

## The influence of psychodynamic psychotherapy on depressive symptoms – a follow up study.

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### Summary

**Aim.** Assessment of change in severity of depressive and generalized anxiety symptoms in patients with neurotic and personality disorders treated with psychodynamic psychotherapy.

**Material and methods.** From a total of 105 patients, 82 (78%) finished the study: 21 men and 61 women aged range from 19 to 67 years of age (mean 35.4 years old). Symptoms and diagnoses of the depressive episode (ICD-10) were assessed using the PSE (Present State Examination from SCAN 2.0) questionnaire before, just after, and 1 year after the 12-week psychotherapy in a day hospital ward. Statistical analyses were based on a cluster analysis and the k-means clustering method.

**Results.** 39 persons (48%) were diagnosed with a depressive episode before treatment. After treatment, 24 patients (29%) still fulfilled the criteria, and after next 12 months the number of diagnoses of depressive episode dropped to 10 (12%). 70% of the patients demonstrated marked decrease of depressive symptoms. 47 patients (57%) who had high initial rates of GAD symptoms demonstrated a marked drop of ratings.

**Conclusion.** Psychodynamic psychotherapy is effective in reducing depressive and GAD symptoms concomitant with neurotic and personality disorders.

psychotherapy / depression / generalized anxiety

### INTRODUCTION

Symptoms of depression and generalized anxiety are common components of many psychiatric disorders, even if they are not included into the diagnostic criteria. Comorbidity of depressive disorders and anxiety, as well as personality disorders is high. Individuals with personality disorders are prone to develop depressive disorder under stress. Anxiety disorders themselves are the source of stress. If they are not transient,

they lead to depressive states. Yet, on the other hand - anxiety symptoms and disorders rise substantially during depressive mood disorders.

Patients directed for psychotherapy in a day hospital ward usually have been made diagnoses of anxiety and personality disorders. It is not recommendable to treat mood disorders in such wards. Nevertheless, patients suffering from personality disorders and long lasting neurotic (anxiety) disorders resistant to pharmacological treatment, commonly develop depressive states. Depressive symptoms make the treatment difficult; they worsen the clinical state of patients, interfere with treatment and make an outcome worse. A method of treatment aimed to treat resistant neurotic disorders ought to be efficient at relieving depressive symptoms.

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A view that depression is a condition arising mainly from biological background is naive. Many studies showed that aetiology of depression is complicated and comprises of biological, psychological and sociological elements [1, 2]. A mixture of these elements makes up a depressive disorder. Yet, in spite of symptomatic similarities, there may not be one single type of depression. Patients with neurotic and personality disorders develop mainly depressive disorders related to stress and those based on prominent individual vulnerability to life adversity. Thus, it is interesting to assess how psychotherapy influences this kind of depressive states.

## MATERIAL AND METHODS

A total of 105 patients (26 men and 79 women) were included in the study. 82 of them (78%) finished the study: 21 men and 61 women aged from 19 to 67 years of age (mean 35.4 years old). There were no statistical differences in age and sex between the groups that finished the study and those that didn't. The loss of contact and the withdrawal of consent were the main reasons for the discontinuation of the study.

Table 1. illustrates the demographic parameters of the subjects.

sex	N	%	age (mean)	Years of education
men	21	26	21-48 (30.4)	11-20 (14.6)
women	61	74	19-67 (37.1)	8-21 (14)
total	82	100%	19-67 (35.4)	8-21 (14.2)

All of them were patients admitted to the day hospital in order to treat neurotic and personality disorders. 50 subjects (61%) had been diagnosed with neurotic disorder, 23 subjects (28%) had been diagnosed with personality disorder, 6 subjects (7%) had been diagnosed with both, and 3 subjects (4%) had been diagnosed with depression. The patients underwent a 12 week intensive group therapy with a psychodynamic setting and analysis of transference. There were two 1.5 h sessions every working day. Each session consisted in an individual session with the therapist against a background of the group, lasting 45 minutes and then 45 minutes of free discussion, when therapists gave only short com-

ments occasionally. Every Tuesday there were psychodramas, games and other forms of figurative activity.

