EVALUATION OF CAT OUTCOME IN PATIENTS WITH DEPRESSIVE DISORDERS

Garyfallos G., Adamopoulou A., Karastergiou A., Voikli M., Zlatanos D., Alektoridi P., Pantazi A.

Community Mental Health Center of Northwestern District. Thessaloniki, Greece.

Objective: To investigate the outcome of Cognitive Analytic Therapy (CAT), a type of brief psychotherapy, in a sample of Greek psychiatric outpatients with DSM-III-R/DSM-IV diagnoses of depressive disorders.

Method: The Minnesota Multiphasic Personality Inventory (MMPI), the Eysenck Personality Questionnaire (EPQ), the Beck Depression Inventory (BDI) and the Post-therapy Questionnaire (PtQ) were used as evaluation instruments. The patients were evaluated in two follow ups, 2 months and 1 year after therapy termination.

Results: On the 2-month follow-up 101 patients showed a statistically significant improvement in comparison to the intake time results on all but two (Ma, Mf) clinical scales, on the sum of the clinical scales and on some of the research scales of the MMPI. Similarly, 74 patients who completed the EPQ on both occasions manifested a significant improvement on scales N (Neuroticism) and E (Extroversion). In addition, the 117 patients who completed the BDI showed a significant decrease on the BDI score at the follow-up time. On the 1-year follow-up, according to the results of MMPI, EPQ, BDI and PtQ, the patients not only maintained the achieved improvement but continued to improve further on. It is worthwhile to mention that in the small sample of patients (17 out of 164) who were treated additionally with antidepressants the drop out rate was significantly higher (47%) than in the patients who were treated with CAT only (13%).

Conclusions: The above results: 1) Indicate that CAT is an effective brief psychotherapeutic technique for outpatients with various depressive disorders. 2) Are important, especially in the present time, where pharmacotherapy is considered as the exclusive treatment choice of depressive disorders.

Key words: depressive disorders, psychotherapy

Psychotherapy, in general, is an effective therapeutic approach which, as has been demonstrated, has a positive effect on patients[1,2]. During the last decades there are numerous studies that attest to the efficacy of psychotherapy[3].

A significant number of patients attending outpatient psychiatric services receive a diagnosis of a depressive disorder. Depressive disorders as well as anxiety disorders are the most frequent among psychiatric outpatients[4]. In recent times, with the development of novel effective and safe antidepressants, pharmacotherapy is the treatment choice for depressive disorders. However, there are studies that support that a psychotherapeutic approach could be at least as effective as antidepressant medication in depression[5]. Thus, it has been fount that cognitive psychotherapy shows equal effectiveness compared to imipramine[6], nortriptyline[7] or amitriptyline[8] and that imipramine is not superior compared to interpersonal therapy[9]. In a recent study, in a sizeable sample of patients, Keller et. al.[10] reported that the overall rate of response (both remission and satisfactory response) was the same (48%) in patients treated with nefazodone and those treated with cognitive-behavioral analysis, a brief psychotherapeutic technique with features of cognitive - behavior and interpersonal psychotherapy. However, the psychotherapy group manifested higher rates of remission (33%) than the medication group (29%) (although this difference was not statistically significant).

Cognitive - Analytic Therapy (CAT) is a brief psychotherapy, developed in the late 70's by Anthony Ryle [11-13] which integrates in theory and practice concepts and methods from cognitive, psychoanalytic, behavioral and other approaches. CAT is delivered in a 16-session format in the majority of cases. There are studies showing the effectiveness of CAT in patients with various psychiatric disorders[14-17].

The present study aims to investigate the outcome of CAT in a sample of psychiatric outpatients with a diagnosis of a depressive disorder.

METHOD

The study was carried out in the Community Mental Health Center of Northwestern District of Thessaloniki. The Center has a standard intake procedure including diagnostic interview and completion of various psychometric tests followed by a disposition conference where diagnosis is established and the treatment modality is decided. The diagnoses are made according to DSM-III-R/IV criteria. All the scientific personnel of the center who are involved in diagnostic interviews are trained and experienced in the use of this diagnostic system.

