

## The Berlin Jungian study: On the effectiveness and efficacy of outpatient (Jungian) psychoanalysis and psychotherapy - a catamnestic study (BJS)

■ Keller, W., Westhoff, G., Dilg, R., & Rohner, H. H. (1998). *Study and the study group on empirical psychotherapy research in analytical psychology*. Berlin: Department of Psychosomatics and Psychotherapy, University Medical Center Benjamin Franklin, Free University of Berlin.

Despite a large number of studies on the effectiveness of psychodynamic psychotherapy, there are so far no studies on the efficacy and effectiveness of long-term psychoanalysis as performed in a naturalistic setting including Jungian psychoanalysts and psychotherapists in private practice. The reasons for this paucity of research include the long duration of prospective case studies and the high costs involved, as well as methodological difficulties involved in research in the field of private treatment practice. Psychoanalysis and psychoanalytic psychotherapy increasingly come under pressure to offer convincing evidence of their effectiveness. The study presented here is an effort to close this gap for Jungian therapy. This study was financed by independent funding (Bosch Family Foundation).

### Objectives

There were three objectives for this study:

- 1 To prove the effectiveness of long-term analyses (more than 100 sessions) in routine treatment practice and to examine the stability of treatment results by a follow-up study 6 years after the end of therapy.
- 2 To evaluate some aspects of cost-effectiveness.
- 3 To implement research strategies in the area of outpatient psychotherapeutic care for quality assurance purposes.

### Recruitment methods and design

All members of the German Society for Analytical Psychology (DGAP), the umbrella organisation of Jungian psychoanalysts, were asked to participate in this retrospective study. Over three quarters (78%) responded to this request and 24.6% participated. Reasons for refusal to participate are listed below in Table 1. Over 40% refused (actively or passively) to participate and a further 15% discontinued participation.

**Table 1: Therapists' reasons for declining to participate in outcome research**

Total number of the members of DGAP (adult psychoanalysts) invited to take part in the study	N (%)
Did not respond to invitation	49 (22.0)
Responded but refused to participate	48 (21.5)
Therapists initially agreed to take part and later refused or failed to contact their terminated patients	32 (14.4)
Therapists with documented agreement of the patients to participate and complete follow-up assessment of these patients	35 (15.7)
No finished cases in 1987/88	59 (26.4)

The remaining sample (both therapists and patients) is described in Table 2. The patient sample thus recruited was less than one third of those in the sampling frame while the therapists recruited were less than 16% of those who could have participated.

*Table 2: Selection of participating therapists and patients*

	Therapists n(%)	Patients n(%)
Total number of contacted therapists	223 (100)	
Therapists who sent back the invitation questionnaire	174 (78)	
Therapists who assessed the pre-treatment status of their finished cases in 1987/1988 (drop-outs included)	55 (24.6)	353 (100)
Therapists who contacted their patients who terminated in 1987/1988	42 (18.8)	259 (73.4)
Therapists who provided documented agreement of participation from their patients terminated in 1987/1988	35 (15.7)	152 (43.1)
Therapists who provided complete follow-up assessment from their patients terminated in 1987/1988	35 (15.7)	111 (31.4)

## Measures and sample

On the basis of their clinical notes, participating therapists in private practice documented all their cases (including dropouts) which terminated in 1987 and 1988. They completed a basic questionnaire regarding clinical and sociodemographic data and setting characteristics at the onset of therapy and gave a retrospective global assessment of their patients' state at the end of therapy.

Based on the diagnosis given in the funding claims of the former therapists, two independent raters reached a consensus concerning a retrospective ICD-10 classification. Additionally, the severity of disease before treatment was assessed using the Schepank method of impairment severity index (BSS, 1987, 1994).

In 1994 111 former patients, who had finished either psychoanalysis or long-term-psychotherapy in 1987 or 1988 and who agreed to take part in the study, were sent a follow-up questionnaire which included measures of life satisfaction, well-being, social functioning, personality traits, interpersonal problems, self rated health care utilisation and some psychometric tests (SCL-90R, VEV, Gießen-Test). In 33 cases (in the Berlin region), a follow-up interview was carried out and actual health status was rated by two independent psychologists trained in Jungian psychoanalysis.

