A 2-year follow-up of mentalization-oriented group therapy following day hospital treatment for patients with personality disorders

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ABSTRACT

Objective *To analyse the effectiveness of mentalization-oriented outpatient group therapy following 5-month day hospital treatment.*

Methods *Twenty-two patients with personality disorders participated. All were consecutively referred and diagnosed according to standardized criteria and had completed a 5-month long psychotherapeutic day hospital treatment. Intervention consisted of once a week mentalization-oriented group therapy for up to 3 years. Outcome on acute symptoms included hospitalizations and suicide attempts, the more enduring social and interpersonal problems were assessed by standardized questionnaires regarding symptoms, interpersonal problems, social functioning and vocational status. Outcome measures were analysed within the framework of generalized estimating equations at the beginning and at the end of treatment, and at 2 years follow-up.*

Results *Average treatment length was 2 years. There was no dropout from treatment. Significant improvements were observed on the Symptom Checklist SCL-90-R, Personality Severity Index Score, Inventory of Interpersonal Problems-Circumplex version, Clark's Personal and Social Adjustment Scale, Global Assessment of Functioning, hospitalizations and vocational status. At follow-up, these results further improved significantly.*

Conclusion *Long-term mentalization-oriented outpatient group therapy was associated with a reduction in both acute symptoms and the more long-lasting social and interpersonal problems in this patient group. At follow-up, results further improved, were paralleled by a level of hospitalizations which dropped to almost none, a marked decrease in the use of psychological treatment, and a clearly improved vocational status. Copyright © 2010 John Wiley & Sons, Ltd.*

Introduction

Recent research suggests that the symptomatology of patients with borderline personality disorder consists of acute and long-lasting symptoms (Zanarini et al., 2007). Acute symptoms such as suicide attempts and self-mutilation resolve relatively quickly but are frequently the reason for costly hospitalizations. Long-lasting symptoms such as anger and fear of abandonment have substantial negative impact on social and interpersonal functioning.

Structured short-term psychodynamic-oriented psychotherapeutic day hospital treatment has proven to be effective on the acute symptoms (Petersen et al., 2008; Wilberg, Karterud, Urnes, Pedersen, Friis, 1998). Number of hospitalizations, suicide attempts and self-harm cases were reduced as was also general psychopathology. However, in our former study, there were only small or no significant changes in problematic social and interpersonal patterns, which were probably induced and maintained by the more long-lasting symptoms. To address these symptoms, a first phase consisting of a short-term day hospital treatment was followed-up by a second phase of weekly long-term mentalization-oriented group therapy.

Aims of the study

To analyse the effectiveness of long-term mentalization-oriented outpatient group therapeutic intervention in a sample of patients who initially received a short-term day hospital treatment. We hypothesize that patients' more enduring social and interpersonal problems will improve, and that these changes will last at follow-up.

Method

Design

Phase one of the study consisted of psychotherapeutic day hospital treatment. The results and description of this part of the study have been published previously (Petersen et al., 2008). The study presents the results of the second outpatient group therapy phase. The design was prospective and naturalistic. The sample consisted of ($n = 22$) patients. Measures were assessed at the start of group therapy and after 1, 2 and 3 years (upon termination) giving up to three assessments per individual from this period (on average 2 years of treatment). Follow-up measures were obtained 1 and 2 years after terminating group treatment. The study was approved by the Local Scientific Ethical Committee and the Danish Data Surveillance Authority and took place at the Psychotherapeutic Clinic, Aalborg Psychiatric Hospital, Denmark.

Intervention

Treatment consisted of one and a half-hour outpatient psychodynamic group therapy once a week. In case of crisis, patients also received individual therapy and as needed a medication review by the consulting psychiatrist.

The treatment was not manualized but relied on recognized guidelines and principles for treatment of borderline personality disorder (APA, 2001; McMain et al., 2009). The leading treatment principles were elements from modern psychodynamic group theories. Therapist aimed at promoting mentalization by increasing patient's curiosity about their own and the other group member's thoughts and feelings, mainly inspired by mentalization-based treatment (Bateman & Fonagy, 2004).