The sample of the study consisted of patients who received a diagnosis of major depression (of mild or moderate severity), dysthymia or depression NOS and for whom it has been decided to be treated with CAT alone, or in combination with antidepressants. These patients were also assessed again 2 months and 1 year after termination of the therapy. At

follow up: 1) They had an interview with their therapists, during which the therapist and the patient completed the Post-therapy Questionnaire (PtQ)[18] specifically designed for CAT post therapy evaluation. The questions tested in the present study were: a) Could the patient remember what problems brought him/her to therapy? b) What was the new understanding he/she gained during therapy i.e reformulation? c) Had this understanding been helpful? These questions were scored from 0 = no correspondance with problems / reformulation or unhelpful to 3 = full correspondance or very helpful d) Had they find helpful or not some basic aspects of CAT such as psychotherapy file, self-monitoring, diary, rating sheets, relationship with the therapist, the fact that therapy was time limited? These questions were scored from 1 = very unhelpful to 5 = very helpful. e) Did they believe that they needed further therapy or not. 2) Then the patients completed the Beck Depression Inventory (BDI), the Minnesota Multiphasic Personality Inventory (MMPI) and the Eysenck Personality Questionnaire (EPQ) if they had completed the same tests at intake. All the tests were adapted for use in Greece, the BDI in 1983[19], the MMPI in 1980[20] and the EPQ in 1977[21]. For the completion of the MMPI a ninth grade education is necessary.

RESULTS

A total sample of 185 patients with diagnosis of major depression (mild or moderate), dysthymia, "double depression" or depression NOS were assigned to CAT from June 1989 to December 2000. Twenty one of them (11%) did not turn up for the first session. In 17 (10,4%) of the 164 patients who started CAT, psychotherapy was combined with antidepressant medication. Twenty seven patients (16%) dropped out. The drop out rate was significantly higher in the group of patients who received additional medication 47% (8 out of 17) than in the group of patients treated with CAT only 13% (19 out of 147) ($X2 = 12.91$, $df = 1$, $p < 0.001$). From the 137 patients who completed therapy 117 (85%) attended the first i.e 2-month follow up. From 129 patients who should have come to the 1-year follow-up, 73 (57%) came and 56 (43%) did not. Thirty nine of them had attended the 2-month follow up and 17 had not. Thus, the percentage of patients who came to the first follow up but failed to attend the second was 35% (39 out of 112). Eighteen (15%) patients who came in the 2-month follow-up asked for further therapy and 12 (10%) received it. Seven of them had more CAT sessions while the remaining 5 were treated with pharmacotherapy and supportive psychotherapy. Three of them were previously receiving antidepressants during their CAT sessions and 2 were not.

The demographic characteristics of the 117 patients who attended the 2-month follow up are presented on Table 1 and their psychiatric diagnoses on Table 2. As it is seen the majority are women, married, with a high school education. Furthermore, 35% of them have an additional axis I diagnosis - mainly an anxiety disorder, (30%) - while more than half (55%) also have an axis II diagnosis mainly borderline and NOS personality disorder.

At the time of the 2-month follow up, the patients manifested a statistically significant improvement on BDI score compared to the intake (18.3 ± 8.7 vs 11.9 ± 9.6, $t = 10.32$, $df = 116$, $p < 0,001$, paired t-test). Similar results were revealed at the comparison of the intake and 1-year follow up BDI score (18.1 ± 9.2 vs 11.6 ± 9.9, $t = 8.84$, $df = 116$, $p < 0.001$), paired t-test) while there was no significant difference between the two follow ups (12.2 ± 9.7 vs 11.6 ± 9.9, $t = 1.43$, $df = 116$, $p < 0.001$, paired t-test).

