7.2±2.7	
6. Sense of alienation	4.7±3.6	7.6±3.9	***	4.5±3.4	7.1±3.8	***
7. Demobilisation	11.3±4.6	13.2±4.3	***	10.0±4.6	12.5±4.2	***

*table continued on the next page*

8. Tendency to take risks	2.9±2.4	3.2±2.6		3.3±2.6	3.7±3.0	
9. Difficulties in emotional relations	6.0±2.7	6.4±2.9		6.8±2.7	7.2±2.6	
10. Lack of vitality	11.3±3.7	12.1±3.6	*	11.2±3.8	12.1±3.4	
11. Conviction of own resourcelessness in life	8.5±3.9	10.2±3.5	***	7.4±4.3	9.4±3.9	**
12. Sense of lack of control	4.4±3.0	6.3±3.1	***	3.8±2.9	5.7±3.2	***
13. Deficit in internal locus of control	8.2±4.1	10.5±4.1	***	7.2±4.2	9.4±4.3	***
14. Imagination, indulging in fiction	5.9±2.8	7.2±2.8	***	6.4±3.0	7.0±2.9	
15. Sense of guilt	6.6±3.0	8.5±2.3	***	6.1±2.9	7.7±2.6	***
16. Difficulties in interpersonal relation	5.5±2.8	7.0±2.8	***	5.7±2.8	6.8±2.7	**
17. Envy	3.7±2.8	5.1±2.9	***	4.0±2.9	5.1±2.9	**
18. Narcissistic attitude	2.2±2.1	3.2±2.7	***	3.1±2.8	4.1±3.0	*
19. Sense of being in danger	5.1±3.0	7.0±3.0	***	4.6±2.8	6.2±3.1	***
20. Exaltation	9.2±2.5	10.2±2.1	***	7.6±2.7	8.3±2.6	*
21. Irrationality	4.6±2.0	4.5±2.2		3.8±2.1	4.2±2.2	
22. Meticulousness	4.0±2.0	4.1±2.0		4.3±2.0	4.1±2.3	
23. Ponderings	7.7±1.9	8.4±1.5	***	7.1±2.2	7.8±1.9	**
24. Sense of being overloaded	4.9±2.0	5.1±2.0		4.7±2.0	5.0±2.1	

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

The results presented in table 4 show that values of XKON coefficient, as well as the majority (16 out of 24) scales of KON-2006 were significantly higher in cases of patients reporting SI. To large extent the results concerning women and men were similar.

Table 5. Differences in levels of neurotic personality disorders between patients without SI and with SI including gradation of its intensity.

	Women					Men				
	no SI	mild SI	moderate SI	severe SI	p main effect	no SI	mild SI	moderate SI	severe SI	p main effect
Global neurotic personality disintegration (XKON coefficient)	32.1±21.9  ①②③	42.1±22.7 ①④	44.9±21.8 ②	55.1±17.6 ③④	***	30.2±21.5 ①②	39.8±21.9 ①	50.3±19.1 ②	54.2±27.9	***
1. Feeling of being dependent on the environment	8.5±4.7 ①②	10.4±4.6 ①	10.1±4.4	11.5±4.3 ③	***	7.8±4.4 ①	9.0±4.6	11.1±3.4 ①	10.3±5.0	*