Staff from the same team as in the day treatment phase were group therapists. All had received a 3-year formal education and training in psychodynamic psychotherapy. The training in mentalization based therapy (MBT) consisted of a 4-day course, literature workshops and supervision once a year by an MBT specialist. The therapists received monthly supervision by external expert.

Participants

All patients were assessed by trained and experienced assessors using the Structured Clinical

Interview for Diagnostic and Statistical Manual for Mental Disorders (DSM)-III-R (SCID II) (APA, 1994; First, Spitzer, Gibbon, & Williams, 2006) for Axis II diagnoses, and for Axis I disorders with the Present Status Examination International Classification of Diseases-10 (PSE) translated into Axis I disorders.

A selection of the patients occurred during the day treatment phase of the programme. Initially, patients referred between 1 January 2002 and June 2003 participated in the study on the effectiveness of the day treatment ($n = 38$). During the day treatment, seven (18.4%) of the 38 patients terminated irregularly, one patient was prematurely discharged due to contract violations, one received another less intensive treatment in the Unit and five (13%) patients dropped out (dropout defined as sudden termination against team advise). At the end of day treatment, nine patients (23.6%) ended treatment, one because of pregnancy, one moved, and three sought other treatment, two were advised to stop due to low attendance, and two couldn't combine treatment with studying. This left us with ($n = 22$) patients in this study.

The inclusion criteria were the same as when patients entered day treatment: over 18 years of age who entered into a treatment contract and who met the DSM criteria for a personality disorder. Excluded were patients fulfilling DSM IV criteria for schizophrenia, bipolar disorders, substance abuse, antisocial personality disorder and organic brain disorder.

Measures

Outcome measures consisted of self-rated and observer-rated multidimensional evaluations of functioning relevant to patients with personality disorders (PD). The two primary outcome measures were: The Personality Severity Index Score (PSI) and the Inventory of Interpersonal Problems-Circumplex version (IIP-C).

The Symptom Checklist SCL-90-R (Global Severity Index (GSI)) (Derogatis, 1983) was used to assess patients' overall subjective experience of symptoms. The personality severity index score (PSI) is the average of the scores on the SCL-90-R subscales of interpersonal sensitivity, hostility and paranoid ideation. It reflects distress due to the PD as opposed to the GSI which incorporates all symptoms. High GSI values may be a sign of anxiety or depressive episodes or of distress related to the PD. The PSI reflects subjective distress consistently reported by patients with PD and has discriminatory power when statistically corrected for the influence of anxiety and depression (Karterud, Friis, Irion, & Vaglund, 1995). Clark's Personal and Social Adjustment Scale (CPSAS) (Clark, 1968) covered specific aspects of the patient's maladjustment: 'work', 'relations', 'social capability', 'positive mental health' and 'coping, esteem and spirit'. The IIP-C version was used to identify dysfunctional patterns of interpersonal interactions. This score is widely used in psychotherapy research and has demonstrated its relevance for assessing outcome on more stable personality traits (Alden, Wiggins, & Pincus, 1990). The staff rated the Global Assessment of Functioning (GAF) (APA, 1994). To assess more specifically the social/occupational functions and symptoms, we used a split version of GAF-F (social/occupational function) and GAF-S (symptoms) (Pedersen, Hagtvet, & Karterud, 2007). No formal reliability test on rating agreement was undertaken. All therapists were trained and performed on a weekly basis GAF rating on patients referred to the psychotherapeutic unit. It was not performed at follow-up.

Patients' self-reported suicidal acts were measured 1 year prior to treatment, upon termination and at follow-up. The number of hospitalizations in psychiatric emergency unit and the number of inpatient hospitalizations were measured, crosschecked with psychiatric records and hospital inpatient database 2 years before treatment start, during group treatment and during 2 years followup. Vocational status: number of months unemployed for 1 year was assessed 1 year prior to day treatment entry, throughout group treatment and

finally during 1 year follow-up. Any use of psychological treatment was monitored during follow-up.