Table 3 includes the MMPI T scores of those patients (N = 101) who had the appropriate level of education, completed the test and their tests were valid at the time of the intake and at the 2-month follow up. The MMPI scales are all the clinical scales and their sum, the validity scales K and L and some of the research scales such as A (Anxiety), Es (Ego Strength), Dy (Dependency), Mas (Manifest anxiety), Soc (Social maladjustment), Mor (Poor Moral), D1 (Subjective

Table 1. Demographic characteristics of the 2-month follow-up attenders (N = 117)

	-	%
Sex		
Male	24	21
Female	93	79
Age (years)	34.6 ± 8.1	
Education (years)	12.1 ± 4.1	
Marital status		
Single	41	35
Married	62	53
Divorced / widowed	14	12

Table 2. DSM-III-R / DSM-IV psychiatric diagnoses of the 2-month follow-up attenders (N = 117)

	-	%
Major depression	62	53
Dysthymia	27	23
Depression NOS	16	14
«Double depression»	12	10
Other Axis I	41	35
Anxiety disorders	36	30
Panic ± AGF	25	21
Somatoform	6	5
Other	2	<1
Axis II	64	55
Borderline	22	19
NOS	16	14
Obsessive - compulsive	12	10
Dependent	12	10
Histrionic	11	9

Depression), Dep (Depression). The Es scale is the only one from the clinical and research scales where a higher score means better psychological state. The patients manifested a statistically significant improvement in all but two (Mf, Ma) scales. Table 4 presents the MMPI T scores of the patients (N = 64) who attended the 1-year follow up compared to their intake scores. There was a significant improvement on the same scales as in the previous table. As seen on Table 5 the patients at the 1-year follow up achieved slightly better scores on the majority of the MMPI scales which reached statistical significance on scale Dy, compared to their scores at the 2-month follow up. There were not significant differences between the patients who attend the 2-month but failed to attend the 1-year, regarding their MMPI scores at the 2-month follow up ($p > 0,05$).

Similar to the MMPI results are the results of the EPQ (Tables 6,7,8). As seen, there is a significant improvement on scales N (Neuroticism) and E (Extroversion) at the 2-month follow up (Table 6) and 1-year follow up (Table 7) compared to the intake while the comparison between the two follow ups did not reveal any difference on any EPQ scale (Table 8). Table 9 depicts the scores on the questions of Post-therapy Questionnaire of the patients (N = 73) who came to the 1-year follow up compared to their scores at the 2-month follow up. At the 1-year follow up the patients significantly appreciated more how helpful was the new understanding and also the fact that therapy was time limited.

It is worthwhile to mention that the highest score on both follow ups is on the question "relationship to the therapist".

Finally, there were not significant differences between the patients who attended both follow ups and those who came to the 2-month but did not come to the 1-year regarding their PtQ scores at the 2-month follow up ($p > 0,05$).

DISCUSSION

The results of the present study indicate that in a public health service patients with "depressive" disorders show a considerable improvement after receiving CAT.

The proportion of patients who completed therapy (84%) is similar to the proportion we found in two previous studies i.e 87%[16] and 85,5%[17] and to that of an English study (82%)[15]. The sample of the above three studies consisted of patients with different psychiatric disorders, mainly depressive and anxiety disorders. The rate of follow up attendance i.e 85% the 2-month follow up and 57% the 1-year follow up is quite satisfactory and higher of that of the study by Dunn et. al.[15], who reported that 52% of patients attended a follow up 3 - 6 months after therapy termination. It has been supported that it is difficult to have high percentages of attendance for follow-ups at 4 months and beyond[22]. The failure to attend follow up could reflect a wish to move on after a difficult time or resentment at un unsuccessful intervention[15]. Against the

Table 3. MMPI T scores before CAT and at the time of 2-month follow-up (N = 101)

