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Changes in neurotic personality profile associated with reduction of suicidal ideation in patients who underwent psychotherapy in the day hospital for the treatment of neurotic and behavioral disorders

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Summary

Aim. Analysis of associations between changes in neurotic personality profile and reduction of suicidal ideation (SI) – or lack of such reduction – defined as its elimination or reduction of its intensity in patients who underwent a course of intensive psychotherapy conducted in integrative approach with predominance of psychodynamic approach.

Material and method. Symptom Checklist KO"O", Neurotic Personality Questionnaire KON-2006 and Life Inventory completed by 461 women and 219 men treated due to neurotic, behavioral or personality disorders in a day hospital between 2005–2013. During the qualification for the therapy 134 women and 80 men reported SI, of whom 84.3% and 77.5% respectively improved.

Results. Patients who improved in terms of SI obtained significantly greater reduction of *global neurotic personality disintegration* (neuroticism) than others ($p<0.0005$ in women and $p=0.015$ in men). Associations were found between improvement in terms of SI and greater reduction of many neurotic personality traits ($p<0.05$) in both genders: *Negative self-esteem, Impulsiveness, Sense of alienation, Demobilization, Difficulties in emotional relations, Lack of vitality, Sense of lack of control, Sense of guilt, Difficulties in interpersonal relations, Sense of being in danger, Exaltation, Ponderings*; and only in women: *Feeling of being dependent on the Environment, Asthenia, Difficulties with decision making, Conviction of own resourcelessness in life, Deficit in internal locus of control* and *Imagination. indulging in fiction.*

Conclusions. The results confirm effectiveness of intensive psychotherapy as a treatment method that leads to comprehensive improvement encompassing reduction of neurotic

personality disorders (neuroticism) and of majority of neurotic personality traits, as well as SI reduction. The revealed associations weigh in favor of hypothesis on neuroticism as SI-predisposing factor in patients with neurotic, behavioral and personality disorders.

Key words: suicidal ideation, neurotic personality, psychotherapy

Introduction

It is widely recognized that neuroticism plays an important role in symptom production in patients with neurotic, behavioral and personality disorders [1–7]. However, medical literature provides various definitions of neuroticism. Most commonly it is accepted that this broad term refers to relatively stable tendency to react rigidly to situations that overburden patient's coping skills (e.g. due to threats, frustrations or losses) with "negative" emotions such as anxiety, anger, sense of guilt, shame, alienation, helplessness or sadness [3, 8–11]. In order to differentiate between norm and psychopathology – in this respect – other attributes of those reactions are taken into account such as degree of its disfunctionality or the threshold of individual vulnerability to stresses. It is also widely accepted that those difficulties usually affect an area of patients' interpersonal relationships. Another term – closely associated with neuroticism or even synonymous with it in cases of the patients studied here – used for describing dysfunctional components of personality which partake in producing functional symptoms is neurotic personality disorder [3, 9]. Consequently, neuroticism has significant influence on patients' lives, its quality and perceived level of distress [12, 13].

Psychotherapeutic treatment has crucial importance for this group of patients. Psychotherapy has been proved to produce improvement both in terms of neurotic symptoms and level of neuroticism [14–16]. Present medical knowledge offers abundance of views on mechanisms of those changes – depending on psychotherapeutic approach and applied methods [3–5]. Nonetheless, this area of research is still rich in questions requiring empirical verification.

Psychotherapy is also recognized as an important element of treatment in patients with neurotic, behavioral and personality disorders who struggle with suicidal ideation (SI) [17–19]. In psychotherapeutic day hospital SI (defined as willingness to take one's own life) is initially reported by 1/3 of patients. Declaration of SI is a meaningful information in many respects: valuable for estimation of risk of auto-aggressive and suicidal behaviors, evaluation of global level of patients' distress, and signalizing significantly increased level of neuroticism [20–24]. Despite that, empirical studies focused on the influence of psychotherapy on SI are rare and frequently only target patients with unipolar depression [25–31]. Consequently, the questions about mechanisms and factors contributing to SI reduction observed during psychotherapy in other groups of patients remain open, as well as the questions about range of the improvement brought in those cases by psychotherapeutic treatment.

Aim

Analysis of associations between changes in neurotic personality profile and SI reduction – i.e. its elimination or reduction of its intensity – or lack of SI reduction in patients with neurotic, behavioral and personality disorders who underwent a course of intensive psychotherapy conducted in integrative approach with predominance of psychodynamic approach in a day hospital.

Material and method

As a source of information concerning SI (defined as willingness to take one's own life) Symptoms Checklist KO"O" [32, 33] was used – the tool that allows to measure intensity of symptoms which are observed in course of neurotic disorders. The questionnaires were completed by patients at the stage of qualification for the treatment [34] and for the second time within the last few days of the hospitalization. Evaluation of SI prevalence and intensity was based on patients' answers to the question about "arduousness of willingness to take one's own life within the last seven days" (question no. 62. in KO"O"). The questionnaire included four optional answers: (0) the negative one and the positive answers that required to note the level of arduousness of SI: (a) mild, (b) moderate or (c) severe.

Socio-demographic characteristics of the studied population

The studied group was composed of 461 women and 219 men who were treated in the Day Hospital for the Treatment of Neurotic and Behavioral Disorders of the University Hospital in Krakow between 2005 and 2013. Basic socio-demographic data were drawn from Life Inventory completed by patients at the stage of qualification for the treatment. The inventory included questions about patients' gender and age, marital status, education and source of income. Mean age of women was 29.9 ± 8 years, and of men 30.4 ± 7 years. The majority of patients had not been married – 63% of women and 64% of men. Married patients constituted 32% of both women and men. Approximately 1/3 of patients were office workers – 34% of women and 33% of men. Students and patients supported by families constituted 29% of women and 23% of men. Both 13% of women and men were unemployed. Large portions of patients were university graduates and university undergraduates: 45% and 16% respectively in women, 47% and 15% in men. Quite large portions of the studied groups were composed of high school graduates – 24% of women and 24% of men [26].

Diagnosis and the course of the treatment

Qualification for the therapy in the psychotherapeutic day hospital included, except for the above-mentioned questionnaires, a set of other questionnaires, at least two psychiatric examinations, and psychological examination. The procedure allowed for exclusion of patients with high risk of suicide, as well as those suffering from other

psychiatric disorders (e.g. affective disorders, psychotic disorders, exogenous disorders and pseudoneurotic disorders, and severe somatic illnesses) in which cases the treatment in the day hospital would be counter-indicated [34–40]. The qualification consisted of a set of ambulatory visits lasting on average 2–3 weeks. After qualification patients started therapy on average within 4–12 weeks.

