
On the effectiveness and efficacy of outpatient (Jungian) psychoanalysis and psychotherapy - a catamnestic study

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on empirical psychotherapy research in analytical psychology

Despite a great number of studies on the effectiveness of psychodynamic psychotherapy, there are so far no studies on the efficacy and effectiveness of long-term psychoanalysis performed in a naturalistic design that include psychoanalysts and psychotherapists in private practice. Background of this are the long duration of prospective case studies and the high costs involved as well as methodological difficulties in the field of private treatment practice.

Psychoanalysis and psychoanalytic psychotherapy increasingly come under pressure to offer convincing evidence of its effectiveness. The presented study is an effort to close this gap.

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Objectives

1. Proving the effectivity of long-term analyses > 100 sessions in the treatment practice and examining the stability of treatment results by a follow-up study 6 years after the end of therapy.
2. Evaluating aspects of cost-effectiveness.
3. Implementing research strategies in the area of outpatient psychotherapy care as a measure for quality assurance.

Methods and design

All members of the German Society for Analytical Psychology, the umbrella organization of Jungian psychoanalysts (DGAP) were asked to participate in this retrospective study. 78% answered our request, 24.6% participated (Tab. 1, 2).

Tab. 1 Therapists reasons to decline

Total number of the members DGAP	N (%) 223 (100)
(adult psychoanalysts) invited to take part in the study	
No reaction	49 (22.0)
Participation refused	48 (21.5)
Therapists consenting participation for the first, later refused or they did not contact their finished patients	32 (14.4)

Therapists with documented agreement of the patients to participate and complete follow-up assessment of this patients	35 (15.7)
no finished cases in 1987/88	59 (26.4)

Tab. 2 Selection of included therapists and patients

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

On the basis of their notes, the participating therapists in private practice documented all their cases (including dropouts) finished in 1987 and 1988 with 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 applications for payment of the former therapists, in a consensus rating a retrospective ICD-10 classification was carried out by two independent raters and 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 finished either psychoanalysis or long-term-psychotherapy in 1987 or 1988 and who agreed to take part could be included in the study sending back a complete follow-up questionnaire consisting different self-assessments of life satisfaction, well-being, social functioning, personality traits, interpersonal problems, self rated health care utilization and some psychometric tests (SCL-90R, VEV, Gießen-Test). In 33 cases (regional sample of Berlin) a follow-up interview was carried out and an actual health status was rated by two independent psychologists trained in psychoanalysis.

Additionally objective data on utilization of health care services were recorded from health insurance companies (number of work disability days and inpatient hospital days) 5 years before and after therapy. In this comparison only those cases were included with complete pre and post data. Thus, for this calculation the sample was reduced to 47 (work disability) respective 58 (hospital days). Both subgroups did not differ from the entire sample in sociodemographic data, pre treatment characteristics or criteria of treatment success.

The selection of the follow-up sample was controlled by comparing the included patients with the

total of 358 therapist documented therapies finished in 1987 and 1988 with respect to central sociodemographic and clinical characteristics. The selection of therapists participating in the study was controlled by an independent survey of all DGAP members with respect to central therapist's and setting characteristics. There was no difference in both comparisons.

Results

1. patients

The mean age at follow-up was 44.5 yrs. (range 27-69), more than 2/3 (69.1%) were women. Compared to the reference sample in the follow-up sample was found a greater rate of unmarried (26% vs. 8%) or separated patients, a higher education level, in the professional status less workers (4% vs 15%) and a higher level of employees (62% vs 13%).

2. Treatment characteristics (Tab. 3)

The mean catamnestic follow-up time was nearly 6 years. Together with an average treatment length only less than 3 years the patients were at follow-up about 10 years older since the beginning of therapy. 76% had psychoanalysis with an average of 193 sessions and a mean duration of 3 years; 63% of the psychoanalytic patients had more than 100 sessions. 17.5% of the included patients were drop-outs finishing treatment at different moments of therapy. We assess this as a "variable of confidence" indicating that the treating therapists sent us not only their successful patients.