	Intake	2-month
Hs*	66.1 ± 11.5	56.8 ± 13.0
D*	69.6 ± 11.4	53.6 ± 12.5
Hy*	64.0 ± 10.5	55.8 ± 11.2
Pd*	58.9 ± 9.7	53.2 ± 7.8
Mf	48.7 ± 11.1	47.9 ± 10.1
Pa*	58.3 ± 10.1	50.1 ± 10.7
Pt*	64.4 ± 10.4	52.5 ± 12.1
Sc*	59.4 ± 11.0	50.4 ± 10.0
Ma	47.5 ± 8.8	49.1 ± 9.1
Si*	59.4 ± 11.6	50.2 ± 10.8
Sum*	596.4 ± 68.3	519.2 ± 64.6
A*	60.5 ± 9.6	50.2 ± 12.6
Es*	40.3 ± 9.9	50.2 ± 11.5
Dy*	62.7 ± 10.1	50.6 ± 12.7
Mas*	62.2 ± 9.4	52.3 ± 12.0
Soc*	59.8 ± 11.1	51.6 ± 10.6
Mor*	61.1 ± 10.4	51.5 ± 12.4
D1*	65.9 ± 11.3	52.3 ± 12.1
Dep*	60.8 ± 10.7	51.6 ± 12.0
K*	49.4 ± 9.5	56.0 ± 11.5
L	50.7 ± 9.6	51.7 ± 11.3

* $p < 0.001$, paired t-test df : 100.

Table 4. MMPI T scores before CAT and at the time of 1-year follow-up (N = 64)

	Intake	1-year
Hs*	66.6 ± 12.3	54.3 ± 10.1
D*	69.7 ± 10.0	51.4 ± 11.7
Hy*	64.9 ± 11.1	54.2 ± 9.9
Pd*	57.3 ± 9.2	51.1 ± 8.7
Mf	49.3 ± 11.4	47.8 ± 9.6
Pa*	56.7 ± 9.7	48.3 ± 8.0
Pt*	65.3 ± 10.3	51.7 ± 10.7
Sc*	58.1 ± 10.5	49.2 ± 8.9
Ma	47.9 ± 7.7	50.2 ± 7.5
Si*	58.5 ± 9.8	49.6 ± 10.6
Sum*	591.6 ± 70.4	507.8 ± 62.7
A*	59.9 ± 9.6	48.4 ± 11.2
Es*	41.3 ± 9.1	52.0 ± 10.8
Dy*	59.7 ± 9.5	49.2 ± 11.1
Mas*	62.1 ± 8.1	50.0 ± 11.9
Soc*	58.2 ± 9.9	50.3 ± 9.0
Mor*	59.6 ± 10.4	50.0 ± 11.1
D1*	65.2 ± 10.7	49.7 ± 11.1
Dep*	60.6 ± 9.8	48.9 ± 11.5
K*	49.5 ± 9.2	56.8 ± 10.8
L	50.9 ± 9.4	51.8 ± 11.4

* $p < 0.001$, paired t-test df : 63.

latter explanation is the finding of the present study that there were no significant differences between attenders of both follow ups compared to those who came to the first follow up but did not come to the second concerning their MMPI and PtQ scores at the time of the first i.e 2-month follow up. All the above indicate that the failure to attend follow ups is related to a wide range of attitudes.

The choice of two follow ups at different time intervals after the end of therapy is recommended for psychotherapy outcome studies especially for brief psychotherapeutic interventions[23,24].

The fact that only 10% of patients were referred on for further treatment suggests a satisfactory impact. However, as the decisions about offering further therapy were made after the 2-month follow up assessment, it is not clear whether the above rate is completely representative, as an additional percentage of 15% did not attend the follow up.

As far as the method used for assessing outcome is concerned the combination of psychometric tests, such as BDI, MMPI and EPQ and post - treatment rating by the patient and therapist using a scale such as PtQ, is considered to be the most appropriate[25]. Regarding the psychometric tests, the choice of a specific test for depression i.e BDI combined with two other popular and reliable instruments such as MMPI and EPQ makes the assessment approach valid. On the other hand the fact that PtQ allows the patient to quantify helpful factors of therapy is an excellent method for assessing therapeutic outcome[24,26].