Only patients undergoing the treatment for the first time were included in the study. The studied group was composed of patients with diagnoses from the ICD-10 spectrum of F40–F69, including patients diagnosed with personality disorders comorbid with disorders belonging to F4 or F5 groups. Detailed characteristics of the studied population including proportions of particular ICD-10 diagnoses and socio-demographic data were included in separate publications belonging to the same research project [26, 37].

Preplanned duration of the course of the therapy was 12 weeks. During the treatment patients participated in intensive everyday open-group psychotherapy including usually 8–10 patients and 10–15 group sessions per week, which were combined with one session of individual therapy per week. The psychotherapy was conducted in integrative approach with predominance of psychodynamic approach with elements of cognitive and behavioral therapy. The course of psychotherapy strived for widening patients' insight in their defense mechanisms, interpersonal processes occurring during therapy and functions of reported symptoms. Important elements of treatment were: work with resistance and transference, strengthening ego and autonomy of patients, correcting dysfunctional cognitive schemas and to enable patients to experience corrective relationships and experiences [3, 14, 15, 34, 41].

Minority of patients was simultaneously using psychopharmacotherapy which was gradually reduced accordingly to patients' mental condition in order to gain access to patients' experiences. According to separate, yet unpublished, study by A. Murzyn conducted on the group of 169 individuals treated in the same day hospital between 2008 and 2011, the percentage of patients who used antidepressants and anxiolytic drugs was 3%.

In case of the studied population, the total time span between the beginning of the qualification and the discharge from the day hospital was estimated to be 137.1 ± 30.3 days in women and 132.4 ± 30.5 days in men.

Subgroups of patients with different changes in terms of SI

Among women the prevalence of SI was 29.1% (95% CI: 25.1%–33.4%) at the stage of qualification for the treatment, while at the end it was 10.2% (95% CI: 7.8%–13.3%). Among men the prevalence of SI was initially 36.5% (95% CI: 30.4%–43.1%), and at the end it was 13.7% (95% CI: 9.8%–18.9%). Proportion of patients who initially did not report SI, but reported it at the end of the therapy were 3.5% (95% CI: 2.2%–5.6%) in women and 1.4% (95% CI: 0.5%–4.0%) in men.

Among women who initially reported SI in KO"O" improvement (defined as its elimination or reduction of its intensity) was observed in 84.3%. At the same time increase in SI intensity was observed only in 5.2%. Among men who initially reported SI, improvement was observed in 77.5%. On the other hand, percentage of men who

suffered increase of SI intensity was observed was 3.8%. Moreover, in majority of the patients the improvement was synonymous with elimination of SI. In the subgroups in which SI was initially reported, its elimination was observed in 76.9% of women and in 66.2% of men (Table 1).

Table 1. **Changes in terms of SI in patients who reported it during the qualification (n = 214) [26, 37]**

	Women (n = 134)			Men (n = 80)			* Gender differences	
	Number	Percentage	95% CI	Number	Percentage	95% CI	Chi^2	p
Improvement in terms of SI i.e. SI reduction (its elimination or reduction of its intensity)	113	84.3%	77.2%–89.5%	62	77.5%	67.2%–85.2%	1.57	ns
Elimination of SI	103	76.9%	69.0%–83.2%	53	66.2%	55.4%–75.5%	2.86	ns
Reduction of SI intensity	10	7.5%	4.1%–13.2%	9	11.3%	6.0%–20.8%	0.89	ns
No changes in SI intensity	14	10.4%	6.4%–16.8%	15	18.8%	11.7%–28.7%	2.95	ns
Increase of SI intensity	7	5.2%	2.6%–10.4%	3	3.8%	1.4%–10.4%	0.24	ns
No improvement in terms of SI (no changes or increase in SI intensity)	21	15.7%	10.5%–22.8%	18	22.5%	14.8%–32.8%	1.57	ns

ns – gender differences were not statistically significant ($p > 0.05$); * – in order to determine if there were significant differences in results concerning SI between women and men Pearson's chi-squared test was used.

Analysis of associations between improvement in terms of SI and changes in patients' neurotic personality profile

In order to measure changes in patients' personality traits which occurred between their qualification for the treatment and the final examination the Neurotic Personality Questionnaire KON-2006 was used. This tool allows to estimate range and intensity of personality dysfunctions which are associated with emergence and persistence of neurotic disorders. Estimations conducted with the questionnaire are described by global neurotic personality disintegration scale, which allows for comprehensive evaluation of the degree of personality disorders, and by 24 subscales which allow for evaluation of particular dysfunctional aspects of personality. This tool is also applied in order to

evaluate effectiveness of psychotherapy [9, 42–44]. It is also suitable for evaluation of effectiveness of psychotherapy [45–47].

Next, differences between initial values of each KON-2006 scale and final values were calculated. Then, a comparison of the differences between patients who improved in terms of SI and those who did not was made separately for women and men.

In the statistical analysis Student's t-test for independent variables of natural distribution was used. For calculations licensed software package STATISTICA PL was used. The information obtained in course of above-mentioned diagnostics was used with patients' permission, and then stored and processed anonymously.

Results

It was found that reduction of global neurotic personality disintegration (neuroticism) was significantly greater in patients who improved in terms of SI than in those who showed no such improvement – that was the case in both genders (Table 2 and 3).

Further analysis showed that also a large portion of neurotic personality traits was reduced to greater extent in patients who improved in terms of SI, than in patients without such improvement. This was observed in cases of the following neurotic personality traits: Negative self-esteem, Impulsiveness, Sense of alienation, Demobilization, Difficulties in emotional relations, Lack of vitality, Sense of lack of control, Sense of guilt, Difficulties in interpersonal relations, Sense of being in danger, Exaltation, Ponderings; and only in women: Feeling of being dependent on the Environment, Asthenia, Difficulties with decision making, Conviction of own resourcelessness in life, Deficit in internal locus of control and Imagination, indulging fiction (Table 2 and 3).