Additionally, objective data on the utilisation of health care services was recorded from health insurance companies (number of days off work through sickness and inpatient hospital days) 5 years before and after therapy. Data were unavailable for a significant proportion of patients. In this comparison only those cases with complete pre and post data were included. Thus, for this calculation, the sample was reduced to 47 (for analysis of sick days) and 58 (for analysis of hospital days). Neither subgroup differed from the entire sample in socio-demographic data, pre-treatment characteristics or other criteria of treatment success.

The selection of the follow-up sample was controlled by comparing the study patients with the total of 358 therapist-documented therapies that finished in 1987 and 1988 with respect to socio-demographic and clinical characteristics. The selection of therapists participating in the study was controlled by an independent survey of all DGAP members with respect to therapist's and setting characteristics. There was no difference between the groups, supporting the assumption that the study sample was representative of the clinical population.

### Patient characteristics

Table 3 gives details of the sample followed up in the study. The mean age at follow-up was 44.5 years (range 27-69). More than two thirds (69.1%) were women. Compared with the reference sample, the follow-up sample contained a higher proportion of unmarried (26% vs 8%) or separated patients, a higher education level, fewer manual workers (4% vs 15%) and a lower level of unemployed individuals (38% vs 87%).

*Table 3: Characteristics of follow-up sample*

Follow-up sample (n=111)	Mean (SD)
Age at follow-up, 1994 (yrs)	44.5 (4.8)
Age at start of treatment (yrs.)	35.0 (8.8)
Age at the end of treatment (yrs)	37.0 (8.0)
Time of follow-up (yrs)	5.8 (0.79)
Treatment length (0.3-8.3 yrs)	2.9 (1.7)
Number of therapy sessions (range 15-399)	161.9 (94.9)

### Treatment characteristics

Table 4 includes information concerning treatment characteristics. Mean post-treatment follow-up time was almost 6 years. Taken together with the average treatment length of just under 3 years, the patients at follow-up were about 10 years older than at the beginning of therapy. Three quarters (76%) had received psychoanalysis with an average of 193 sessions and a mean duration of 3 years; 63% of the psychoanalytic patients had more than 100 sessions. Overall, 17.5% of the patients included were drop-outs, finishing treatment at various points of therapy. Thus the results reported constitute an intention to treat analysis. This figure further validates the representativeness of the selection procedure indicating that the treating therapists did not exclusively select their successful patients.

*Table 4: Characteristics of the treatment*

Type of therapy	Mean (SD)
Psychoanalysis (%)	76.0
Treatment length (0.3-8 yrs.)	3.0 ( 1.6)
Number of therapy sessions (range 17-399)	192.9 (88.9)
Psychotherapy (%)	16
Treatment length (0.8-8.3 yrs.)	2.4 ( 1.9)
Number of therapy sessions (range 30-200)	78.3 (40.5)
Drop-outs (%)	17.5

### Status before treatment

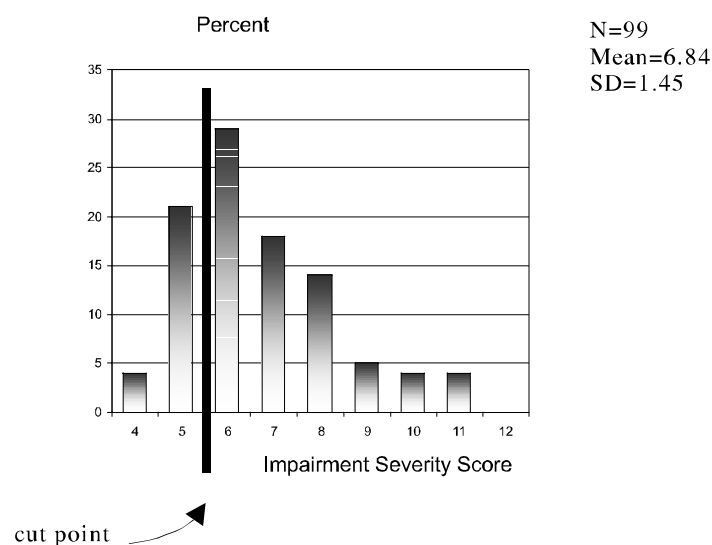
Table 5 gives information concerning the principal ICD-10 diagnoses of the follow-up sample. A third (34%) of the patients had had symptoms for more than 10 years; 17% had a personality disorder and 46% were classified as affective disorders according to ICD-10.