As seen, at the 2-month follow up patients showed a considerable improvement of depression as it was measured by the BDI as well as by the 3 corresponding scales of the MMPI i.e D, D1 and Dep. The scales D and D1 showed the

Table 5. MMPI T scores at the 2-month and at the 1-year follow-up (N = 64)

	2-month	1-year
Hs	56.5 ± 12.1	54.3 ± 10.1
D	53.5 ± 11.4	51.4 ± 11.7
Hy	56.7 ± 10.1	54.2 ± 9.9
Pd	53.1 ± 7.9	51.1 ± 8.7
Mf	47.2 ± 8.7	47.8 ± 9.6
Pa	48.4 ± 8.4	48.3 ± 8.0
Pt	52.8 ± 11.4	51.7 ± 10.7
Sc	49.1 ± 8.6	49.2 ± 8.9
Ma	49.5 ± 10.2	50.2 ± 7.5
Si	50.1 ± 11.2	49.6 ± 10.6
Sum	516.7 ± 65.1	507.8 ± 59.5
A	50.7 ± 12.1	48.4 ± 11.2
Es	49.9 ± 12.0	52.0 ± 10.8
Dy*	52.8 ± 11.9	49.2 ± 11.1
Mas	52.4 ± 11.1	50.0 ± 11.9
Soc	51.8 ± 10.2	50.3 ± 9.0
Mor	52.3 ± 12.2	50.0 ± 11.1
D1	53.0 ± 12.3	49.7 ± 11.4
Dep	51.6 ± 11.5	48.9 ± 11.5
K	55.9 ± 11.1	56.8 ± 10.8
L	51.6 ± 11.1	51.8 ± 11.4

* $p < 0.05$, paired t-test, df : 63.

Table 6. EPQ scores before CAT and at the time of 2-month follow-up (N = 74)

	Intake	2-month
P	4.7 ± 2.6	3.5 ± 2.2
N*	17.3 ± 3.6	13.5 ± 4.9
E*	10.3 ± 4.6	13.3 ± 4.2
L	9.9 ± 3.7	10.1 ± 8.3

* $p < 0.001$, paired t-test, df : 73.

Table 7. EPQ scores before CAT and at the time of 1-year follow-up (N = 48)

	Intake	1-year
P	3.8 ± 2.0	3.3 ± 2.2
N*	18.2 ± 3.8	13.3 ± 4.4
E*	10.0 ± 3.4	14.1 ± 3.9
L	10.1 ± 3.0	10.2 ± 3.7

* $p < 0.001$, paired t-test, df : 47.

Table 8. EPQ scores at the 2-month and 1-year follow-up (N = 48)

	2-month	1-year
P	3.7 ± 2.4	3.3 ± 2.2
N	14.0 ± 5.2	13.3 ± 4.4
E	13.8 ± 3.8	14.1 ± 3.9
L	10.4 ± 3.5	10.2 ± 3.7

Paired t-test df : 47. None of the differences between the two groups reached statistical significance.

Table 9. Post - therapy Questionnaire scores of the patients at the 2-month and 1-year follow-up (N = 73)

	2-month	1-year
1. Presented problem	2.7 ± 0.3	2.7 ± 0.3
2. Correspond. with reformulation	2.4 ± 0.6	2.3 ± 0.7
3. Helpful or not*	2.4 ± 0.5	2.6 ± 0.3
4. Helpful or not		
- Psychotherapy file	3.8 ± 1.0	3.9 ± 0.9
- Self-monitoring	4.0 ± 0.8	4.1 ± 0.9
- Diary	3.5 ± 1.0	3.6 ± 1.1
- Ratings	3.7 ± 0.8	3.7 ± 1.0
- Relationship with therapist	4.4 ± 0.6	4.5 ± 0.5
- Time limited*	3.9 ± 0.8	4.2 ± 0.7

* $p < 0.05$, Statistical comparison with Wilcoxon test for pair differences.