Table 2. **The comparison of changes in the Neurotic Personality Questionnaire KON-2006 scales (which occurred from the qualification for the treatment until the end of the therapy) between women who improved in terms of SI and those women who did not (n = 134)**

KON-2006 scales	Mean changes of scales' values ± std. dev.		Student's t-test				
	[a] No SI improvement (n = 21)	[a] SI improvement (n = 113)	[b] Difference	95% CI		t	p
Global neurotic personality disintegration (XKON coefficient)	-5.72 ± 22	-24.99 ± 22	-19.27	-29.69	-8.85	-3.659	0.000
1. Feeling of being dependent on the environment	-0.38 ± 3.7	-3.31 ± 4.3	-2.93	-4.93	-0.93	-2.899	0.004
2. Asthenia	0.00 ± 2.5	-3.83 ± 3.9	-3.83	-5.57	-2.09	-4.352	0.000
3. Negative self-esteem	-0.29 ± 3.8	-4.15 ± 3.8	-3.86	-5.66	-2.07	-4.252	0.000
4. Impulsiveness	-0.67 ± 3.9	-2.81 ± 4.0	-2.14	-4.00	-0.27	-2.269	0.025
5. Difficulties with decision making	0.00 ± 2.1	-1.74 ± 2.7	-1.74	-2.96	-0.53	-2.839	0.005
6. Sense of alienation	0.00 ± 4.1	-3.84 ± 3.7	-3.84	-5.61	-2.07	-4.300	0.000

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7. Demobilization	-0.57 ± 3.8	-4.87 ± 4.4	-4.30	-6.32	-2.27	-4.199	0.000
8. Tendency to take risks	0.33 ± 3.2	1.35 ± 2.3	1.02	-0.12	2.16	1.773	0.079
9. Difficulties in emotional relations	0.33 ± 2.9	-1.66 ± 2.5	-2.00	-3.20	-0.80	-3.297	0.001
10. Lack of vitality	-0.43 ± 3.8	-3.65 ± 3.7	-3.23	-4.96	-1.49	-3.672	0.000
11. Conviction of own resourcelessness in life	0.19 ± 3.7	-3.80 ± 3.8	-3.99	-5.77	-2.20	-4.416	0.000
12. Sense of lack of control	-0.81 ± 3.2	-3.35 ± 3.1	-2.54	-4.02	-1.07	-3.403	0.001
13. Deficit in internal locus of control	-0.24 ± 3.4	-3.50 ± 4.1	-3.26	-5.14	-1.38	-3.432	0.001
14. Imagination, indulging in fiction	-0.05 ± 2.2	-1.69 ± 2.9	-1.64	-2.95	-0.33	-2.478	0.014
15. Sense of guilt	0.38 ± 2.8	-2.82 ± 3.1	-3.20	-4.65	-1.76	-4.382	0.000
16. Difficulties in interpersonal relations	0.00 ± 3.0	-1.97 ± 2.4	-1.97	-3.17	-0.78	-3.275	0.001
17. Envy	-0.67 ± 3.1	-1.83 ± 3.1	-1.17	-2.63	0.30	-1.578	0.117
18. Narcissistic attitude	-0.24 ± 3.1	-0.56 ± 2.3	-0.32	-1.46	0.82	-0.552	0.582
19. Sense of being in danger	-0.71 ± 3.6	-3.06 ± 3.1	-2.35	-3.85	-0.85	-3.097	0.002
20. Exaltation	-0.38 ± 2.7	-2.38 ± 2.8	-2.00	-3.30	-0.70	-3.043	0.003
21. Irrationality	-0.76 ± 1.9	-0.75 ± 2.0	0.01	-0.91	0.93	0.021	0.983
22. Meticulousness	-1.10 ± 2.1	-1.05 ± 1.8	0.04	-0.83	0.92	0.095	0.924
23. Ponderings	0.00 ± 2.1	-1.77 ± 2.1	-1.77	-2.77	-0.77	-3.517	0.001
24. Sense of being overloaded	-0.90 ± 2.1	-0.90 ± 2.0	0.00	-0.95	0.95	0.004	0.997

[a] – negative values signify reduction of traits' intensity which occurred from the qualification for the treatment until the end of the therapy, while positive values signify increase of traits' intensity throughout the same period; [b] – the results are equal to the differences between mean changes of personality traits that were compared with Student's t-test i.e. equal to the differences between changes observed in those who improved in terms of SI and changes observed in those without such improvement;

Table 3.The **comparison of changes in the Neurotic Personality Questionnaire KON-2006 scales (which occurred from the qualification for the treatment until the end of the therapy) between men who improved in terms of SI and those men who did not (n = 80)**

KON-2006 scales	Mean changes of scales' values ± std. dev.		Student's t-test				
	[a] No SI improvement (n = 18)	[a] SI improvement (n = 62)	[b] Difference	95% CI		t	p
Global neurotic personality disintegration (XKON coefficient)	-10.82 ± 20.0	-27.32 ± 26.0	-16.51	-29.75	-3.26	-2.481	0.015

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1. Feeling of being dependent on the environment	-1.61 ± 3.4	-3.66 ± 5.4	-2.05	-4.74	0.64	-1.515	0.134
2. Asthenia	-2.11 ± 3.1	-3.34 ± 4.4	-1.23	-3.43	0.98	-1.109	0.271
3. Negative self-esteem	-0.61 ± 3.5	-4.24 ± 3.6	-3.63	-5.56	-1.70	-3.743	0.000
4. Impulsiveness	-0.89 ± 3.0	-2.76 ± 3.3	-1.87	-3.60	-0.14	-2.149	0.035
5. Difficulties with decision making	-1.00 ± 2.5	-1.76 ± 3.2	-0.76	-2.38	0.86	-0.931	0.355
6. Sense of alienation	-0.94 ± 4.9	-4.44 ± 4.1	-3.49	-5.80	-1.18	-3.014	0.003
7. Demobilization	-1.17 ± 4.0	-4.79 ± 5.5	-3.62	-6.40	-0.85	-2.600	0.011
8. Tendency to take risks	0.94 ± 2.2	1.63 ± 2.8	0.68	-0.76	2.13	0.943	0.349
9. Difficulties in emotional relations	-0.78 ± 2.3	-2.32 ± 2.8	-1.54	-2.99	-0.10	-2.122	0.037
10. Lack of vitality	-0.94 ± 3.8	-3.94 ± 4.6	-2.99	-5.36	-0.63	-2.519	0.014
11. Conviction of own resourcelessness in life	-1.94 ± 3.2	-3.69 ± 4.8	-1.75	-4.15	0.65	-1.451	0.151
12. Sense of lack of control	-1.22 ± 2.9	-3.24 ± 3.4	-2.02	-3.79	-0.25	-2.271	0.026
13. Deficit in internal locus of control	-1.17 ± 4.0	-3.44 ± 4.7	-2.27	-4.71	0.17	-1.849	0.068
14. Imagination, indulging in fiction	-0.72 ± 3.1	-1.82 ± 3.6	-1.10	-2.97	0.77	-1.172	0.245
15. Sense of guilt	-1.22 ± 3.2	-3.39 ± 3.4	-2.16	-3.95	-0.38	-2.419	0.018
16. Difficulties in interpersonal relations	-0.22 ± 3.2	-2.29 ± 3.2	-2.07	-3.76	-0.38	-2.433	0.017
17. Envy	-0.89 ± 3.3	-2.53 ± 3.3	-1.64	-3.39	0.11	-1.869	0.065
18. Narcissistic attitude	-0.78 ± 2.6	-0.97 ± 2.4	-0.19	-1.49	1.11	-0.291	0.772
19. Sense of being in danger	-0.72 ± 3.4	-3.39 ± 3.4	-2.66	-4.49	-0.84	-2.904	0.005
20. Exaltation	-0.28 ± 2.8	-2.71 ± 3.1	-2.43	-4.05	-0.81	-2.985	0.004
21. Irrationality	-0.11 ± 1.4	-0.92 ± 2.0	-0.81	-1.80	0.18	-1.621	0.109
22. Meticulousness	-1.06 ± 1.9	-1.50 ± 2.1	-0.44	-1.53	0.64	-0.816	0.417
23. Ponderings	-0.72 ± 2.0	-2.15 ± 2.3	-1.42	-2.60	-0.25	-2.416	0.018
24. Sense of being overloaded	-1.39 ± 2.4	-0.68 ± 2.0	0.71	-0.40	1.82	1.273	-.207