Statistical analyses

Data were analysed with Stata release 10 (Stata-Corp, College Station, TX, http://stata.com) with a significance level of 5%. The progress in terms of the various outcome measures was analysed within the framework of generalized estimating equations (GEE) (Liang & Zeger, 1986), specifically the quasi-least squares method by (Shults, Ratcliffe, & Leonard, 2007). Measures were to some extent unequally distributed (not all schemes were filled out by all participants, i.e. missingness) and the correlation between measures from the same subject was therefore modelled with the Markov correlation structure. For the estimation of the regression parameters, we used a sandwich-type robust covariance matrix. All regressions were adjusted for mean-centralized age. Estimated slopes (denoted by β) quantify the effect of treatment and were therefore of primary interest and are reported with 95% confidence intervals and *p* values from a Wald's test for the null hypothesis of zero slope ($\beta = 0$). All intercepts (denoted by α) were clearly and highly significantly larger than zero but this is expected and is not very interesting, so for these we will just report the estimates. Baseline demographics, clinical characteristics and baseline outcome measures for the patients who terminated during the day treatment phase were analysed and compared with those who entered the second phase of group therapy using Wilcoxon signed-rank test.

Results

Subjects

All of the participants were female. The average age was 28.5 years. All had a PD, 72% a borderline personality disorder and 59% of the patients had more than one personality disorder. The baseline measures indicated a high level of pathology with previous hospitalizations, previous drug abuse and a history of aggressive and self-destructive acts. Unemployment was high, most were unskilled, half of the patients lived alone and 59% had previously attended a psychotherapeutic treatment (Table 1).

There was no dropout. The average treatment length in outpatient group therapy was 24 months. Four patients (18%) received in average six parallel individual therapy sessions during group therapy.

The patients who terminated treatment before entering the second phase of group therapy differed from those who continued on some variables. Their functioning was significantly lower (GAF-F), 36.3 compared with 44.6 ($p = 0.005$) and (GAF-S) 36.4 compared with 45.6 ($p = 0.001$), and they reported more aggressive/destructive acts ($p = 0.007$).

Table 1: Demographic and clinical characteristics

	%	*n*
Age (mean (SD))	28.5 (6.1)	
Gender, women	100	22
Children	36.6	8
Unskilled	68.1	15
Living alone	50.0	11
Unemployed	81.8	18
Previous psychiatric hospitalization	50	11
Previous psychotherapy	59	13
Previous suicidal/self-destructive acts	40.9	9
Aggressive/destructive acts	27.2	6
Previous drug or alcohol abuse	54.5	12
Psychopharmacological treatment	54.5	12
DSM-IV axis II diagnoses		
Borderline	72.2	16
Avoidant	4.5	1
Dependent	13.6	3
NOS	9	2
Co-morbid DSM-IV axis I disorders		
Any anxiety disorder	36.3	8
Any depression	13.6	3
Any eating disorder	13.6	3

n = 22. SD, standard deviation; NOS, not otherwise specified; DSM-IV, Diagnostic and statistical manual of mental disorders IV.

There was no significant difference in outcome measures between the non-borderline group and the patients with borderline personality disorder.

Self-report measures

The patients experienced a significant improvement from the start of group treatment to the end of follow-up on all self-report measures (Figure 1). The global severity of symptoms (SCL-90 GSI) was significantly reduced ($p = 0.02$; $\beta = -0.0043$). In the same manner, the more stable personality traits (SCL-90 PSI) improved significantly over time ($p = 0.02$; $\beta = -0.0036$). The improvement in interpersonal problems (IIP-C mean) was significant ($p = 0.02$; $\beta = -0.0042$). Improvement was also marked in patients' social adjustment (CPSAS) ($p = 0.01$; $\beta = 0.0047$).

GAF scores. Patients' functioning improved significantly according to staff ratings of GAF-F ($p = 0.002$; $\beta = 8.2$) and GAF-S ($p = 0.001$; $\beta = 5.9$).

Suicide attempts

One patient attempted suicide during treatment and none during 2-year follow-up period.