most significant after treatment change of all MMPI scales. It is supported that scales D (Depression), Pt (Psychasthenia), Sc (Schizophrenia) from the clinical scales and the sum of the clinical scales appear to provide consistent validity as change indices[25,27,28]. The same scales, with the addition of scale Hs (Hypochondriasis) showed the most significant improvement in the present study, as well. The high improvement on scale Hs may be explained as a consequence of improvement of depression as it is well known that the clinical picture of depression includes somatic symptoms. Furthermore some patients, apart from a depressive disorder received an additional diagnosis of panic disorder and/or somatoform disorder which also include in their symptomatology somatic complaints, that have also been ameliorated. Regarding the research scales of the MMPI, apart from scale D1, the most notable changes appear on the two anxiety scales (A and Mas), in congruence with other studies[29] and also on scale Dy (Dependence) and Es (Ego strength). The latter scale is the best index of a positive change after treatment[30] and is usually incorporated as a measure into psychotherapy outcome studies[25]. Higher score after therapy means that the individual tends to be better adjusted psychologically and that he/she is more capable to cope with problems and stresses in life[30]. Scale K of the MMPI is a validity scale measuring defensiveness but, in contrast to the other validity scale L of the test, it measures more subtle and mature defenses[30]. A higher score after psychotherapy - if this score does not exceed 60 for individuals of lower middle class and upper lower class[30], as in the present study - is indicative of improvement reflecting better functioning, ego strength and psychological resources[30]. It is worthwhile to mention that the other validity scale (L) did not manifest significant differences between the pre and post - therapy assessment.

The results of the EPQ validated those of the MMPI and vice versa. After therapy, the patient were more stable (scale N) and more extroverted (scale E) according to Eysenck's dimensions of personality. Furthermore, there are correlations between the scales of the two tests. For instance, scale N of the EPQ has a significant positive correlation with scales Hs, D and Pt and a negative correlation with scales K and Es of the MMPI[31-33] while scale E is negatively correlated with scale D, Pt and Si[31,33].

The fact that the patients did not only sustain the achieved therapeutic gain 1 year after therapy but they also improved further, as seen from the better score on scale Dy of the MMPI, is in line with previous reports claiming that after termination, patients consolidate the gains resulting from the brief psychotherapy and continue to improve approaching life problems more effectively[34,35]. This finding is also congruent with other investigators supporting that psychotherapy most probably has a prophylactic effect as far as the recurrence of a depressive disorder is concerned[36-38]. It is worthwhile to mention that more than half of our patients had a concomitant personality disorder. Therefore, CAT may have benefited them not only concerning depression but mainly on personality. The results of the MMPI are validated by the results of the PtQ, where patients considered the new understanding more helpful as well as the fact that therapy was time limited at the time of 1-year follow up than at the 2-month follow up, when probably some themes regarding separation had not been completely resolved.

Keller et. al[10] reported that for depressive patients the combination of psychotherapy and pharmacotherapy was significantly more efficacious than either treatment alone. They found a response rate of 73% when nefazodone was combined with a type of brief psychotherapy i.e behavioral - analysis, while the corresponding rate of the therapies separately applied was 48% for each of them. In the present study it was not possible to check the above findings as the number of patients treated additionally to CAT with an antidepressant was too small i.e 17 out of 164. However, it was an impressive finding that almost half of them (47%) dropped out while the rate of drop outs in the rest of the patients was significantly lower (13%). It is not clear how to interpret this finding. Did the drug have a negative influence on the patient's continuation of psychotherapy or were these patients not appropriate candidates for CAT. Perhaps both hypotheses could be contributing to this result. Further research is necessary on the above issue.

In conclusion, the present study indicated that CAT is an effective therapeutic approach for patients with depressive disorders. The above findings are important especially nowadays when pharmacotherapy is considered to be the first choice of treatment for depressive disorders. Furthermore, CAT treats these problems in a short time while simultaneously inflicting beneficial changes to the personality structure of the patients thus reducing the possibility of recurrence. Finally, another advantage could be the avoidance of the side effects of the drugs.