In 96% of the patients psychotherapy was necessary because disturbance of emotional, psychosocial and physical functioning was above the clinical cut-point. The mean impairment severity score (BSS) for the total sample was 6.8. The clinical cut-off point for this measure is 5.0 or above (Schepank, 1987, 1994). Figure 1 shows the distribution of BSS Impairment severity score prior to therapy and indicates that a substantial proportion of the sample were very severely handicapped, normally warranting hospitalisation or partial hospitalisation (score of 9 or above).

*Table 5: ICD-10 Classification prior to treatment (retrospective expert rating n=100 main groups only)*

		n	%
<b>F3 Affective disorders</b>	F31 bipolar affective disorder	1	1.0
	F32 depressive episode	13	13.0
	F33 recurrent depressive episode	13	13.0
	F34 cyclothymia	19	19.0
<b>F4 Neurotic and somatoform disorders</b>	F40 phobic disorder	4	4.0
	F41 anxiety disorder	10	10.0
	F42 compulsion disorder	3	3.0
	F43 stress reaction	3	3.0
	F45 somatoform disorder	8	8.0
<b>F5 Behavioural disturbance with physical symptoms</b>	F50 eating disorder	3	3.0
	F52 sexual dysfunction	3	3.0
<b>F6 Personality disorders</b>	F60 specific personality disorder	17	17.0
	F61 complex or other personality disorder	1	1.0
	F63 abnormal habits	2	2.0

*Figure 1: Total mean of impacts on emotional, psychosocial and physical functioning prior to psychotherapy.*



### Self-assessment of the patients at follow-up

Compared with their state before therapy, 6 years after the termination of treatment 70-94% of the former patients reported good to very good improvements with respect to physical or psychological distress, general well-being, life satisfaction, job performance and partner and family relations as well as social functioning. The distribution of some responses are presented in Table 5.

*Table 5: Global self reports of the patients at follow-up compared with presentation prior to therapy*

	n	Better %	Unchanged %	Deteriorated %
How did the problems, which brought you into treatment, develop?	111	93	6	1
How do you see your emotional condition today?	111	94	5	1
How do you compare your physical health status to that before treatment?	111	66	24	10
How did the physical problems, which brought you into psychotherapy, develop?	63	83	10	7
Compared to pre-therapy, how satisfied are you with your partnership today?	80	74	19	7
Compared to pre-therapy, how satisfied are you with your job conditions?	111	75	17	8

### Global health-state

The self reported global health state of the patients at follow-up was compared with a representative randomly assigned calibration sample drawn from a “normal” population (Gerdes & Jäckel, 1992) adapted to the study with regard to sex and age. Overall, 88% of the follow-up sample’s ratings fell within the 75th percentile of the reference sample, indicating that 88% of this study’s sample’s global health state could be seen as “normal health” as rated by 75% of the calibration sample.