The severity of symptoms and diagnoses of depression were assessed using PSE (Present State Examination from the SCAN 2.0) questionnaire. The PSE questionnaire is aimed at assessing, measuring and classifying the psychopathology and behaviour associated with major psychiatric syndromes. An interview is carried out by a clinician, who rates the severity of symptoms on a 4 point scale: (0) symptom absent after appropriate examination, (1) the symptom was present during the interview but only to a mild degree, below the threshold for diagnosis, but noticeable, (2) the symptom is definitely present, but of moderately severe intensity or, if severe, was present for less than half the interview, and (3) severe for more than half the period of the interview [3, 4]. Severity of depression was calculated as a total of all the 10 depressive symptoms severity, therefore ratings range from 0 to 30. Severity of generalized anxiety was calculated in a similar way. Symptoms of the generalized anxiety disorder (GAD) were divided into 2 groups: the first group comprising of 8 psychological symptoms and the second group comprising of 13 somatic symptoms. A total of symptoms severity in each group was normalized to fit a range from 0 to 30, and then the totals were added and divided by 2 to obtain a mean value from groups of psychological and somatic symptoms. Diagnoses of depression were made using the ICD-10 criteria for depressive episode (F32.x). Medical history of recurrent depressive disorder was omitted, but patients with a history of a manic or a hypomanic episode were excluded from the study.

Statistical analyses were based on a cluster analysis and the k-means clustering method. The number of clusters depended of the size of the smallest cluster, it has been decided that this clusters have to contain at least 16 persons (20%). Statistical comparisons between groups were made by means of the parametric t-test for repeated measures and the chi-square test using the statistical computer program Statistica (version 7). The study was carried out in accordance with the guidelines of the local ethic committee and supported by the Committee of Scientific

Researches as a scientific research in years 2004 – 2006 (grant 2 P05B 111 27).

## RESULTS

From 82 patients that completed the study 39 persons (48%) were diagnosed as having a depressive episode during the initial examination (prior to treatment –  $t_1$ ). All the patients were also diagnosed with neurotic or personality disorders. After the treatment ( $t_2$ ) 24 patients (29%) were diagnosed as having the depressive episode, after the next 12 months of follow-up ( $t_3$ ), the number of diagnoses dropped to 10 (12%). Change of prevalence of the depressive episode diagnosis between  $t_1$  and  $t_3$  was statistically significant (chi-square = 30.86,  $p < 0.001$ ), just as it was between  $t_1$  and  $t_2$  (chi-square = 7.62,  $p = 0.006$ ) and between  $t_2$  and  $t_3$  (chi-square = 8.87,  $p = 0.003$ ). Mean symptom severity dropped from 13.96 through 9.35 after 12 weeks of treatment ( $t = 7.63$ ,  $p < 0.001$ ), up to 6.75 after 12 months of follow up ( $t = 9.86$ ,  $p < 0.001$ ). The difference between  $t_2$  and  $t_3$  was smaller, but it was also statistically significant ( $t = 4.65$ ,  $p < 0.001$ ). Fig 1. illustrates the changes in the severity of depressive symptoms. The cluster analysis revealed 4 clusters of different patterns of change. Looking from the endpoint, clusters 1 and 3 had similar medium ratings of depressive symptoms (12.6 and 10.3 respectively), while clusters 2 and 4 had similar low ratings of depressive symptoms (3.9 and 3.5 respectively). Therefore, half of the patients finished the follow up period almost without depressive symptoms while the second half finished the follow up period with medium ratings of depressive symptoms. This is a significant drop of symptoms' severity if one takes into consideration the fact that at the initial examination 32 patients (clusters 1 and 2) had high ratings, 25 patients (cluster 3) had medium ratings and 25 patients (cluster 4) had quite low ratings (but about twice higher than at the endpoint). Only 25 patients (30%) in cluster 3 demonstrated no significant drop of depressive ratings.

Changes in the severity of generalized anxiety symptoms are a little bit different (Fig. 2). 47 patients (57%) demonstrated a drop of GAD ratings (clusters 1 and 2), half of the patients demonstrated a drop to low ratings, the second half

of the patients demonstrated a drop to medium ratings. In the case of 35 patients (43%) initially low ratings of GAD symptoms had not been changed.

Figure 1. Changes in severity of depressive symptoms in 4 clusters – results of a cluster analysis.