Tab. 3 Treatment characteristics

Follow-up sample n=111	mean	SD
Age at follow-up 1994	44.5	(4.8)
Age at begin of treatment (yrs.)	35.0	(8.8)
Age at the end of treatment	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)

Type of therapy

Psychoanalysis (76%)

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	

3. Status before treatment 34% of the patients have had symptoms for more than 10 years. In 17% was found a personality disorder and 46% were classified as affective disorders according to ICD-10. (Tab. 4)

Tab. 4 ICD-10 Classification prior to treatment

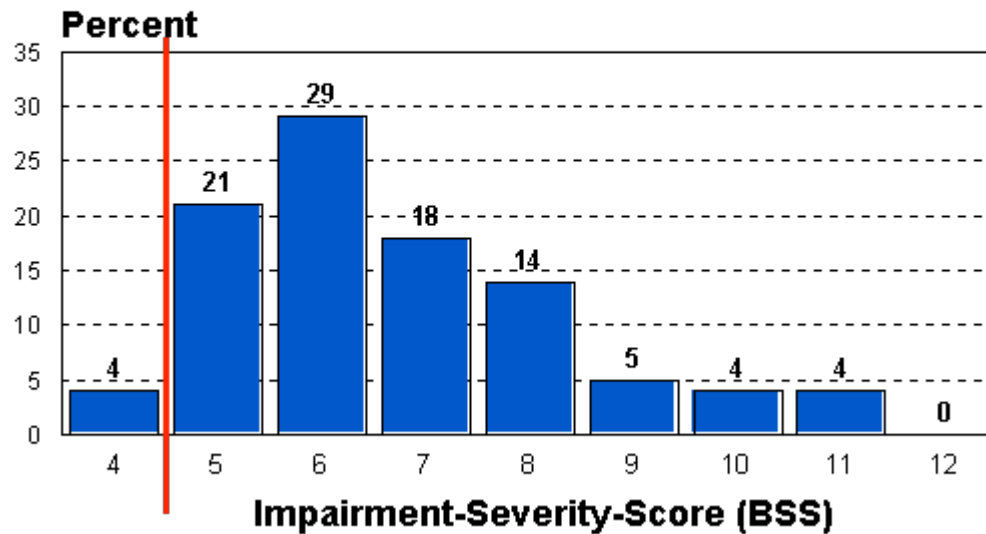
retrospective expertrating n=100**main groups only**

		n	%
F3 Affective disorders	F31 bipolar. affect. disease	1	1.0
	F32 depressive episode	13	13.0
	F33 recurrent depress. episode	13	13.0
	F34 cyclothymia	19	19.0
F4 Neurotic and somatoforme disorders	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 somatoforme disorder	8	8.0
F5 Behavioral disturbance with physical symptoms	F50 eating disorder	3	3.0
	F52 sexual dysfunction	3	3.0
F6 Personality disorders	F60 specific personality disorder	17	17.0
	F61 complex or other personality disorder	1	1.0
	F63 abnormal habits	2	2.0

In 96% of the patients psychotherapy was necessary because of disturbance of emotional, psychosocial and physical functioning (Total impairment severity score BSS 6.8- the cut-off point for clinical relevance of BSS is determined at 5.0- ; Schepank 1987, 1994). Fig.1 show the distribution of BSS.

Total mean of impacts on emotional, psychosocial and physical functioning prior to psychotherapy

Beschwerden-Schwere-Score: BSS Impairment-Severity-Score, Schepank 1994



N=99, Mean=6.84 (SD=1.45)

Fig. 1

4. Self-assessment of the patients at follow-up

Compared with the state before therapy 70-94% of the former patients reported 6 years after the termination of treatment 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. Some results are presented in Tab. 5

Tab. 5 Global self reports of the patients at follow-up

compared prior to therapy

	n	better %	unchanged %	deteriorated %
How developed problems indicating treatment ?	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 developed the physical problems indicating psychotherapy ?	63	83	10	7
Compared: how satisfied are you with your partnership today ?	80	74	19	7
Compared: how satisfied are you with your job conditions ?	111	75	17	8
		good to excellent	moderate	poor
How about your actual health state ?	111	51	37	12

• Global health-state

Comparing the self reported global health state of the patients at follow-up with a representative randomly assigned calibration sample of a "normal population" (Gerdes and Jäckel 1992) adapted to our study with regard to sex and age, 88% of the follow-up sample range within the 75th percentile

of the reference sample indicating that 88% of our sample reported their global health state as 75% of the calibration sample as "normal health".