[a] – negative values signify reduction of traits' intensity which occurred from the qualification for the treatment until the end of the therapy, while positive values signify increase of traits' intensity throughout the same period; [b] – the results are equal to the differences between mean changes of personality traits that were compared with Student's t-test i.e. equal to the differences between changes observed in those who improved in terms of SI and changes observed in those without such improvement;

Discussion

The produced results – regarding changes of various components of neurotic personality that were associated with SI reduction which occurred after participating in 12–week course of intensive psychotherapy – allow to construct many different hypotheses. Due to limited size of this publication it is possible to present here only a selected part of those hypotheses.

A result of key significance is a finding of clear associations in both genders between SI reduction and reduction of global neurotic personality disorganization (X-KON coefficient – Table 2 and 3). The level of the personality disorganization is equal to weighted sum of values calculated with the questionnaire key based on all of 24 subscales included in KON-2006. According to questionnaire's authors it measures an extent and intensity of personality dysfunctions associated with emergence and persistence of neurotic disorders [9, 42, 43]. Consequently, it is reasonable to assume that global neurotic personality disorganization to a large extent corresponds (or is synonymous) with neuroticism. The above-mentioned definition and the presented results are consistent with results of separate part of the research project, which aimed at studying exactly the same group of patients. In this part of the project another tool was used for measuring intensity of symptoms that are typical for neurotic disorders – Symptoms Checklist KO"O" was used [32, 33]. This led to a finding that reduction of global intensity of neurotic symptoms was significantly greater in patients who improved in terms of SI, than in those who did not – that was the case in both genders ($p < 0.0005$ both in women and men) [48].

Further analyses showed that the found co-occurrence of the beneficial changes suited to healthcare needs of the patients with SI. One of those analyses was conducted on the same group of 680 patients. It demonstrated significant differences between patients who did not report SI before the treatment and those who did report SI (the latter group consisted of patients who improved in terms of SI until the end of the therapy and of those who did not). The initial global neurotic personality disorganization was greater in patients with SI than in others (in women $p < 0.001$ in Student's t-test; X-KON coefficients: 43.5 ± 22 vs. 31.5 ± 20; while in men $p < 0.001$, X-KON coefficients: 51.6 ± 23 vs. 30.3 ± 22 – table 4; at the same time it is worth emphasizing that X-KON value typical for patients is above 18 and the value typical for healthy population is below 8; the values between 8 and 18 should be regarded as "unspecific" [9, 42–44]). Similar study of 739 women and 324 men before the treatment in the same psychotherapeutic day hospital between 2004 and 2008 also showed that there was an association between SI and greater level of global neurotic personality disorganization ($p < 0.001$ both in women and men) [24]. In the same study it was found that patients, who initially reported SI, were burdened with greater intensity of neurotic symptoms than others ($p < 0.001$ both in women and men – symptom intensity was measured also with Symptom Checklist KO"O" [32, 33]). The above-mentioned results regarding patients' condition before the psychotherapeutic treatment weigh in favor of associations between SI and high level of neuroticism (global neurotic personality disorganization). This corresponds with reports of other researchers who used different

tool for evaluation of (differently defined) neuroticism e.g. The Great Five Model by Costa and McCrae (NEO PI-R and NEO-FFI personality inventories) [49–52], as well as Eysenck Personality Questionnaire – Revised (EPQ-R) [53, 54].

The findings of associations between SI reduction and reduction of neuroticism presented in this study appear to constitute valuable supplementation and expansion of previously conducted research. Taking all those results into account weigh in favor of hypothesis that high level of neuroticism (or global neurotic personality disorganization) in this group of patients participate in emergence and persistence of SI (defined as willingness to take one's own life present within a week before an examination and reported by the patient). The results also indicate that intensive psychotherapy conducted in integrative approach with predominance of psychodynamic approach was in those cases a helpful method of treatment which led both to reduction of neuroticism [14, 15] and SI reduction. It is reasonable to assume that the demonstrated reduction of neuroticism (which is one of main aims of the applied psychotherapy) belongs to one of the factors that lead to the observed improvement in terms of SI. Moreover, in a view of report on associations between neuroticism, SI and other manifestations of auto-aggression [54–57], arise questions about potential influence of the applied therapy on the risks of suicidal behavior, self-harm, tendencies to expose oneself to life- or health-threatening situations, as well as about permanence of effects of the therapy.