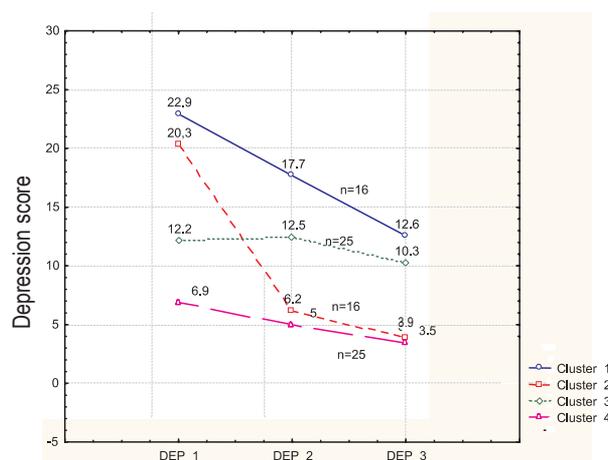
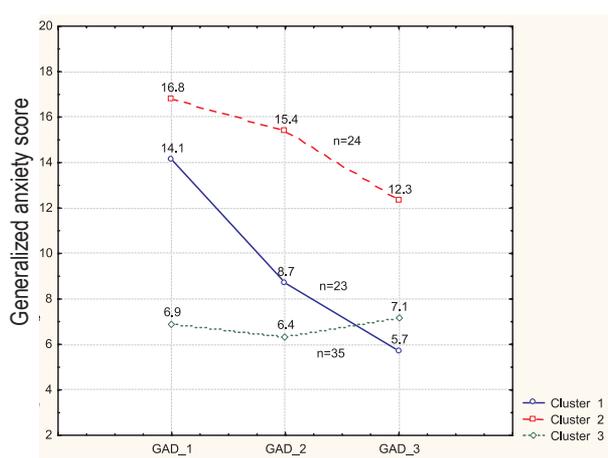


Figure 2. Changes in severity of generalized anxiety symptoms in 3 clusters – results of a cluster analysis.



## DISCUSSION

Psychodynamic psychotherapy is not a common method of treatment of depressive disorders. Nevertheless, it is in the focus of attention because an essential proportion of depressive disorders is dependent on the personality. In the past there was a clear distinction between neurotic and endogenous depression. It has been assumed that neurotic depression came directly from personality structure and stress. Endogenous depression was based on neurological

disturbances. However, nowadays a border between these two kinds of depression is vague. ICD-10 and DSM-IV classifications define only one depression in spite of its aetiology.

There is an increased number of publications showing that the personality structure and adverse life events are essential in the development of depression [5, 6, 7, 8]. Neuroticism is a personality trait which has a prominent link to depression. Yet, although neuroticism is easily measured and related to the pathology of personality, it is still not clear what does the trait of neuroticism mean. Thus, depression that is based on a high level of neuroticism is linked to personality structure and can be treated with psychotherapy, especially psychodynamic therapy, as this type of psychotherapy addresses the personality change.

There are several papers on the efficacy of psychodynamic psychotherapy in depression. Bond in his review on this issue claims that all the previous studies show significant improvement in symptoms in patients who were depressive before treatment with psychodynamic psychotherapy. There is no data showing that psychodynamic psychotherapy is more or less effective than other forms of psychotherapy in depression [9].

Wenneberg et al. showed that psychodynamic psychotherapy was effective in decreasing depressive symptoms in patients manifesting a history of substance abuse after 18 months of therapy [10]. Franz et al. carried out a multi-centre retrospective study on a sample of 495 patients. The results show good efficacy of inpatient treatment measured with depression scales, as 55% of all the patients indicated that they had markedly improved [11].

Some studies assessed the efficacy of psychodynamic psychotherapy with pharmacotherapy. de Maat et al. carried out a randomized study on 97 patients treated with short psychodynamic supportive psychotherapy (SPSP) during which 45 patients were treated with pharmacotherapy and 171 patients were treated with their combination. There were no differences in symptoms reduction between SPSP and pharmacotherapy, but therapists and patients favoured SPSP. Combined therapy was found superior to pharmacotherapy, but not to SPSP alone [12]. The study of Bond on 53 patients with de-

pression (with or without personality disorder) showed a significant improvement during psychotherapy or combined psycho- and pharmacotherapy [13]. de Jonghe et al. investigated whether combined therapy has advantages over psychotherapy alone. They carried out a 6-month randomized clinical trial which compared SPSP therapy with combined therapy in ambulatory patients with mild or moderate major depressive disorder. Results showed that the advantages of combining antidepressants with psychotherapy were equivocal [14]. In a six-month randomized clinical trial of antidepressants and combined therapy, Kool et al. showed that for depressed patients with personality disorders, combined therapy was more effective than pharmacotherapy. Combined therapy was not more effective than pharmacotherapy alone for depressed patients without personality disorders [15].

About half of the patients who were treated in the day hospital for neurotic disorder have personality disorders, concomitant or just personality disorder. The second half has various character disturbances. Thus, psychodynamic psychotherapy aiming at changing personality and treating neurotic disorders can be effective also in reducing depressive symptoms. It is important, because almost a half of the patients have a concomitant diagnosis of mild or moderate depression. After 12 weeks of treatment and 12 months of follow up, depressive disorders prevalence dropped from 48% to 12%. Taking into account depressive ratings, there were 4 patterns of change. Patients with high initial ratings (clusters 1 and 2) demonstrated a drop of depressive symptoms, down to almost a lack of symptoms (cluster 2) or a marked decrease of symptoms severity (cluster 1). Patients, initially with low depressive ratings demonstrated even a lower level of symptoms severity after follow-up (cluster 4). There was, though, a group of patients (which constituted 30% of subjects) with median ratings of depression (cluster 3) that demonstrated no significant change in depressive symptoms.