• Clinical significance of global well-being

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

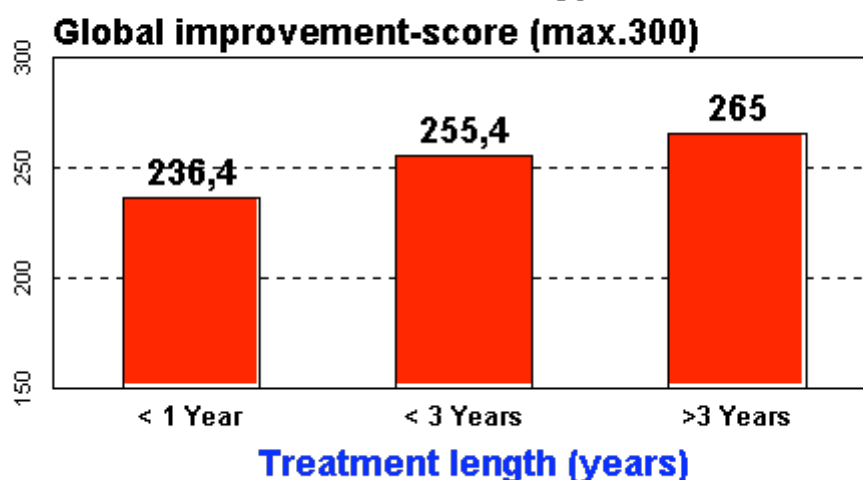
• Relation between global success and treatment length

The addition of 3 total mean scores (ranging from 0 to 100) of different self reported global ratings (degree of improvement of the complaints indicating psychotherapy, how much psychotherapy helped the patient, satisfaction with the actual psychological and emotional state) created a global variable of therapy success. Fig. 2 shows a relation of therapy success with the 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 criteria long-term psychotherapy was more successful than short-time psychotherapy. Similar results were found by Seligman (1995) and Sandell (1996).

Treatment length and global therapy success

Improvement- score composed by addition of 3 different global self-assessments of therapy success



$p<0.05$

Fig. 2

5. The global assessment by former therapists of the patients' state at the end of therapy shows a comparatively good agreement 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).

6. Results of psychometric test examinations at follow-up

- **SCL-90R:** In the standardized **psychometric test examinations** of the actual state of health at follow-up, the sample tested lies within the range of healthy standard random samples and compared to other clinical groups with respect to the relevant alteration qualities of symptoms Fig. 3 shows the total means of the 9 subscales of SCL-90R.

SCL-90-R-Scales and global mean value

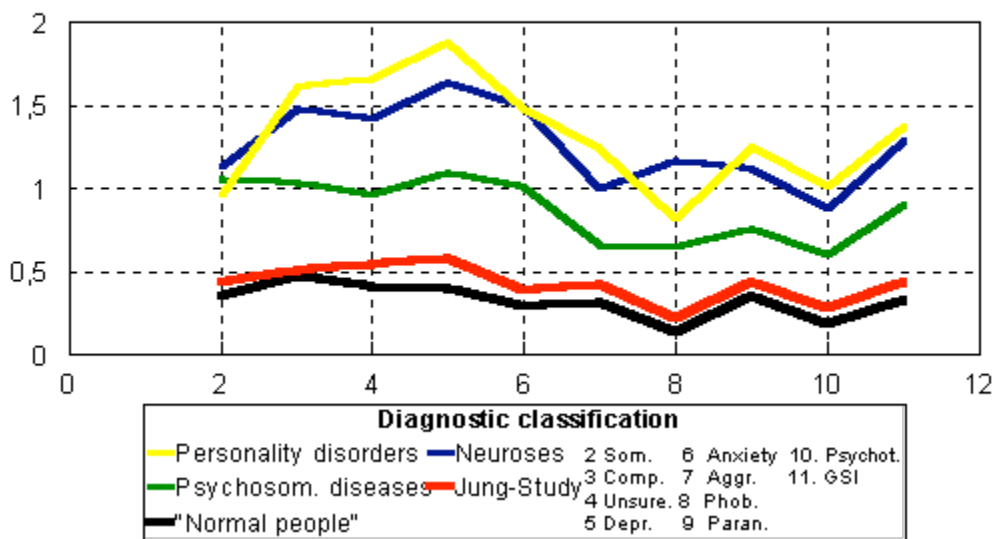


Fig.3

- **Gießen-test (personality):** The standardized (sex, age) total means of the Gießen test scales (T-values) range within the calibration values (two SD's from 50) indicating absence of clinical relevant disturbance. (Tab. 6)

Tab. 6 Gießen-Test (T-values)

	Mean	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

• VEV :

Regarding the "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 an other clinical sample treated with an inpatient cognitive behavior therapy after a one year follow-up there are no marked differences (Tab. 7).