More detailed analysis allowed to select the neurotic personality components that were clearly associated with SI – the reduction of SI was associated with greater reduction of the following personality components (level of statistical significance was $p < 0.05$ or lower – Tables 2–4): Negative self-esteem (describing self-perception as unattractive, worthless person, dissatisfied with her/himself), Impulsiveness (describing the subject's perception of self as a person easily out-bursting, quarrelsome, irritable, uneasy for others, physically aggressive, and not accepting those behaviors), Sense of alienation (describing the subject's perception of him/herself as a person who is alienated, deprived of social support, not understood, treated with disrespect, being not comprehensible), Demobilization (describing the subject's experiencing of loss of hope and decrease of life dynamics, being afraid of new challenges and situations, feeling of tiredness, dissatisfaction with him/herself), Difficulties in emotional relations (describing feeling of difficulties in relations with others and distrust towards the environment connected to it), Lack of vitality (describing lack of life dynamics and awareness of that dysfunction), Sense of lack of control (describing the subject's perception of him/herself as a person depending on circumstances, "the powers above", accidental events, and other people, and suffering from various losses as a consequence), Sense of guilt (describes the tendency of the subject to experience guilt, worry, blaming him/herself about his/her own behaviors and features), Difficulties in interpersonal relations (describes both difficulties in relations with the environment, as well as the subject's perception of him/herself as a person not coping adequately when contacting others), Sense of being in danger (describing the subject's distrust towards others, foreseeing failures, resignation of own goals, perception of him/herself as a person not enough resistant, not understood, being abused by the environment), Exaltation (describing the subject's self-perception as a very sensitive person, fragile, emotional, with variable moods, and at the same time seeking

for support), Ponderings (describing a tendency of the subject to recollecting, pondering over him/herself and his/her own actions, uncertainty and susceptibility); as well as only in women: Feeling of being dependent on the environment (describing the subject's tendency to perceive herself as a dependent person, subordinated to others, compliant, unable to refuse, conditioning her opinions and actions to others, and at the same time disapproving those aspects of herself), Asthenia (describing the subject as a person with low dynamics, perceiving her own psychic weakness, dissatisfied with life), Difficulties with decision making (describing the subject's perception of herself as having difficulties with decision making, tendency to hesitate, give a matter careful considerations, deliberations, avoiding having own initiative), Conviction of own resourcelessness in life (describing the subject's perception of herself as a person who is unstable, resourceless, not oriented on achieving her goals, easily disorganized and withdrawing in a situation of increased difficulties), Deficit in internal locus of control (describing the subject's perception of herself as a person not driven by her own aspirations and decisions, unable to have own initiative and steer her life on her own), Imagination, indulging fiction (describing tendency of the subject to give play to her imaginations, especially grandiose ones, need to gain admiration and being liked by others [9, 42, 43]).

Importance of above-mentioned neurotic personality components for SI is being emphasized by results of another, yet unpublished, analysis of this group of patients. It showed that initially high level of all above-mentioned neurotic personality components was associated with initial presence of SI (level of statistical significance was $p < 0.05$ or lower – Table 4). Together, the results suggest that the listed neurotic personality components may be the factors that partake in emergence of SI and its persistence, while reduction of those personality components in course of psychotherapy may contribute to improvement in terms of SI.

Another analysis belonging to the same research project revealed that initial level of three of neurotic personality components (out of 24 measured with KON-2006) were significant prognostic factors for improvement in terms of SI – Impulsiveness ($p = 0.038$) and Tendency to take risks ($p = 0.002$) high levels of which were associated with lower than average chances for improvement in terms of SI, and Envy ($p = 0.041$) high level of which was associated withnhigher than average chances for reducing SI (those result were discussed in detail in separate publication [58] – Table 4).

Table 4. **Juxtaposition of results concerning different associations between SI and intensity of neurotic personality disorders and its components. All the results refer to the same group of 461 women and 219 men, and a subgroup of 134 women and 80 men who initially reported SI and underwent a course of intensive psychotherapy, belonging to it**

	Personality factors initially high level of which was associated with presence of SI [a]		Personality factors which in course of the therapy were reduced to greater extent in patients with SI reduction than in those without it [b]		Personality factors initially high level of which was significantly prognostic for lack of improvement in terms of SI [58]	
	Women	Men	Women	Men	Women	Men
Global neurotic personality disintegration (X-KON coefficient)	***	***	***	*	ns	ns

table continued on the next page

1. Feeling of being dependent on the environment	**	***	**	ns	ns	ns
2. Asthenia	***	***	***	ns	ns	ns
3. Negative self-esteem	***	***	***	***	ns	ns
4. Impulsiveness	**	***	*	*	*	ns
5. Difficulties with decision making	*	ns	**	ns	ns	ns
6. Sense of alienation	***	***	***	**	ns	ns
7. Demobilization	***	***	***	*	ns	ns
8. Tendency to take risks	ns	ns	ns	ns	**	ns
9. Difficulties in emotional relations	**	*	***	*	ns	ns
10. Lack of vitality	***	***	***	*	ns	ns
11. Conviction of own resourcelessness in life	***	***	***	ns	ns	ns
12. Sense of lack of control	***	***	***	*	ns	ns
13. Deficit in internal locus of control	***	***	***	ns	ns	ns
14. Imagination, indulging in fiction	**	***	*	ns	ns	ns
15. Sense of guilt	***	***	***	*	ns	ns
16. Difficulties in interpersonal relations	***	***	***	*	ns	ns
17. Envy	***	***	ns	ns	ns	!
18. Narcissistic attitude	**	**	ns	ns	ns	ns
19. Sense of being in danger	***	***	**	**	ns	ns
20. Exaltation	***	***	**	**	ns	ns
21. Irrationality	ns	ns	ns	ns	ns	ns
22. Meticulousness	ns	ns	ns	ns	ns	ns
23. Ponderings	***	***	***	*	ns	ns
24. Sense of being overloaded	ns	ns	ns	ns	ns	ns

[a] – yet unpublished results; [b] – the results that are presented in detail in Table 2 and 3; *** associations statistically significant at the level of $p < 0.001$ with positive Pearson's correlations; ** associations statistically significant at the level of $p < 0.01$ with positive Pearson's correlations; * associations statistically significant at the level of $p < 0.05$ with positive Pearson's correlations; ns – no significant associations were found ($p \geq 0.05$; ! – the only statically significant association ($p < 0.05$) in which case the Pearson's correlation between variables was negative, which meant that initially high level of Envy was associated with relatively high chances of improvement in terms of SI, contrary to high levels of Impulsiveness and Tendency to take risks which were unfavorable prognostic factors – this subject was presented in details in separate publication [58]

The results concerning Narcissistic attitude (describing the subject's perceiving him/herself as a person deserving particular privileges, who wants to own more than others, is better than others and is egocentric [9, 42, 43]) in both genders were ambiguous (Tables 2–4). Despite the fact that presence of SI was associated with initially prominent Narcissistic attitude, probably deconstruction of narcissistic defense mechanisms through development of patients' insight in course of the therapy might lead to revealing their negative emotions towards themselves. Patients' confrontations with such painful emotions – inaccessible earlier – might decrease their inflated self-esteem, which in short term might not favor SI reduction and requires further psychotherapeutic treatment.

