

The Effect of an Activity Therapy Program for Chronic Patients Within a Therapeutic Milieu

R. Mahfouz, Zeinab Loutfi, M. Arafa, Enayat Abdel Wahab
and M. Hassib El-Defrawi

This study was conducted with the aim of evaluating the effects of an integrated activity therapy program on the social competence of chronic hospitalized psychiatric patients.

Over a period of 10 weeks, 12 chronic psychiatric patients (mostly schizophrenic) were subjected to a rather intensive schedule of group activities within a structured therapeutic milieu. Assessment of performance in activities as well as in different aspects related to social competence was carried out at the beginning and at the end of the program. The results have indicated significant positive changes.

(Egypt.J. Psychiat., 1992, 15: 225-233).

Introduction

Chronic psychiatric disorders, particularly schizophrenia are incapacitating as they usually lead to social isolation and serious deterioration in the personality.

This, in turn, leads to a marked decline in social competence (Philips, 1966, Philips et al., 1966). Long term institutionalization, when practiced with the traditional aim of merely providing custodial care, adds to the problem. Patients become generally apathetic inactive, poorly socialized, excessively de-

pendent and profoundly deficient in their repertoire of daily living skills (Becker and Bayer, 1975). The sick role is reinforced (Penick, 1971) and further deterioration, resocialization and chronicity are enhanced (Matheney and Topalis, 1974).

Awareness of these facts has led to the progressive development of new dynamic approaches favouring shorter hospitalization and aiming at active total rehabilitation of patients as members of the community (Shader, 1975 and Mitchell, 1976). The goal of such rehabilitation should be to provide the disabled person with the physical, intellectual and emotional skills needed to live, learn and work in the community with the least possible support. (Anthony, 1977). The same awareness has also given rise to the new concepts of milieu or community therapy. i.e, the hospital becoming a structured social therapeutic environment providing an active and integrated or multidimensional rehabilitative role (Visher and Sullivan 1970 and Wolf, 1977). As pointed out by Cohen and Bauer (1976), a milieu therapy pro-

R. Mahfouz, Professor of Psychiatry, El-Menya University.

Zeinab. Loutfi, Assistant Professor of Psychiatric Nursing, High Institute of Nursing, Cairo University.

M. Arafa, Assistant Professor of Psychiatry, Cairo University.

Y. Amin, Lecturer in Psychiatry, Suez Canal University.

E. Abdel Wahab, High Institute of Nursing, Cairo University.

M. Hassib El-Defrawi, Lecturer in Psychiatry, Suez Canal University.

gram provides and creates opportunities for corrective emotional experiences in learning coping techniques. Components of a milieu which include group therapies, group activities, occupational therapy, recreational therapy, supportive measures and medical psychiatric management are interrelated and integrated to ultimately produce a healing effect that is greater than the sum of the individual parts.

Within a therapeutic community activity and group activity therapies are a necessary and vital aspect. Activity therapy as used in this context is a broad term encompassing the different varieties of occupational, recreational educational, manual art and gymnastic activities that may be used in association with other lines of psychotherapy or pharmacotherapeutic management. They help promote recovery through the release of excess energy, the provision of a vehicle for self expression, the practise of social skills in a protecting and accepting environment, the correction of physical and psychological impairment, the development of a sense of responsibility and the achievement of a better self-esteem (Linn et al., 1982 ; Becker and Bayer, 1975)

The present study was planned with the aim of evaluating the effects of an integrated activity therapy program on the social competence of chronic hospitalized psychiatric patients. It was conducted in an Egyptian psychiatric center that adopts the policy of active multidimensional rehabilitation within a structured therapeutic community or milieu.

Subjects and Method

The sample of the study consisted of 12 chronic hospitalized psychiatric patients at Al. Mokattam mental health center. Diagnosis was established by agreement of at least two experienced psychiatrists and included the following categories:

Schizophrenia: paranoid type (4 patients),

Chronic undifferentiated type (3 patients),

Catatonic type (one patient);

Manic depressive, illness (one patient),

Schizotypal personality disorders (one patient)

and Schizoid personality disorder (one patient).

Age ranged between 15-47 years with a mean of 31 years. Nine of the patients were males (all single) and 3 were females (one married and 2 separated). Educational level ranged between, primary (2 patients), middle (3 patients), secondary (4 patients) and higher (3 patients) levels.

The duration of illness ranged between 2-8 years and all patients had been hospitalized more than one time before. However, the concept of chronicity adopted in this study was not restricted to the time factor, but was rather in terms of established or settled malorganization, i. e, the active process of disorganization has become over ruled and personality structure has been transformed into an established pathological pattern (Rakhawy, 1983 and Craig and Hyatt 1978). All patients exhibited behaviour dependent in nature with diminished level of functioning in their interpersonal relations, vocational and intellectual skills.

Over a period of 10 weeks the patients were subjected to a structured program of group activity therapies including: 1-group reading, 2-group physical exercise, 3-group dancing, 4-group work, 5-group play and 6-scheduled responsibilities for daily life activities and self-care. Play and work activities were combined in a special therapeutic plan and were performed in a farm belonging to

the center. All the activities are actually part of the hospitals usual milieu therapy program. For the purposes of the study, a standard and carefully planned schedule was applied to the sample.

This work was preceded by a pilot study on 10 patients during which an attempt was made to elaborate and gain sufficient experience with proper tools for assessing the effects of the therapeutic process. This has resulted in the adoption of 2 types of assessment procedures:

A- Assessment of performance in activity therapy sessions.