### Clinical significance of global well-being

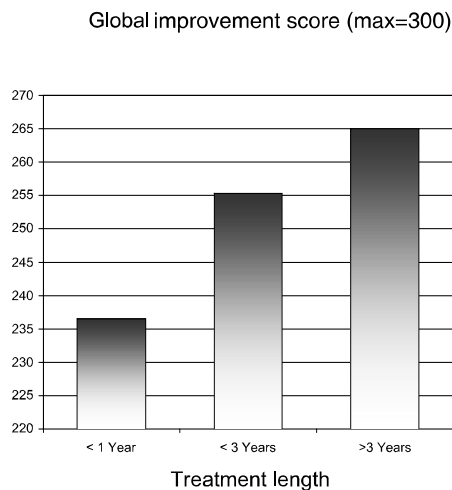
Global well-being was assessed by a 6 point Likert-scale (from very poor to very good). Of 60.4% (n=67) of patients reporting their well-being as very poor prior to therapy, 86.6% (n=56) rated their global well-being at follow-up (6 years after termination of psychotherapy) as very good, good or moderate. This indicates improvement in global well-being long after the termination of treatment. These results have been confirmed by the “Consumer’s Report-Study” by Seligman (1995).

### Relation between global success and treatment length

The addition of 3 total scores (ranging from 0 to 100) of different self reported global ratings (degree of improvement of the complaints leading to need for psychotherapy, how much psychotherapy helped the patient, satisfaction with actual psychological and emotional state) created a global variable of therapy success. Figure 2 shows the relationship of therapy success to treatment length ( $p < 0.05$ ), indicating the longer the treatment, the better the treatment success 6 years after termination of psychotherapy.

With regard to this criterion, long-term psychotherapy was more successful than short-time psychotherapy. Similar results were found by Seligman (1995) and Sandell (1996).

**Figure 2: Treatment length and global therapy success (improvement-score composed of the addition of 3 different global self-assessments of success)**



### The global assessment by former therapists

The global assessment by former therapists of the patients' state at the end of therapy shows a comparatively good agreement in terms of distribution with the patients' own assessment at the time of follow-up 6 years after the end of therapy (therapist: 64.9% good, 29.7% moderate, 5.4% unchanged or deteriorated overall state; patients: 70.3% good, 22.5% moderate, 7.2% unchanged or deteriorated).

### Results of psychometric test examinations at follow-up

**SCL-90R:** On standardised psychometric tests of state of health at follow-up, the sample tested lies within the range of healthy standard random samples and compares favourably with other clinical groups with respect to the relevant alteration qualities of symptoms. Figures 3a & b show the means of the 9 subscales and global severity scores on the SCL-90R for the study sample compared with relevant standardisation samples.

Figure 3a: Mean SCL-90-R-Scales on follow-up compared to standardisation samples

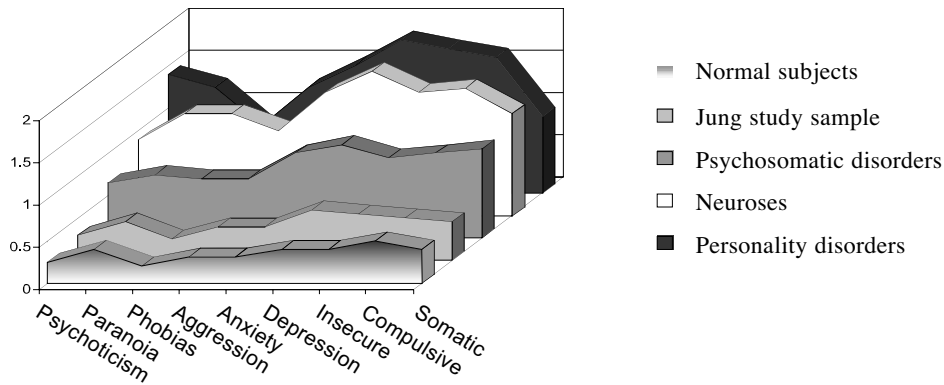
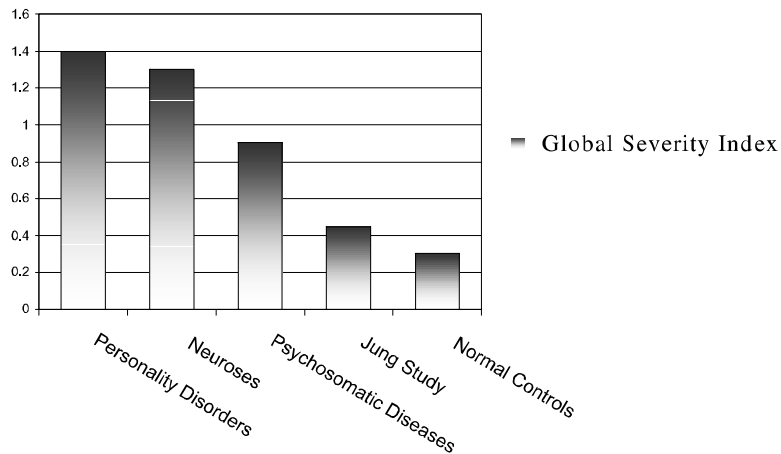