Results concerning Sense of being overloaded (describing the subject's perception of him/herself as a person subordinated to rules, obligations and tasks, expecting a lot from her/himself, as being overburdened [9, 42, 43]) seemed counter-intuitive. Despite the supposition that sense of being heavily burdened with obligations, tasks or life difficulties may predispose to SI [55], none of the results showed any significant associations between Sense of being overloaded and SI (Tables 2–4). E.g. it might be expected that reduction of Sense of being overloaded in course of the therapy will be associated with SI reduction, but neither such association was found. This fact may stem from the specificity of the applied scale. It may also be sensitive to personality factors such as loyalty towards close ones, tendency to fulfill undertaken obligations, or being compliant to religious principles that may constitute protective factors in reference to SI [59], and consequently balance "prosuicidal" influence of the sense of being overburdened.

For accurate interpretation of the results provided in this study it should be emphasized that the studied patients at least temporarily were not burdened with high risk of suicide that would render day hospital treatment impossible. Nonetheless, presence of other manifestations of auto-aggression [60, 61] such as substance abuse, self-inflicted cuts or having history of suicidal attempt were common. Also, due to lack of control group, it's advisable to ask if the observed changes allow authors to conclude on effectiveness of the psychotherapy. However, in the view of the observed dynamics of both neurotic personality disorders and SI (Tables 1–3), as well as in the view of the fact that the applied psychotherapy is widely acknowledged method of treatment in cases of such groups of patients [3, 4, 14, 17, 18, 41, 46, 62–69], it is highly probable that the presented results reflect changes produced by the applied psychotherapy. Among limitations of this study, there also was an inability to verify permanence of the symptom improvement. However, this is one of typical drawbacks of nearly all the studies on changes occurring during psychotherapy conducted in everyday clinical practice – follow-up observations are rarely obtained and if so frequently refer only to a small proportion of the formerly treated patients. Also, the Symptom Checklist KO"O" question about "willingness to take one's own life" at which the study was based upon referred to the last seven days. That might have resulted in not registering patients in who the symptom remitted only temporarily. Moreover, the question referred to SI that were "arduous". Clinical experience shows that some patients, especially those with profound personality disorders or severely depressed, may regard

SI as ego-syntonic. It is also probable that some of the reported SI might have had manipulative character. For this reason among others it should be stressed that the SI declared by the patients are not synonymous with SI that are revealed in a course of psychiatric evaluation. The type of the applied treatment is important as well, as the psychodynamic psychotherapy did not include detailed plan of therapeutic interventions. Consequently, the studied population was composed of patients in reference to whom psychotherapeutic interventions were at least in part selected in the course of the treatment and in the individualized manner. Thus, we may assume that the observed changes in each individual might have been results of slightly different factors from the spectrum of psychotherapeutic interventions [26, 37]. Finally, it needs to be stressed that the study included only a limited number of personality factors from the wide range of factors which may be relevant for SI presence and reduction.

Conclusions

1. It was found that in patients treated in a day hospital with intensive psychotherapy conducted in integrative approach with predominance of psychodynamic approach due to neurotic, behavioral or personality disorders, reduction of global neurotic personality disintegration (neuroticism) was significantly greater in those who improved in terms of SI, than in those who did not – this referred to both genders.
2. Also, associations were found between improvement in terms of SI and greater reduction of many neurotic personality traits in both genders: Negative self-esteem, Impulsiveness, Sense of alienation, Demobilization, Difficulties in emotional relations, Lack of vitality, Sense of lack of control, Sense of guilt, Difficulties in interpersonal relations, Sense of being in danger, Exaltation, Ponderings; and only in women: Feeling of being dependent on the Environment, Asthenia, Difficulties with decision making, Conviction of own resourcelessness in life, Deficit in internal locus of control and Imagination, indulging fiction.
3. The results confirm effectiveness of intensive psychotherapy as a treatment method that leads to comprehensive improvement encompassing reduction of neurotic personality disorders (neuroticism) and of majority of neurotic personality traits, as well as SI reduction.
4. The revealed associations weigh in favor of hypothesis on neuroticism as SI-predisposing factor in patients with neurotic, behavioral and personality disorders.

References

1. Ormel J, Jeronimus BF, Kotov R, Riese H, Bos EH, Hankin B. et al. *Neuroticism and common mental disorders: meaning and utility of a complex relationship.* Clin. Psychol. Rev. 2013; 33(5): 686–697.
2. Ormel J, Bastiaansen A, Riese H, Bos EH, Servaas M, Ellenbogen M. e al. *The biological and psychological basis of neuroticism: current status and future directions.* Neurosci. Biobehav. Rev. 2013; 37(1): 59–72.

3. Aleksandrowicz J. *Psychoterapia*. Warsaw: PZWL Medical Publishing; 2000.
4. Czabała JC. *Czynniki leczące w psychoterapii.* Warsaw: Polish Scientific Publishers PWN; 2014.
5. Gabbard GO. *Psychodynamic psychiatry in clinical practice.* Fourth edition. Washington DC: American Psychiatric Publishing; 2005.
6. Heitzman J, Furgał M, Pilecki M. *Etiologia, patogeneza i epidemiologia zaburzeń psychicznych.* In: Heitzman J. ed. *Psychiatria. Podręcznik dla studentów medycyny.* Warsaw: PZWL Medical Publishing; 2007. p.16–19.
7. Sadock BJ, Kaplan HI. ed. *Kaplan and Sadock's synopsis of psychiatry: behavioral sciences/ clinical psychiatry.* 10th ed. Lippincott: Williams & Wilkins; 2007.
8. Bienvenu OJ, Brandes M. *The interface of personality traits and anxiety disorders.* Prim. Psychiatry 2005; 12(3): 35–39.
9. Aleksandrowicz JW, Klasa K, Sobański JA, Stolarska D. *Kwestionariusz osobowości nerwicowej. KON-2006.* Psychiatr. Pol. 2007; 41(6): 759–778.
10. Clark LA. *Temperament as a unifying basis for personality and psychopathology.* J. Abnorm. Psychol. 2005; 114(4): 505–521.
11. McCrae RR, Costa PT Jr. *Personality trait structure as a human universal.* Am. Psychol. 1997; 52(5): 509–516.
12. Bobić J. *Subjective estimation of the quality of life in relation to neuroticism.* Arh. Hig. Rada Toksikol. 2012; 63(supl. 1): 17–22.
13. Samochowiec J, Kucharska-Mazur J, Hajduk A, Wojciechowski B, Samochowiec A. *Profil osobowości pacjentów z zaburzeniami lękowymi oceniany za pomocą Inwentarza Temperamentu i Charakteru Cloningera (TCI) oraz Kwestionariusza Osobowości R.B. Cattella*. Psychiatr. Pol. 2005; 39(3): 527–536.
14. Mielimąka M, Rutkowski K, Cyranka K, Sobański JA, Müldner-Nieckowski Ł, Dembińska E. et al. *Effectiveness of intensive group psychotherapy in treatment of neurotic and personality disorders*. Psychiatr. Pol. 2015; 49(1): 29-48.
15. Sobański JA, Klasa K, Cyranka K, Mielimąka M, Dembińska E, Müldner-Nieckowski Ł. et al. *Effectiveness of intensive psychotherapy in a day hospital evaluated with Neurotic Personality Inventory KON-2006*. Psychiatr. Pol. 2014 [E-pub ahead of print; DOI: 10.12740/psychiatri-apolska.pl/online-first/6].
16. Jarema M. *Standardy leczenia farmakologicznego niektórych zaburzeń psychicznych.* Gdansk: Via Medica; 2011.
17. Leenaars AA. *Psychotherapy with sucidal people a person-centred approach*. Chichester, West Sussex: John Wiley & Sons Ltd.; 2004.
18. Fowler JC. *Core principles in treating suicidal patients.* Psychotherapy (Chic) 2013; 50(3): 268–272.
19. Wasserman D, Rihmer Z, Rujescu D, Sarchiapone M, Sokolowski M, Titelman D. et al. *The European Psychiatric Association (EPA) guidance on suicide treatment and prevention.* Eur. Psychiatry 2012; 27(2): 129–141.
20. Victor SE, Klonsky ED. *Correlates of suicide attempts among self-injurers: A meta-analysis.* Clin. Psychol. Rev. 2014; 34(4): 282–297.
21. Anyansi TE, Agyapong VI. *Factors predicting suicidal ideation in the preceding 12 months among patients attending a community psychiatric outpatient clinic.* Int. J. Psychiatry Clin. Pract. 2013; 17(2): 120–124.