Tab. 7 VEV-questionnaire of Change in Experience and Behavior:

comparison of the follow-up sample (N=111) with a 1- year follow-up-sample of an inpatient cognitive behavioral treatment (N=142, Zielke 1993)

follow-up n=111 comparison-group n=142

N	%	N	%
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positive change (>187)	78	70.3	105	73.9
(value>187)				

Indifferent or moderate change (>150)	31	27.9	34	24.0
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(value between >150 and <187

negative change (< 150)	2	1.8	3	2.1
(value<150)				

M	SD	p	M	SD	p
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Total mean	200.4	24.3	p<0.01	210.7	32.1	p<0.01
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7. Change of the Impairment severity score (BSS):

In the comparative pre- and post-expert rating of the actual state of the disease by clinical interviews during the follow-up, a partial sample of n=33 patients (regional sample of Berlin) by independent raters showed a significant ($p<0.01$) decrease of the severity of the disease (Impairment Severity Index according to Schepank). The effect size was 2.1 (Fig.4)

Impairment severity score (BSS) prior and post psychotherapy (follow-up)

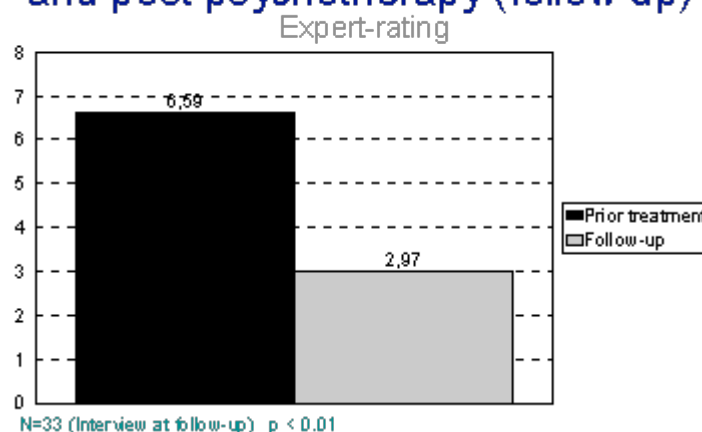


Fig.4

8. Health care utilization:

• Drug-intake (Fig. 5):

A high percentage of the patients indicate a remarkable reduction in drug-intake compared to the

status before psychotherapy.

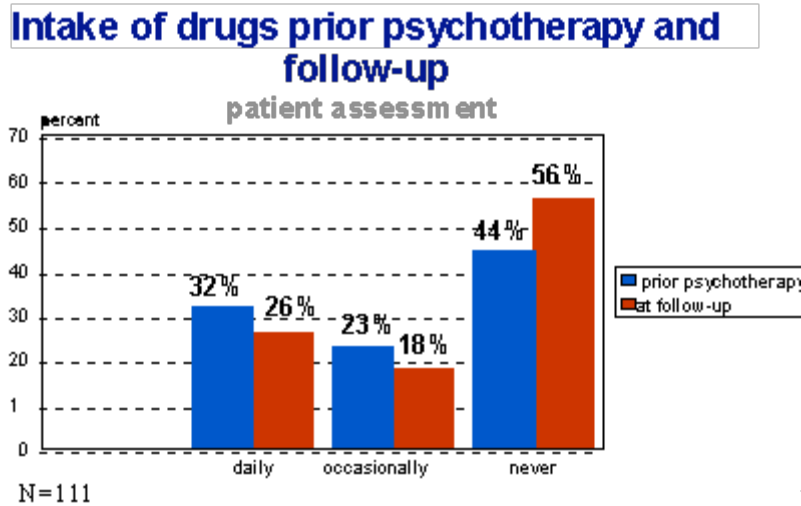


Fig. 5

• **Frequency of doctor visits (Fig. 6):**

More than half of the patients reported a substantial reduction in the frequency of doctor visits compared prior to psychotherapy. 8.1% had a higher frequency and nearly 40% reported an unchanged frequency to the year before follow-up.