Figure 3b: Mean SCL-90-R-Global Severity Index on follow-up compared to standardisation samples



The global severity scores and the sub-scale scores of the Jung Study sample indicates that 6 years after treatment this group with a relatively severe set of diagnoses pre-therapy were quite well-adjusted on all scales of psychopathology and more like the normal comparison group than any of the clinical groups with which they shared diagnoses prior to therapy.

### Gießen personality test:

Standardised for sex and age, the Gießen test scales (T-values) range within the calibration values of two SD's from 50, for normal sample. Clinically significant disturbance is indicated by deviations greater than two SDs from the mid-point of 50. The results obtained from the Jungian Study follow-up indicate that the means of these subjects fell within the normal range on all scales.

**Table 6: Mean values on the Gießen Personality Test for the Jungian Study sample**

	Mean (N=11)	Std Dev
Dominance	44.23	9.68
Social resonance	46.83	9.81
Control	51.05	9.14
“Permeability”	51.27	11.40
Social potency	51.84	8.70
Basic mood	58.51	10.18

### Changes in experience and behaviour (VEV)

A questionnaire measure of change (VEV), covering a range of behavioural and subjective items, was administered on follow-up. On this scale of “Change in Experience and Behavior” (VEV), the test subjects showed significant improvements in various areas of life ( $p < 0.01$ ) compared to the calibrated random sample. Compared to a one year follow-up of another clinical sample treated with inpatient cognitive behavioural therapy, there are no marked differences (Table 7). Both treatments appear to bring about positive change in about three quarters of a clinical sample.

**Table 7: Results for VEV questionnaire of Change in Experience and Behavior: Comparison of the Jungian follow-up sample (N=111) with a 1-year follow-up sample of inpatient cognitive behavioural treatment (N=142, Zielke, 1993).**

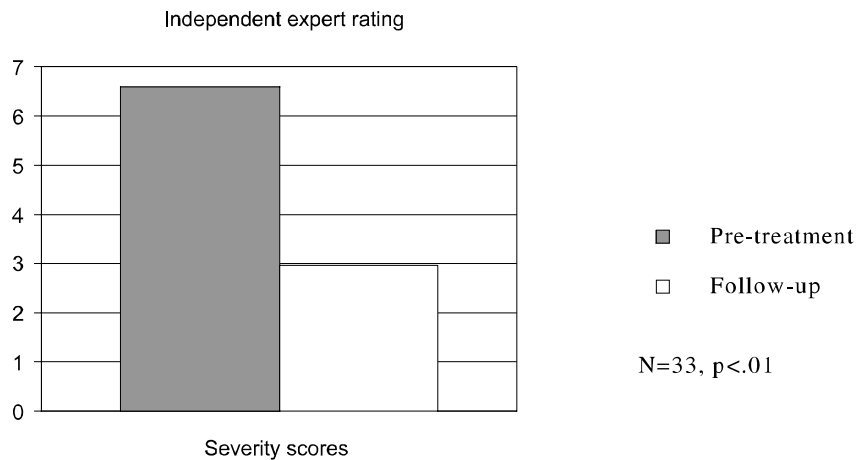
	Jungian sample (N=111)		CBT sample (N=142)	
	N	%	N	%
Positive change (>187)	78	70.3	105	73.9
Moderate change (value between >150 and <187)	31	27.9	34	24.0
Negative change (value<150)	2	1.8	3	2.1

### Change of the impairment severity score (BBS)

In the comparative pre- and post-treatment expert rating of the actual state of disturbance by clinical interviews during the follow-up, an examination of a sub-sample of  $n=33$  patients (regional sample of Berlin) by independent raters showed a significant ( $p < 0.01$ ) decrease of the severity of the disturbance on the Schepank Impairment Severity Index. The effect size was 2.1 (see Figure 4) which is large, although in this instance the comparison was not a control group, which may explain why the ES is larger than usual.