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2. Asthenia	9.4±3.1 ①②③	10.8±2.5 ①	11.2±2.2 ②	11.7±1.8 ③	***	9.0±3.6 ①②	10.3±2.9 ①③	12.1±1.2 ②③	10.4±3.7	***
3. Negative self-esteem	5.1±3.3 ①②③	6.8±3.5 ①④	7.8±3.2 ②	9.1±2.7 ③④	***	3.9±2.9 ①②	5.9±3.5 ①③	8.5±3.0 ②③	7.3±4.2	***
4. Impulsiveness	7.5±4.0 ①②③	8.6±4.0 ①④	10.0±4.0 ②	10.4±3.2 ③④	***	6.5±3.9 ①	7.4±3.7	8.2±3.6	10.1±2.7 ①	*
5. Difficulties with decision making	7.4±2.7	7.6±2.9	7.0±3.1	8.0±2.5	ns	7.1±2.7	7.0±2.8	7.4±2.6	8.5±1.9	ns
6. Sense of alienation	4.7±3.6 ①②③	6.6±4.1 ①④	8.0±3.5 ②	9.3±3.2 ③④	***	4.5±3.4 ①②	6.5±3.8 ①③	9.1±3.2 ②③	7.4±3.1	***
7. Demobilisation	11.3±4.6 ①②③	12.7±4.6 ①	13.0±4.0 ②	14.4±3.6 ③	***	10.0±4.6 ①②	11.9±4.2 ①	14.0±3.7 ②	14.0±4.7	***
8. Tendency to take risks	2.9±2.4	3.2±2.5	3.3±2.7	3.0±2.6	ns	3.3±2.6	3.8±3.1	3.4±2.9	3.3±2.4	ns
9. Difficulties in emotional relations	6.0±2.7	6.2±3.1	6.6±2.9	6.7±2.5	ns	6.8±2.7	7.2±2.4	7.0±2.8	8.1±2.8	ns
10. Lack of vitality	11.3±3.7 ①	11.9±3.7	11.9±3.7	12.9±3.2 ①	*	11.2±3.8	11.7±3.5	12.8±3.3	13.5±2.6	ns
11. Conviction of own resourcelessness in life	8.5±3.9 ①②	10.2±3.5 ①	9.6±3.6	10.9±3.4 ②	***	7.4±4.3 ①	8.8±3.9	10.9±3.2 ①	10.0±4.6	**
12. Sense of lack of control	4.4±3.0 ①②③	5.6±3.0 ①④	6.3±3.4 ②	7.6±2.7 ③④	***	3.8±2.9 ①②	5.5±3.1 ①	6.5±3.3 ②	5.6±3.3	***
13. Deficit in internal locus of control	8.2±4.1 ①②③	10.2±4.0 ①	10.2±4.2 ②	11.4±4.0 ③	***	7.2±4.2 ①	8.7±4.3 ②	11.3±3.0 ①②	10.3±6.0	***
14. Imagination, indulging in fiction	5.9±2.8 ①②	7.1±2.8 ①	6.9±2.9	7.6±2.9 ③	***	6.4±3.0	6.8±3.1	7.6±2.4	7.4±2.6	ns
15. Sense of guilt	6.6±3.0 ①②③	8.0±2.5 ①④	8.5±2.2 ②	9.3±1.8 ③④	***	6.1±2.9 ①②	7.3±2.7 ①	8.8±2.1 ②	8.4±2.9	***
16. Difficulties in interpersonal relation	5.5±2.8 ①②③	6.7±3.0 ①	7.3±2.4 ②	7.6±2.6 ③	***	5.7±2.8 ①	6.5±2.7	7.6±2.8 ①	7.1±1.6	*
17. Envy	3.7±2.8 ①②③	4.7±3.0 ①④	5.0±2.8 ②	5.9±2.6 ③④	***	4.0±2.9 ①②	4.7±2.9	5.8±2.6 ①	7.1±3.0 ②	**
18. Narcissistic attitude	2.2±2.1 ①②③	3.0±2.7 ①	3.2±2.7 ②	3.6±2.8 ③	***	3.1±2.8 ①	3.8±3.0	4.3±2.4	6.9±3.6 ①	*
19. Sense of being in danger	5.1±3.0 ①②③	6.4±3.0 ①④	7.1±3.0 ②	8.3±2.7 ③④	***	4.6±2.8 ①②	5.6±2.9 ①	7.5±3.2 ①	7.6±3.4	***
20. Exaltation	9.2±2.5 ①②③	10.1±2.1 ①	10.1±2.3 ②	10.7±1.8 ③	***	7.6±2.7	8.1±2.7	8.9±2.0	8.5±3.1	ns

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21. Irrationality	4.6±2.0	4.5±2.1	4.5±2.4	4.7±2.4	ns	3.8±2.1	4.3±2.3	4.0±2.2	3.6±1.9	ns
22. Meticulousness	4.0±2.0	3.9±1.9	3.9±2.1	4.6±1.8	ns	4.3±2.0	4.1±2.3	3.8±2.1	4.8±2.8	ns
23. Ponderings	7.7±1.9 ①②	8.3±1.7 ①	8.3±1.5	8.8±1.2 ②	***	7.1±2.2	7.7±2.0	8.1±1.3	7.6±2.1	*
24. Sense of being overloaded	4.9±2.0 ①	4.7±1.9 ②	5.2±2.0	5.9±1.9 ①②	**	4.7±2.0	4.8±2.2	5.4±1.6	5.5±2.1	ns

main effects' significance \*p<0.05. \*\*p<0.001. \*\*\*p<0.001, post hoc tests significance ①②③④p<0.05

**Table 6. Differences in global severity of neurotic symptoms between patients who reported SI and those who did not.**

	Women			Men			
	No SI	SI		No SI	SI	No SI	SI
Global severity of neurotic symptoms (OWK coefficient)	337.6±144.5	466.3±137.1	***	304.0±129.2	406.0±140.2	***	

Statistical significance: \*\*\*p<0.001

Regardless of the patients' gender the values of OWK coefficients measuring global severity of neurotic symptoms were significantly greater in patients reporting SI (Table 6).