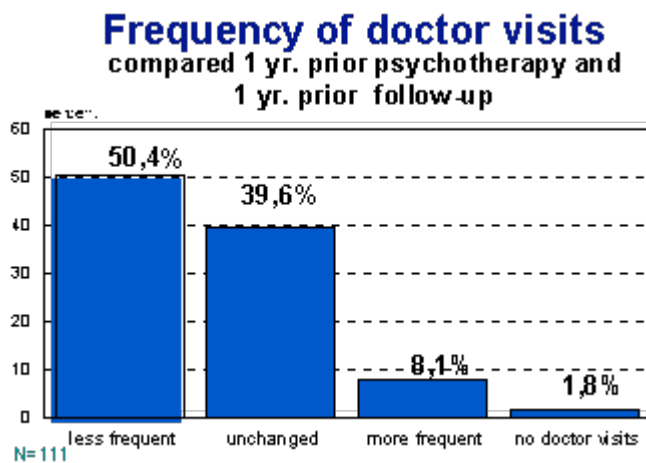
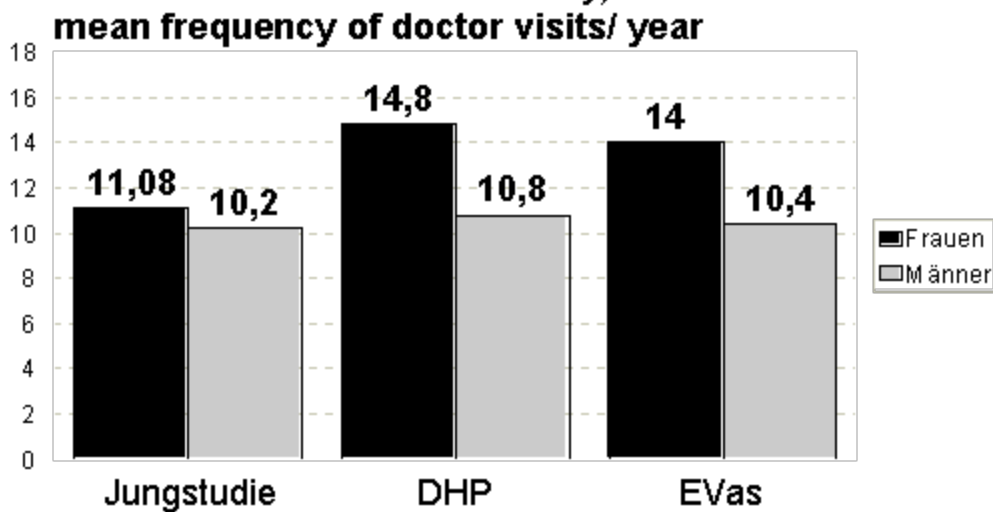


Fig. 6

The mean frequency of doctor-visits in the year before follow-up range within the mean frequencies of two representative studies from private praxis (Hoffmeister 1988, Schacht 1989) (Fig. 7).

Frequency of doctor visits in the past year compared with two representative studies (DHP and EVas-Study)



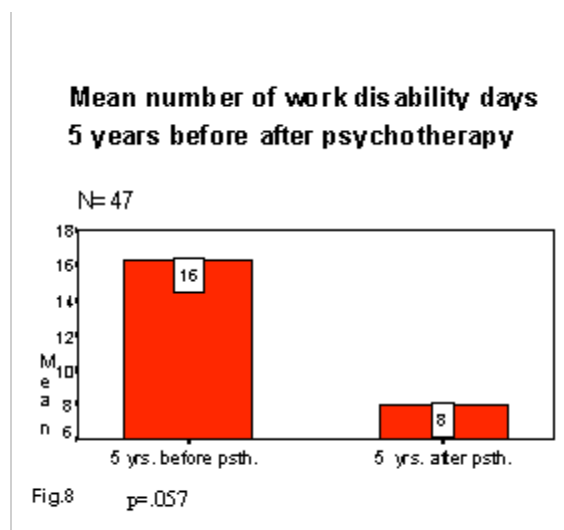
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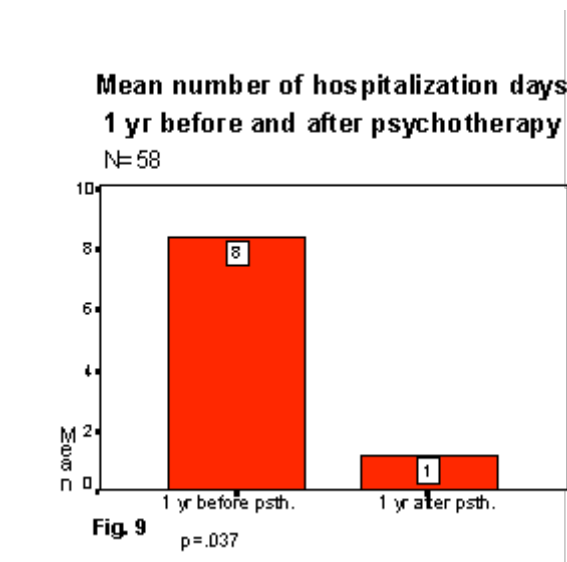
Fig. 7