Hospitalizations and psychological treatment

Figure 2 shows changes in hospitalization patterns 2 years before entering day treatment, during group therapy and during 2 years follow-up (hospitalizations during day treatment have been published previously (Petersen et al., 2008)). Nine patients (41%) were hospitalized in the emergency room 2 years prior to entering day treatment, three (13.6%) during treatment and two (9%) during 2 years follow-up. Ten patients (45.5%) were admitted to
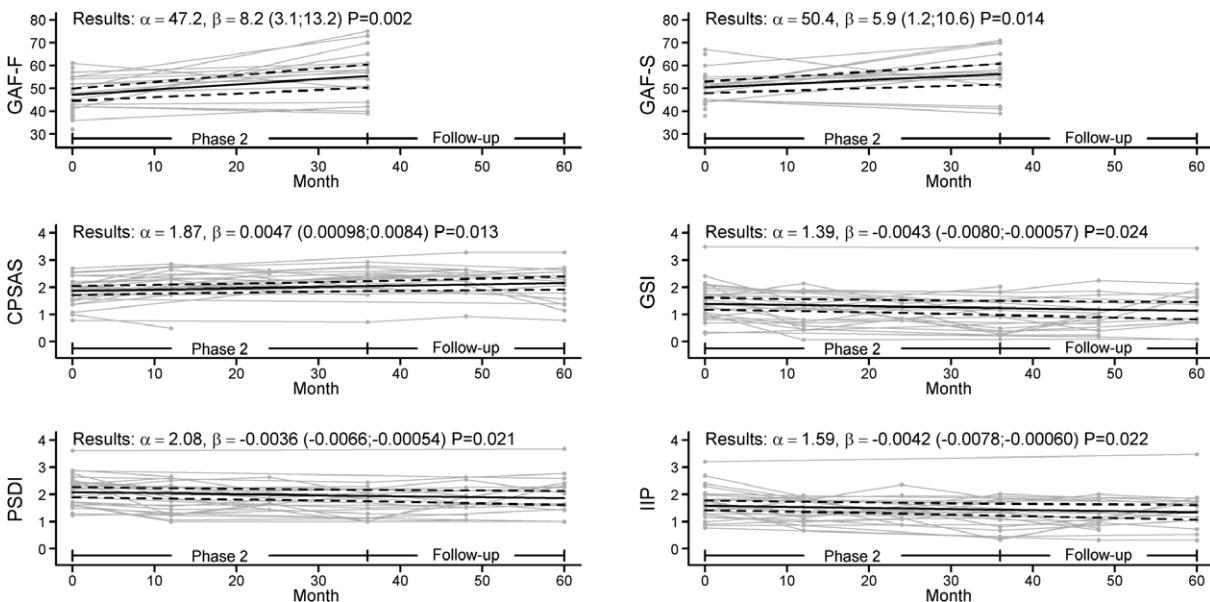
Figure 1: Outcome measures. Greyed lines and points are the subject specific measures (points) and the trend between measures (lines). The black lines are results from quasi-least squares estimated linear models and the broken lines are corresponding 95% confidence limits. Estimated intercept (α) and slope (β) are presented. Moreover, 95% confidence interval for β and the p value from a Wald's test for the null hypothesis of zero slope ($\beta = 0$) are given. The timescale is months since the beginning group therapy treatment, and the broken vertical line indicates the beginning of the follow-up period
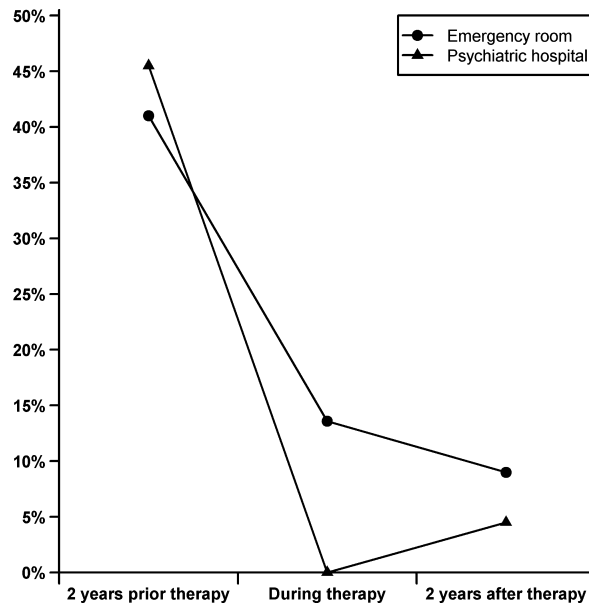
Figure 2: Percentage of patients admitted to emergency room and psychiatric hospital during 6 years

psychiatric hospital 2 years prior to day treatment, none (0%) during treatment and one (4.5%) during 2 years follow-up.