REFERENCES

1. Bergin, A., Lambert, M. The evaluation of therapeutic outcome. In: Handbook of psychotherapy and behavior change. 2nd ed. Garfield, S., Bergin, A. (eds). New York, John Wiley and Sons, pp: 139-189, 1978.
2. Lambert, M. Introduction to assessment of psychotherapy outcome: Historical perspective and current issues: In: The assessment of psychotherapy outcome. Lambert, M., Christensen, E., Dejulio, S. (eds). New York, John Wiley and Sons, pp: 3-32, 1983.
3. Howard, K., Orlinsky, D., Lueger, R. The design of clinically relevant outcome research: Some considerations and an example. In: Research foundations for psychotherapy practice. Aveline, M. and Shapiro, D. (eds). N.Y., John Willy and Sons, pp: 3-47, 1995.
4. Alnaes, R., Torgersen, S. DSM-III symptom disorder (Axis I) and personality disorders (Axis II) in an outpatient population. Acta Psychiatr. Scand. 78: 348-355, 1988.
5. Blackburn, I. The relations between drug and psychotherapy effects. In: Research foundations for psychotherapy practice. Aveline, M. and Shapiro, D. (eds). John Wiley, N.Y., pp: 231-246, 1995.
6. Hollon, S.D., Derubeis, R.J., Evans, M.D. et. al. Cognitive therapy and pharmacotherapy for depression. Singly and in combination. Arch. Gen. Psychiatry 49: 774-781, 1992.
7. Murphy, G., Simons, A., Wetzel, R., Lastman, P. Cognitive therapy