- **Work disability and hospitalization days (Fig. 8, 9):**

A comparison of the data recorded by cost carriers 5 years and 1 year before and after treatment showed a reduction of objective work disability of 50% from 16 to 8 days and a reduction in hospitalization days of 87.5% from 8 to 1 day in the year before and after therapy (Fig. 8 and 9).

Generally, a reduction of work disability and hospitalization days after treatment can be regarded as an indirect measure of therapy success. In order to assess the number of work disability days, the study participants had to be continuously employed. A part of the sample is therefore not applicable. Thus the sample was reduced from 111 to 47 patients for work disability days and to 58 patients for hospitalization days.





Conclusion

The effectiveness of Jungian psychoanalysis and psychotherapy was determined on the basis of 5 different perspectives and different success criteria. 76% of the patients examined had had psychoanalysis so that empirical proof of the effectiveness of long-term analyses could be demonstrated after an average of 6 years. Even after 5 years, the improvement in the patients' state of health and attitude toward the disease still resulted in a markedly constant reduction of health insurance claims (work disability days, hospitalization days, doctor's visits and drug intake) in a large number of the patients treated and thus in a reduction of costs. Cost effectiveness aspects increasingly play an important role as success criteria especially for health administrations. As we have demonstrated in this retrospective study, psychotherapy apparently also has a long-lasting effect on the patients' health care utilization. The complete recording of these data (in Germany) requires great care and a methodologically confirmed approach toward the interpretation of these data (Richter et al. 1994). However, when these prerequisites are provided, convincing arguments for the effectiveness of psychotherapy or psychoanalysis together with the clinical results can be found even for a retrospective design.

References

Gerdes N, Jäckel WH: "Indikatoren des Reha-Status (Ires)" - Ein Patientenfragebogen zur Beurteilung von Rehabilitationsbedürftigkeit und -erfolg. *Rehabilitation* 31, 73-79 (1992).

Hoffmeister J, Hoeltz J, Schön D, Schröder E, Güther B: Nationaler Untersuchungs-Survey und regionale Untersuchungs-Surveys der DHP (Deutsche Herz-Kreislauf-Präventionsstudie). *DHP Forum* 3. Heft1 (1988).

Richter, R, Hartmann, A, Meyer AE, Rüger, U: Die Kränksten gehen in eine psychoanalytische Behandlung? - Kritische Anmerkung zu einem Artikel in *Report Psychologie. Zsch. psychosom. Med.* 40, 41-51 (1994).

Sandell R, Blomberg J, Lazar A: Repeated follow-up of long-term psychotherapy and psychoanalysis. Paper presented at Stuttgart Kolleg: "Measuring progress in long-term psychodynamic psychotherapy", at Forschungsstelle für Psychotherapie, Stuttgart, February, 1996.

Schacht E, Schwartz FW, Kerek-Bodden HE: Die EVaS-Studie. Eine Erhebung über die ambulante medizinische Versorgung in der BRD. Zentralinstitut für die kassenärztliche Versorgung, Köln, (1989)

Schepank, H: Psychogene Erkrankungen der Stadtbevölkerung - eine epidemiologische Studie in Mannheim. Springer, Heidelberg, New York, London, Paris, Tokyo (1987).

Schepank, H: Der Beeinträchtigungsschwere-score (BSS) für psychogene Erkrankungen. Beltz, Weinheim (1994).

Seligman MEP: The Effectiveness of Psychotherapy- The Consumers Reports Study. American Psychologist, 50, 965-974 (1995).