Results in GAD symptoms change were a little bit different in comparison to the depressive symptoms' change. The main difference was the lack of the group with median symptoms severity that demonstrated no change in ratings (like cluster 3 of depressive symptoms). Patients with high ratings of GAD symptoms demonstrated a

high (cluster 1) or moderate (cluster 2) reduction of symptoms severity. Subjects with low ratings of GAD symptoms had no change in symptoms severity (cluster 3).

The fact that the reduction in symptoms' severity has been done during the therapy as well as during the follow-up is an important finding. It could be presumed that psychotherapy started a change in personality that resulted in symptomatic improvement during the one-year follow-up.

## CONCLUSION

In all the patients, 70% demonstrated a marked decrease of depressive symptoms, no matter what the initial depressive ratings were. Taking into account GAD symptoms, almost all the patients who have high initial rates demonstrated a marked drop of ratings. Psychodynamic psychotherapy is effective in reducing depressive and GAD symptoms concomitant with neurotic and personality disorders.

## REFERENCES

1. Kendler KS, Gardner ChO, Prescott CA. Toward a comprehensive developmental model for major depression in women. *Am J Psychiatry*, 2002, 159:1133–1145.
2. Kendler KS, Gardner ChO, Prescott CA. Toward a comprehensive developmental model for major depression in men. *Am J Psychiatry*, 2006, 163: 115–124.
3. World Health Organization. Schedules for Clinical Assessment in Neuropsychiatry, Version 2.0, Manual. Geneva: World Health Organization; 1994.
4. World Health Organization. Schedules for Clinical Assessment in Neuropsychiatry, Version 2.0, Glossary. Geneva: World Health Organization; 1994.
5. Kendler KS, Kuhn J, Prescott CA. The Interrelationship of neuroticism, sex, and stressful life events in the prediction of episodes of major depression. *A J Psychiatry* 2004, 161: 631–636.
6. Oldenhinkel A, Bouhuys AL, Brilman EI, Ormel J. Functional disability and neuroticism as predictors of late-life depression. *Am J Geriatr Psychiatry*, 2001, 9: 241–248.
7. Ormel (2) J, Rosmalen J, Farmer A. Neuroticism: a non-informative marker of vulnerability to psychopathology. *Soc Psychiatry Psychiatr Epidemiol*, 2004, 39: 906–912.
8. Ormel J, Wohlfarth T. How Neuroticism, long-term difficulties and life situation change influence psychological distress: A longitudinal model. *J Pers Soc Psychol*, 1991, 5, 744–755.
9. Bond M. Psychodynamic psychotherapy in the treatment of mood disorders. *Curr Opin Psychiatry*, 2006, 19: 40–43.
10. Wenneberg P, Weinryb RM, Lindgren A, Busch M, Saxson L, Skarbrandt E. The development of depression during psychodynamic group psychotherapy among subjects in substance abuse remission. *Subst Use Misuse*, 2005, 40: 543–549.
11. Franz M, Janssen P, Lensche H, Schmidtke V, Tetzlaff M, Martin K, Wöller W, Hartkamp N, Schneider G, Heuft G. On the effects of psychoanalytic oriented psychotherapy – an inpatient multicenter study. *Z Psychosom Med Psychoter*, 2000, 46: 242–258.
12. de Maat S, Dekker J, Schoevers R, van Aalst G, Gijsbers-van Wijk C, Hendriksen M, Kool S, Peen J, Van R, de Jonghe F. Short Psychodynamic Supportive Psychotherapy, antidepressants, and their combination in the treatment of major depression: a mega-analysis based on three randomized clinical trials. *Depress Anxiety*, 2007, 7: in printing.
13. Bond M, Perry JC. Psychotropic medication use, personality disorder and improvement in long-term dynamic psychotherapy. *J Nerv Ment Dis*, 2006, 194: 21–26.
14. de Jonghe F, Hendriksen M, van Aalst G, Kool S, Peen V, Van R, van den Eijnden E, Dekker J. Psychotherapy alone and combined with pharmacotherapy in the treatment of depression. *Br J Psychiatry*, 2004, 185: 37–45.
15. Kool S, Dekker J, Duijsens IJ, de Jonghe F, Puite B. Changes in personality pathology after pharmacotherapy and combined therapy for depressed patients. *J Personal Disord*, 2003, 17: 60–72.