22. Liu RT, Miller I. *Life events and suicidal ideation and behavior: A systematic review.* Clin. Psychol. Rev. 2014; 34(3): 181–192.
23. Hendin H, Haas AP, Maltsberger JT, Koestner B, Szanto K. *Problems in psychotherapy with suicidal patients.* Am. J. Psychiatry 2006; 163(1): 67–72.
24. Sobański JA, Cyranka K, Rodziński P, Klasa K, Rutkowski K, Dembińska E. et al. *Are neurotic personality traits and neurotic symptoms intensity associated with suicidal thoughts reported by patients of a day hospital for neurotic disorders?* Psychiatr. Pol. 2014 [E-pub ahead of print; DOI: 10.12740/psychiatriapolska.pl/online-first/5].
25. Hsiao FH, Lai YM, Chen YT, Yang TT, Liao SC, Ho RT. et al. *Efficacy of psychotherapy on diurnal cortisol patterns and suicidal ideation in adjustment disorder with depressed mood.* Gen. Hosp. Psychiatry 2014; 36(2): 214–219.
26. Rodziński P, Sobański JA, Rutkowski K, Cyranka K, Murzyn A et al. *Skuteczność terapii na oddziale dziennym leczenia nerwic i zaburzeń behawioralnych w zakresie redukcji nasilenia i eliminacji myśli samobójczych*. Psychiatr. Pol. 2015 (accepted for publication).
27. Mewton L, Andrews G. *Cognitive behaviour therapy via the internet for depression: A useful strategy to reduce suicidal ideation.* J. Affect. Disord. 2014; 170c: 78–84.
28. Watts S, Newby JM, Mewton L, Andrews G. *A clinical audit of changes in suicide ideas with internet treatment for depression*. BMJ Open 2012; 2(5): pii: e001558.
29. Christensen H, Farrer L, Batterham PJ, Mackinnon A, Griffiths KM, Donker T. *The effect of a web-based depression intervention on suicide ideation: secondary outcome from a randomised controlled trial in a helpline.* BMJ Open 2013; 3(6): pii: e002886.
30. Mehlum L, Tørmoen AJ, Ramberg M, Haga E, Diep LM, Laberg S. et al. *Dialectical behavior therapy for adolescents with repeated suicidal and self-harming behavior: a randomized trial.* J. Am. Acad. Child Adolesc. Psychiatry 2014; 53(10): 1082–1091.
31. Weitz E, Hollon SD, Kerkhof A, Cuijpers P. *Do depression treatments reduce suicidal ideation? The effects of CBT, IPT, pharmacotherapy, and placebo on suicidality.* J. Affect. Disord. 2014; 167: 98–103.
32. Aleksandrowicz JW, Hamuda G. *Kwestionariusze objawowe w diagnozie i badaniach epidemiologicznych zaburzeń nerwicowych.* Psychiatr. Pol. 1994; 28(6): 667–676.
33. Rewer A. *Skale kwestionariusza objawowego „O".* Psychiatr. Pol. 2000; 34(6): 931–943.
34. Sobański JA, Klasa K, Rutkowski K, Dembińska E, Müldner-Nieckowski Ł. *Kwalifikacja do intensywnej psychoterapii w dziennym oddziale leczenia nerwic*. Psychiatr. Psychoter. 2011; 7(4): 20–34.
35. de Barbaro B, Cechnicki A. *Możliwość ograniczenia hospitalizacji psychiatrycznej z perspektywy psychiatrii społecznej*. Psychiatr. Pol. 1992; (1-2): 155–159.
36. Tobiasz-Adamczyk B, Szafraniec K, Bajka J. *Zachowania w chorobie. Opis przebiegu choroby z perspektywy pacjenta.* Krakow: Jagiellonian University Press; 1999.
37. Rodziński P, Rutkowski K, Sobański JA, Murzyn A, Cyranka K, Grządziel K. et al. *Reduction of suicidal ideation in patients undergoing psychotherapy in the day hospital for the treatment of neurotic and behavioral disorders and neurotic symptoms reported by them before the hospitalization*. Psychiatr. Pol. 2015 [E-pub ahead of print; DOI: 10.12740/32223].
38. Makara-Studzińska M, Sygit K, Sygit M, Goździewska M, Zubilewicz J, Kryś-Noszczyk K. *Analysis of the phenomenon of attempted suicides in 1978-2010 in Poland, with particular emphasis on rural areas of Lublin Province*. Ann. Agric. Environ. Med. 2012; 19(4): 762–769.
39. Zięba A, Dubiel D, Stach R. *Trudności stosowania psychoterapii poznawczej w leczeniu depresji.* Post. Psychiatr. Neurol.1995; 4: 245–251.