**Table 7. Differences in global severity of neurotic symptoms between patients with SI and without SI including gradation of SI intensity.**

	Women					Men				
	no SI	mild SI	moderate SI	severe SI	p main effect	no SI	mild SI	moderate SI	severe SI	p main effect
Global severity of neurotic symptoms (OWK coefficient)	337.6±144.5 ①②③	433.8±132.7 ①④	460.0±117.2 ②	544.2±139.1 ③④	***	304.0±129.2 ①②③	377.7±136.4 ①④	474.4±138.0 ②④	467.3±95.2 ③	***

main effects significance \*\*\*p<0.001, post hoc tests significance ①②③④p<0.05

Reporting absence of SI (answer '0' in Symptoms Checklist KO "0") was related with the smallest values of OWK coefficient. The presence of mild SI (answer 'a') was related to significantly greater values of OWK coefficient than in case of no SI and at the same time with smaller values of OWK coefficient than in case of moderate or severe SI (answer 'b' and 'c') (Table 7).

It was also observed that the OWK coefficient measuring global severity of neurotic symptoms gradually increased in groups of patients segregated from those without

SI, through those with mild and moderate SI, up to those with severe SI, with slight disturbance of this tendency in men (Table 7). Nonetheless not all of the differences between the groups reached the level of statistical significance, thus the observation constituted only an account of trends.

### Discussion

The obtained results draw our attention to the fact that the percentage of patients reporting the occurrence of suicidal ideation starting psychotherapeutic treatment in a day hospital designed primarily for people suffering from neurotic disorders and some personality disorders is several times higher than the percentage provided by the studies on groups that were representative of general populations. In the studied group one-third of women and one-third of men reported the presence of suicidal ideation (Table 3). The main factor determining the specificity of the group of patients of a day hospital for neurotic disorders is the fact that after applying for treatment they underwent the procedure of qualification. It involves examinations conducted by experienced psychiatrists and psychologists aimed at selecting patients for group psychotherapy combined with elements of individual therapy that involves confrontations with symptoms and causes tension. Therefore, some individuals, whose disorders' profile was not suitable for the treatment, were not admitted. This applied mostly to patients with diagnoses of: organic CNS disorders, substance dependency, schizophrenic psychosis and affective disorders; as well as to patients who could not benefit from the treatment program due to their life conditions, general health, etc. Lastly, among individuals that were not qualified there were also patients with personality disorders with a significantly reduced ability to control auto-aggressive impulses or with a high risk of suicidal behaviours, that would render day-treatment impossible. As a result, the qualification process was passed only by 20-25% of patients initially examined by a psychiatrist [40]. Many of the criteria not qualifying patients for the treatment (including above-mentioned diagnoses, the high risk of suicide and lack of ability to control auto-aggressive impulses, as well as severe somatic diseases) are comorbid with suicidal ideation [41]. Consequently, it is highly probable that some specific group of patients with SI, among all of those who applied for treatment, were not included in this study. This leads to questions about the profile of this not qualified population in terms of symptoms and neurotic personality traits (or types of personality disorders in general) and about the differences between them and those patients who participated in this study.

Another factor that undoubtedly affects the results of this study is the specificity of the clinical tool – Symptom Checklist KO“0” [32] – which allowed us to determine the proportions of patients declaring SI (34% both in men and in women ) and proportions of severe SI (answer ‘c’ declared in the groups of women and men by 8% and 3% respectively – Table 3). For this purpose the patients' answers to the question no. 62 concerning the “level of arduousness of willingness to take one's own life” were used. It should be emphasized that the declaration of having arduous SI is certainly not equivalent to the disclosure of SI during psychiatric examination.

Due to methodology applied in this study a number of questions arise. What are the differences in terms of personality profile between the patients with SI in an interview and those who did not experience this symptom within the last seven days preceding the examination? Similarly, what factors leads to absence of or non-declaring SI during the week before the examination in patients who had SI in the past? Answering these questions requires separate studies.

Another important matter is the question about differences and similarities in personality profiles between the studied group of patients and those who declare the presence of other forms of auto-aggressive ideation or behaviours. Many studies, including those already mentioned in the introduction, points to the frequent co-occurrence of many different forms of auto-aggression (self-harm, risky sexual behaviour, psychoactive substance abuse, etc.) [1] and its associations with various personality traits [22, 42].

Without a doubt, there are some discrepancies between what patients call SI and what is referred to as SI (with or without tendencies to act upon them) by psychiatrists during the mental status examination. To illustrate the methodological difficulties this poses, we can use the example of the studies that have been conducted by Mundt et al [43] using the electronic version of Columbia – Suicide Severity Rating Scale. As a part of this study a group of patients who reported life-time occurrence of SI with tendencies to act upon them or suicidal behaviours in the past, was selected. The researchers found that the sensitivity and specificity of this method in determining the actual history of suicidal behaviour based on subjective patients' declarations were relatively low – 0.67 and 0.76 respectively.