Figure 4: Impairment severity score (BBS) prior to and post psychotherapy (follow-up)

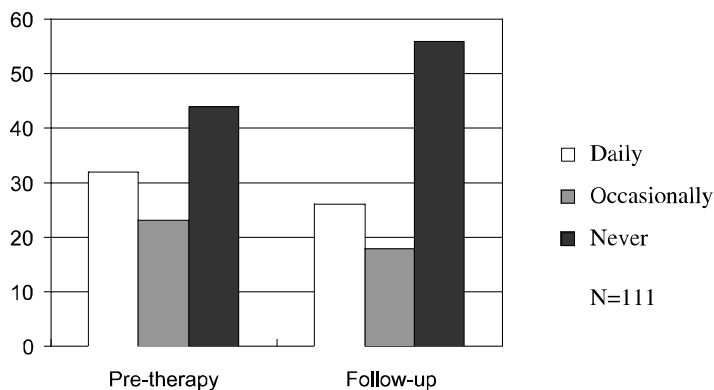


### Health care utilisation

Health care utilisation was looked at in a number of ways. Psychotropic drug use significantly reduced over the course of the post-therapy period (Figure 5).

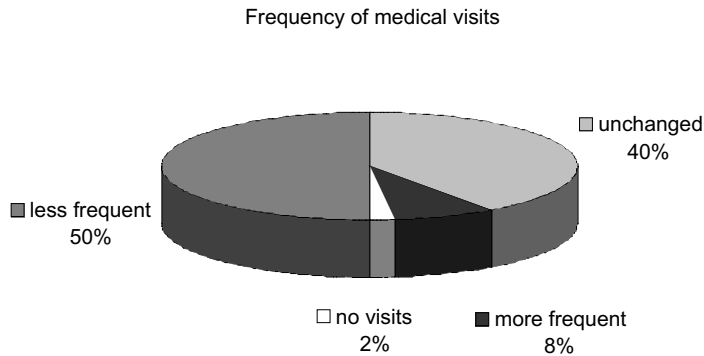
An increased percentage of the patients no longer use psychotropic drugs compared to pre-psychotherapy and the proportion of those taking medication regularly reduced most substantially.

Figure 5: Intake of psychotropic drugs prior to psychotherapy and at follow-up



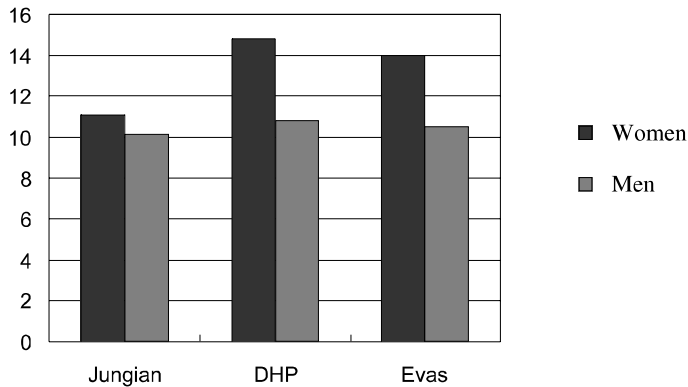
Neurotic and personality disordered patients often use resources by presenting at primary care physicians for physical symptoms or support. More than half of the patients reported a substantial reduction in the frequency of doctor visits compared with the frequency of visits prior to psychotherapy. Only 8.1% had a higher frequency and nearly 40% reported an unchanged frequency in the year before the follow-up.