and pharmacotherapy, singly and together in the treatment of depression. Arch. Gen. Psychiatry 41: 33-41, 1984.
8. Scott, A.I.F. & Freeman, C.L. Edinburgh primary care depression study: treatment outcome, patient satisfaction and cost after 16 weeks. Brit. Med. Journal 8304, 883-887, 1992.
9. Elkin, I., Shea, M.T., Watkins, J.T., et. al. NIMH Treatment of depression collaborative research program: general effectiveness of treatments. Arch. Gen. Psychiatry 46: 971-982, 1989.
10. Keller, B.M, Mccullough, P.J., Klein, N.D. et. al. A comparison of nefazodone, the cognitive behavioral-analysis system of psychotherapy, and their combination for the treatment of chronic depression. New Engl. J. Med. 342: 1462-1470, 2000.
11. Ryle, A. Psychotherapy: A cognitive integration of theory and practice. London, Academic Press, 1982.
12. Ryle, A. Cognitive Analytic Therapy. Developments in theory and practice. New York, John Wiley and Sons, 1995.
13. Ryle, A., Kerr, I. Introducing Cognitive Analytic Therapy. Principles and Practice, New York, John Wiley and Sons, 2002.
14. Brockman, B., Pounton, A., Ryle, A., Watson, J. Effectiveness of time-limited therapy carried out by trainees: comparison of two methods. Br. J. Psychiatry 151: 602-609, 1987.
15. Dunn, M., Golynkina, K., Ryle, A., Watson, J. A repeat audit of the Cognitive Analytic Therapy Clinic at Guy's Hospital. Psychiatric Bull. 123: 165-168, 1997.
16. Garyfallos, G., Adamopoulou, A., Mastrogianni, A., et. al.. Evaluation of Cognitive Analytic Therapy (CAT) outcome in Greek psychiatric outpatients. Eur. J. Psychiatry 12/3: 167-179, 1998.
17. Garyfallos, G., Adamopoulou, A., Voikli, M., Zlatanos, D. et. al. Evaluation of Cognitive - Analytic Therapy (CAT) outcome: A 4-8 year follow up. Eur. J. Psychiatry, 16/4: 197-209, 2002.
18. Ryle, A., Ansari, S. The Post-therapy Questionnaire. Pers. Communic., 1988.
19. Donias, S., Demertzis, J. Assessment of depressive symptomatology with Beck Depression Inventory. In: Proceedings of the Tenth Panhellenic Psychiatric Conference, Varfis et. al. (eds), Thessaloniki, University Studio Press, pp: 1383-1392. (in Greek), 1983.
20. Manos, N. Adaptation of the MMPI in Greece. In: Advances in personality assessment. Butcher, J., and Spielberger, C. (eds), Hilsdale, Erlbaum, pp: 159-185, 1985.
21. Dimitriou, E. The Eysenck Personality Questionnaire (EPQ) in the study of the Greek Personality and its use in clinical practice. Thessaloniki, 1977.
22. Aveline, M. Assessing the value of brief intervention at the time of assessment of dynamic psychotherapy. In: Research foundations for psychotherapy practice. Aveline, M., and Shapiro, D. (eds) New York, John Wiley and Sons, pp: 129-150, 1995.
23. Kolotkin, R., Johnson, M. Crisis Intervention and measurement of treatmen outcome. In: The assessment of psychotherapy outcome. Lambert M, Christensen E, Dejulio S. (eds). N.Y., John Wiley and Sons, pp: 132-159, 1983.
24. Elliot, R. Therapy process research and clinical practice: Practical Strategies. In: Research foundations for psychotherapy practice. Aveline, M. and Shapiro, D. (eds). N.Y., John Willy and Sons, pp: 49-72, 1995.
25. Beutler, Al., Crago, M. Self-report measures of psychotherapy outcome. In: The assessment of psychotherapy outcome. Lambert, M., Christensen, E., Dejulio, S. (eds), New York, John Wiley and Sons, pp: 453-497, 1983.
26. Garfield, S., Prager, R., Bergin, A.N. Evaluation outcome in psychotherapy. J. Consult. Clin. Psychol., 37: 320-322, 1971.
27. Sloane, R., Staples, R., Whiple, K., et. al. Patients attitudes towards behavior therapy and psychotherapy. Am. J. Psychiatry, 134: 134-137, 1977.
28. Manos, N., Vassilopoulou, E. Evaluation of psychoanalytic psychotherapy outcome. Acta Psychiatr. Scand., 70: 28-35, 1984.
29. Conte, H., Plutchik, P., Picord et. al. Self-report measures as predictors of psychotherapy outcome. Compr. Psychiatry, 29: 355-360, 1988.
30. Graham, J. The MMPI: A practical guide. New York, Oxford University Press, pp: 18-36, 1987.
31. Roessler, R. Personality, psychophysiology and performance. Psychophysiol. 10: 315-327, 1973.
32. Wakefield, J., Yom, B., Bradley, P. et. al. Eysenck's personality dimension: A model for the MMPI. Br. J. Soc. Clin. Psychol. 13: 413-420, 1974.
33. Garyfallos, G., Adamopoulou, A., Dimitriou, E.. Correlation between the MMPI and the EPQ in a Greek sample. Galenus 37: 303-309 (in Greek), 1995.
34. Frank, J. Therapeutic components of psychotherapy. A 25-year progress report of research. J., Nerv, Ment, Dis., 159: 325-342, 1974.
35. Patterson, V., Levene, H., Berger, L. A one-year follow up of two forms of brief psychotherapy. Am. J. Psychother., 31: 76-82, 1977.
36. Beck, A., Hollon, S., Young J. et. al. Treatment of depression with cognitive therapy and amitriptyline. Arch. Gen. Psychiatry, 42: 142-148, 1985.
37. Blackburn, I.M., Eunson, K.M. & Bishop, S. A two-year naturalistic follow-up of depressed patients treated with cognitive therapy, pharmacotherapy and a combination of both. J. Affect. Disord. 10: 67-75, 1986.
38. Evans, M.D., Hollon, S.D., Derubeis, R.J., et. al. Differential relapse following cognitive therapy and pharmacotherapy for depression. Arch. Gen. Psychiatry 49: 802-808, 1992.

Corresponding author:
G. Garyfallos M.D.
Community Mental Health Center
20 Papadopoulou Str. – Sikies
56625 Thessaloniki – Greece
Fax: +30 2310 623940
E-mail: anakar@med.auth.gr