Only four patients (18%) attended some form of psychological treatment during the two years follow-up period.

Vocational Status

On average, the number of months of unemployment in 1 year decreased from 8.6 months in 1 year prior to entering day treatment to 5.5 months in the first year of group therapy, 3.3 months in the second year of group therapy and finally to 2.4 months in the first year of follow-up. The number of months unemployed during day treatment was not included because all patients had to attend treatment on a daily basis and were therefore unable to work or study.

Discussion

As opposed to the short-term day treatment intervention, patients who continued in the second

phase of group therapy showed improvement in both acute symptoms and the more enduring social and interpersonal problems. At follow-up, these results were further improved and were paralleled by a drop in hospitalizations to almost none, a marked decrease in the use of psychological treatment and a clearly improved vocational status.

The patients who either dropped out of day treatment or terminated at the end of day treatment showed significantly lower functioning and more aggression than patients who completed group therapy. These patients might have profited from a longer day hospital treatment like the one described by Bateman Anthony where patients had a similar mean GAF score (in the mid thirties) (Bateman & Fonagy, 1999b). The change in structure of the treatment after the first day treatment phase might have stressed the patients to much. The ability to handle stress and changes in life circumstance by mentalization is known to take time to evolve in patients with PD (Fonagy, Gergely, Elliot, & Target, 2002).

A relatively fast improvement on acute symptoms has been seen in follow-up studies of patients

with severe PD receiving non-evidence–based and non-manualized treatment (Zanarini, Frankenburg, Hennen, Reich, & Silk, 2005), though functional impairment in the social and interpersonal domain continues for a longer time (Skodol et al., 2005). Improvement was marked in these domains for patients in our sample who completed treatment. Structured treatment based upon a coherent theory, in our case mentalization-oriented, might accelerate this process of improving the ability to handle life in more adaptive ways (Bateman & Fonagy, 2009).

Patients in a Norwegian outcome study of group therapy following day hospital treatment (Wilberg et al., 2003) only showed modest improvements during their second outpatient group therapy phase. Non-completers (43%) in this study had a mean GAF score of 41.4 which is very close to the mean GAF 45.6 of the completers in the present study. They hypothesized that patients with personality disorders might have needed more support during the outpatient phase and that the two-phased model aroused too many feelings of abandonment, leading to irregular termination. The Norwegian intervention resembled the present one as to duration and the concept of two phases, but differed in content. It was based on another theory, and only 38% of their patients were diagnosed with borderline personality disorder and 18% had no PD. In the present study, the group was more homogenous and interventions were mostly mentalization-oriented.

It is normally difficult to predict suitability for psychotherapeutic treatment, (Valbak, 2004), but nevertheless, the present intervention may be placed between the treatment described by Wilberg et al. (2003) and the treatment model described by Bateman and Fonagy (1999a) regarding target group and the effectiveness in reducing the more lasting symptoms in patients with PD. Patients who have a level of functioning corresponding to a GAF score around 45, and who are able to handle the frustrations caused by the relatively short day treatment period might improve with the present intervention.

Limitations

The non-randomization, lack of control and low number of participants are the main limitations of this study. Patients might have continued to improve irrespective of further treatment after the Day Hospital treatment. Furthermore, the selection occurring during the Day Hospital phase might have contributed to the positive outcome.

Conclusions

Long-term mentalization-oriented outpatient group therapy following day hospital treatment was associated with a reduction in both acute symptoms and more lasting social and interpersonal problems. At follow-up, these results further improved and were paralleled by a level of hospitalizations which dropped to almost none, a marked decrease in the use of psychological treatment and a clearly improved vocational status.

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