A special type of psychopathology encountered in working with psychiatric patients that is important in the context of this study is the subtype of SI that is recognized by the patients as ego-syntonic or non-arduous. Frequently that is the case in patients with a deeply disturbed personality. Such situation may result from the use of SI as a mean of regulation of emotional tension that brings patients a subjective sense of relief and as such is viewed by them as less arduous or not arduous at all. Similar symptoms are observed in some case of patients suffering from severe depression that is accompanied by a tendency to uncritical regard SI as a way of coping with the misjudged life situation. In such cases patients tend to accept SI as thoughts that depict a prospect of authentic solution that brings relief. This way of experiencing SI may lead to lack of sense of its arduousness.

As a result of this study it was observed that the groups of men and women reporting arduous SI are characterized by higher values of global neurotic personality disintegration (XKON) in comparison to groups that are not reporting SI (Table 4). Moreover, by arranging groups of patients from those who did not declare SI, through those who report mild and moderate SI, and lastly those with severe SI, a systematic, although, not always statistically significant increase of the coefficients of the global neurotic personality disintegration (XKON) among both women and men is observed (Table 6). These results confirm the results of previous research on the link between the occurrence of SI and severity of neuroticism [17, 22]. However, it should be noted that in the cited studies neuroticism was defined differently and operationalized with different tools.

The results of this study also allow us to further specify some aspects of the previous findings. They show that none of the twenty-four scales that characterize neurotic personality is significantly lower in the groups of patients with SI in comparison with groups not reporting SI in both women and men (Table 4). This leads to the conclusion that none of the components of neurotic personality (reflected by the high values of KON scales) reduce the risk of SI (neither is a protective factor).

On the other hand, by taking into account the result of this study it is possible to conclude that most of the scales of KON-2006 questionnaire are characterized by statistically significantly higher values in the groups of patients reporting SI than in those without SI. This was observed regardless of respondents' gender in case of 16 (out of 24) scales of KON – 2006 and in women in case of 20 (out of 24) ) scales of KON – 2006 (Table 4).

Consistent results were produced by analysis of information drawn from Symptom Checklist KO“0” allowing to estimate global severity of neurotic symptoms. By comparison of groups of patients without SI and those with SI of different arduousness it was observed that the groups with severe SI – in both women and men – were characterized by significantly greater general severity of neurotic symptoms (reflected by higher values of OWK coefficients – Table 5). The results of this study correspond with the results provided by Sareen et al. [4] according to which having history of suffering from each subtype of anxiety disorders is an independent risk factor of subsequent occurrence of SI. Result of this study correspond also with result provided by Thibodeau et al. [5] according to which each anxiety disorder was associated with an increased life-time risk of suicidal attempts and SI. Moreover, the researchers gave an up-to-date account of SI prevalence observed in neurotic disorders.

### Conclusions

1. Among 1063 patients, both women and men undergoing qualification for therapy in day hospital for the treatment of neurotic and personality disorders between 2004 and 2008 SI were frequently observed (34% of both women and men reported having SI within a week before initial examination). Presence of SI in the patients was related with greater global severity of neurotic symptoms (OWK coefficient), as well as with higher level of global neurotic personality disintegration (XKON coefficient).
2. This picture was complemented by observations regarding values of majority of Neurotic Personality Questionnaire KON-2006 scales which were significantly greater in patients reporting SI. That was the case regardless of gender in 16 out of 24 scales.
3. The greater severity of SI was observed in women, the higher level of majority of neurotic personality traits was measured with Neurotic Personality Questionnaire KON-2006 scales – nonetheless the differences in values of the scales were below the threshold of statistical significance. Similar trend was observed in men, although in men with severe SI the intensity of majority of neurotic personality traits was slightly lower than in men with moderate SI. Thus it is impossible to conclude

explicitly on associations between neurotic personality traits and intensity of SI. It is necessary to limit the conclusions to those referring to associations between intensity of neurotic personality traits and mere presence of SI.

4. None of the components of neurotic personality was decreasing the risk of having SI (neither was associated with low level of arduousness of SI or its absence).
5. The patients who report in questionnaire willingness to take one's own life, despite the fact that they are quite common in the neurotic disorder treatment day hospital, they require special attention because of greater severity of disorders in terms of their symptoms as well as underlying personality disorders.

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Correspondence Address: Jerzy A. Sobański  
Department of Psychotherapy UJ CM  
31-138 Kraków, Lenartowicza Street 14

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