**Figure 6: Frequency of medical visits (comparison of the year prior to psychotherapy and the year prior to follow-up)**



The frequency of medical visits in the year before follow-up were substantially below the frequencies that would be expected on the basis of two representative studies of private practice patients (Hoffmeister, 1988; Schacht, 1989) (Figure 7).

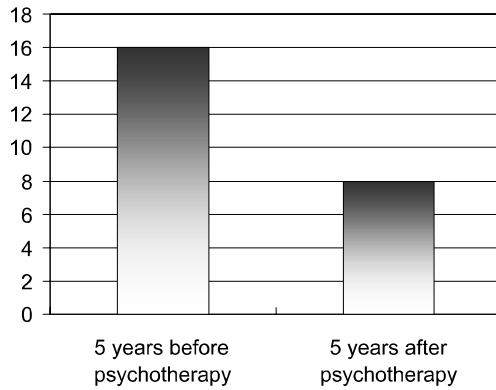
**Figure 7: Frequency of medical visits in the past year compared with two German studies of general practice attendance (DHP and Evas-Study)**



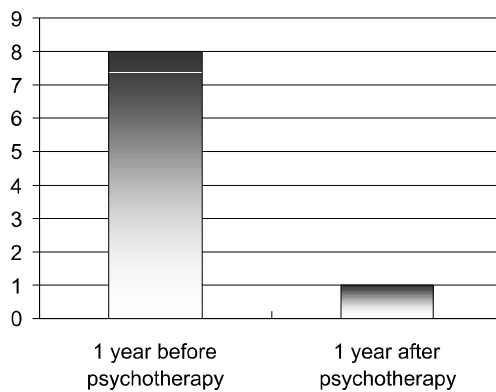
Perhaps the most meaningful index of resource use is days lost from work due to illness (sickness absence) and cost of hospitalisation. An examination of the data recorded by third party payers (national insurers) before and after treatment revealed a substantial reduction of working days lost due to sickness. Sickness absence dropped by 50% (from an average of 16 to 8 days). At the same time an even greater reduction in hospitalisation days was observed. The reduction was 87.5%, from an average of 8 days per year before therapy to an average of 1 day per year after (Figures 8 and 9).

Generally, a reduction of sickness absence and hospitalisation days after psychotherapy can be regarded as an important indirect measure of therapy success. However, in order to assess the number of days of sickness using insurance records, the study participants had to be continuously employed. Part of the sample therefore could not be included in this analysis. Thus the sample was reduced from 111 to 47 patients for analysis of sickness absence and to 58 patients for days hospitalisation. This detracts from the persuasiveness of the findings.

**Figure 8: Mean number of work days lost per annum due to sickness 5 years before and five years after psychotherapy**



**Fig. 9: Mean number of days of hospitalisation (one year before and after psychotherapy)**



## Conclusion and evaluation

The effectiveness of Jungian psychoanalysis and psychotherapy was determined on the basis of a number of different perspectives and success criteria in a selected and not necessarily representative sample. Three quarters (76%) of the patients examined had Jungian psychoanalysis so that empirical proof of the effectiveness of long-term analyses could be examined after an average of 6 years. Even after 5 years, the improvement in the patients' state of health and attitude toward the disease resulted in a measurable reduction of health insurance claims (work days lost due to sickness, hospitalisation days, doctor's visits and psychotropic drug intake) in a significant number of the patients treated. This suggests that psychoanalysis is related to a reduction of health care and related costs. Cost effectiveness aspects increasingly play an important role as outcome criteria for health care purchasers and providers. This retrospective study demonstrated that psychoanalysis also has long-lasting effects on the patients' psychological wellbeing. There are numerous major methodological problems with these data including the lack of comparison sample, the non-representativeness of the sample, the unreliability of pre-treatment data, the high rate of attrition, the need for multi-variate statistics, and uncertainty about the actual treatments offered. However, limitations of design and methods aside, the data here provide some convincing arguments for the effectiveness of psychoanalysis. This is encouraging as the design could be readily replicated on other patient populations.