40. Wołodźko T, Kokoszka A. *Classification of persons attempting suicide. A review of cluster analysis research.*. Psychiatr. Pol. 2014; 48(4): 823–834.
41. Mazgaj D, Stolarska D. *Model terapii nerwic na oddziale dziennym*. Psychiatr. Pol. 1994; 28(4): 421–430.
42. Aleksandrowicz JW, Klasa K, Sobański JA, Stolarska D. *Kwestionariusz osobowości nerwicowej KON-2006.* Krakow: Library of Polish Psychiatry; 2006.
43. Aleksandrowicz JW, Klasa K, Sobański JA, Dorota Stolarska D. *KON-2006 Neurotic Personality Questionnaire.* Arch. Psychiatry Psychother. 2009; 11(1): 21–29.
44. Ježková V, Matulová P. *Pilot study of KON-2006 in the Czech Republic.* Arch. Psychiatr. Psychother. 2010; 12(3): 57–61. \
45. Styła R. *Concept of reliable change in the usage of the KON-2006 Neurotic Personality Questionnaire.* Arch. Psychiatr. Psychother. 2011; 13(3): 21–24.
46. Styła R. *Differences in effectiveness of intensive programs of treatment for neurotic and personality disorders. Is it worth to monitor the effectiveness of the therapeutic team?* Psychiatr. Pol. 2014; 48(1): 157–171.
47. Białas A. *Wiek pacjentów a skuteczność psychoterapii i możliwość zmiany cech osobowości.* Psychoterapia 2008; 144(1): 27–42.
48. Rodziński P, Rutkowski K, Murzyn A, Sobański JA, Cyranka K, Dembińska E. et al. *Changes in intensity of neurotic symptoms associated with reduction of suicidal ideation in patients who underwent psychotherapy in the day hospital for the treatment of neurotic and behavioral disorders*Psychiatr. Pol. Online First 2015 [E-pub ahead of print; DOI: 10.12740/PP/OnlineFirst/36294].
49. Brezo J, Paris J, Turecki G. *Personality traits as correlates of suicidal ideation, suicide attempts, and suicide completions: a systematic review.* Acta Psychiatr. Scand. 2006; 113(3): 180–206.
50. Cox BJ, Enns MW, Clara IP. *Psychological dimensions associated with suicidal ideation and attempts in the national comorbidity survey.* Suicide Life Threat. Behav. 2004; 34: 209–219.
51. Enns MW, Cox BJ, Inayatula M. *Personality predictors of outcome for adolescents hospitalized for suicidal ideation.* J. Am. Acad. Child Adolesc. Psychiatry 1996; 42: 720–727.
52. Velting DM. *Suicidal ideation and the five-factor model of personality.* Pers. Individ. Dif. 1999; 27: 943–952.
53. Farmer A, Redman K, Harris T, Webb R, Mahmood A, Sadler S. et al. *The Cardiff sib-pair study suicidal ideation in depressed and healthy subjects and their siblings.* Crisis 2001; 22: 71–73.
54. Batterham PJ, Christensen H. *Longitudinal risk profiling for suicidal thoughts and behaviours in a community cohort using decision trees.* J. Affect. Disord. 2012; 142(1–3): 306–314.
55. Handley TE, Attia JR, Inder KJ, Kay-Lambkin FJ, Barker D, Lewin TJ. et al. *Longitudinal course and predictors of suicidal ideation in a rural community sample.* Aust. N. Z. J. Psychiatry 2013; 47(11): 1032–1040.
56. Chodak M, Barwiński Ł. *Autoagresja jako forma radzenia sobie ze stresem – przegląd zagadnień*. Psychiatr. Psychoter. 2010; 6(1): 19–30.
57. Tsirigotis K, Gruszczyński W, Tsirigotis-Maniecka M. *Indirect self-destructiveness and psychological gender.* Psychiatr. Pol. 2014; 48(4): 759–771.
58. Rodziński P, Rutkowski K, Murzyn A, Sobański JA, Cyranka K, Dembińska E. et al. *Reduction of suicidal ideation in patients undergoing psychotherapy in the day hospital for the treatment of neurotic and behavioral disorders and their neurotic personality traits measured before the hospitalization.* Psychiatr. Pol. Online First 2015 [E-pub ahead of print; DOI: 10.12740/PP/OnlineFirst/34108].

59. Blüml V, Kapusta ND, Doering S, Brähler E, Wagner B, Kersting K. *Personality factors and suicide risk in a representative sample of the German general population.* PLoS One 2013; 8(10): e76646.
60. Bętkowska-Korpała B. ed. *Uzależnienia w praktyce klinicznej*. Warsaw: Parpamedia; 2009.
61. Modrzejewska R, Bomba J. *Porównanie obrazu depresji młodzieńczej w populacji uczniów krakowskich szkół gimnazjalnych na podstawie analizy wyników badań za pomocą inwentarza objawowego IO „B1" w latach 1984 i 2001*. Psychiatr. Pol. 2009; 43(2): 175–182.
62. Wciórka J, Pużyński S, Rybakowski J. ed. *Psychiatria*. Wroclaw: Elservier Urban & Partner; 2012.
63. Leichsenring F, Hiller W, Weissberg M, Leibing E. *Cognitive-behavioral therapy and psychodynamic psychotherapy: techniques, efficacy, and indications*. Am. J. Psychother. 2006; 60(3): 233–259.
64. Town JM, Abbass A, Hardy G. *Short-term psychodynamic psychotherapy for personality disorders: a critical review of randomized controlled trials*. J. Pers. Disord. 2011; 25(6): 723–740.
65. Schier K. *Piękne brzydactwo. Psychologiczna problematyka obrazu ciała i jego zaburzeń.* Warszawa: Wydawnictwo Naukowe Scholar; 2009.
66. Pilecki M, Cygankiewicz P. *Specyfika, zasady i dylematy terapii pacjentek z rozpoznaniem jadłowstrętu psychicznego na młodzieżowym oddziale psychiatrycznym.* Psychoterapia 2008; 147(4): 17–27.
67. de Barbaro B, Józefik B, Drożdżowicz L. *Terapia rodzin w zaburzeniach osobowości: wątpliwości i możliwości.* Psychoterapia 2008; 144(1): 5–16.
68. Aleksandrowicz JW, Sobański JA. *Skuteczność psychoterapii poznawczej i psychodynamicznej*. Krakow: Library of Polish Psychiatry; 2004.
69. Kamiński R. *Effect of group psychotherapy on changes in symptoms and personality traits in patients with anxiety syndromes* Ann. Acad. Med. Stetin. 2001; 47: 177–188.

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