This was done through specially constructed rating scales evaluating different items of behaviour manifesting in different activities. The items were operationally defined and included: initiation, persistence, interaction with others, emotional reactivity, attention, body awareness, appropriation of movement, coherence, abstraction and capacity for adaptive regression.

The items related to each activity were rated on an eight point scale following each session of activity.

Rating was done by agreement among two participant raters from the therapeutic team (a psychiatrist and a psychiatric nurse who was constant all through).

B- Assessment of change in social competence.

The concept of social competence adopted here has a broad perspective ranging from the ability to perform simple self-care and personal daily life activities to the complex higher levels related to cognitive performance and interpersonal relations (Butler function, 1978). Different aspects representing this concept of social competence were evaluated through 4 tools:

1- Ego function test

This is a semistructured interview format eliciting information about 12 ego function after which the subject is rated on a ten-point scale for each functions were considered relevant for the assessment of social competence in this study (Table 3).

2- Nurse's Observation Rating Scale for Inpatient Evaluation (NOSIE)

A version of this scale which was developed by Honigfeld et al., (1962) was used to assess change in daily life activities including such aspects as self-care, social interest and cooperation, different symptoms..etc.

3- Initiative Rating Scale (IRS).

This scale consists of a checklist of daily routine events related to self-care activities including hygiene, clothing meals..etc, rated on a 3-point scale.

4- Brief psychiatric Rating Scale (BPRS) (Overall and Gorham, 1962)

Each of the above tools was used at least twice; once before starting the program and another time on its termination. The Ego Function Test and the BPRS were rated by agreement between two raters (psychiatrist and psychiatric nurse) while the NOSIE and the IRS were rated by agreement among nurses supervised by the researcher nurse. All patients were on minimal doses of psychotropic drugs (mainly phenothiazines). However, all medication was stopped during the days of work and play activities in the farm.

Results

Table (1) illustrates the effects of the activity therapy program on patients' performance in different activities. It shows that the mean scores have significantly increased in all activities assessed by the end of the program. However, the level of significance varies from one area to another.

Table (1)
*Effects of Activity Therapy Program on
 Patients' Performance in Different Group Activity Therapies*

Activity	Score at 1st session	Score at last session	Change in score	Significance of Change
1. Reading	1.9±1.6	2.6±1.4	0.7± 1.15	t = 2.2 P<0.05
2. Work	1.7±1.37	3.2±0.9	1.5 ± 1.17	t = 8.75 P<0.001
3. Play	2.2 ±1.6	3.7 ±1.04	1.5 ± 1.5	t = 7.5 P<0.001
4. Physical ex.	2.3 ±1.25	3.7 ±1.1	1.4 ± 0.98	t= 10.76 P<0.001
5. Dancing	1.6 ± 0.97	2.8 ±1.07	1.35 ± 1.2	t ± 9.00 P<0.001

Table (2)
Effects of the Program on Patient's Social Competence

Assessment Tool	Mean Scores on Program Start	Mean Scores on Program termination	Change in Score	Significance of Change
Brief Psych. R. Scale	27.08 ± 7.6	17.33 ± 5.4	9.75 ± 7.96	t= 4.2 P <0.001
Ego functions	3 ± 1.4	4.2 ± 1.4	1.2 ± 1.1	t= 10 P <0.001
NOSIE	48.08 ± 12.3	59.58 ± 8.75	11.5 ± 7.8	t=5.1 P <0.001
Initiative. R. S. cale	21.7 ± 3.97	23.5 ± 3.15	1.8 ± 2.01	t= 2.86 P <0.01

Table (2) shows the effects of the program on the social competence of patients as assessed before and after the program through the four rating tools. Mean scores on all tests show a statistically significant positive change.

The highest significance is noticed in relation to ego function (t= 10).

Changes in the mean scores of different ego functions were statistically significant in all six functions assessed. Mastery and competence showed the highest score while object relations was lowest. (Table 3)

Table (4) presents the mean scores on performance in every day life activities as assessed by the NOSIE before and after the program. The maximal level of performance is given the highest score (4) and the minimal level is given the lowest score (0)

It can be seen that the percentage of the maximal levels of performance have increased after the therapy program while the percentage of minimal levels of performance have decreased by the end of the program. Statistical evaluation was significant (z= 2.25).

Table 3

Effects of the Program on Patients Ego Functions

Items	Before		After		Changes			
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	t	P
Reality Testing	2.9	1.2	4.5	1.3	1.6	1.4	4.00	0.001
Object relation	2.4	0.7	3.00	1.08	0.6	0.8	3.00	0.01
Autonomous functioning	3.3	0.98	4.6	1.1	1.3	0.8	6.5	0.001
Mastery Competence	S* 0**	S 0	S 0	S 0	S 0	S 0	S 0	0.001
	4.75 2.5	1.9 0.9	5.2 4.1	1.8 0.8	0.45 1.6	1.3 0.8	1 8	
Sense of reality	3.4	0.99	4.2	1.2	0.8	0.8	4	0.001
Judgement	2	1.2	3.9	1.2	1.9	1.4	4.75	0.001
Total Ego Score	3.00	1.4	4.2	1.4	1.2	1.1	10	0.001

* Subjective

** Objective

Table (4)

Calculation of the Rating (NOSIE) Effects of the Program on Patients' Performance Regarding Every Day Life Activities.

Category	Before the program		After the program	
	Score	%	Score	%
4	68	25.75	89	33.72
3	39	14.77	57	21.59
2	61	23.12	73	27.65
1	51	19.32	31	11.74
0	45	17.04	14	5.30
Total	264	100.00	264	100.00

 $Z = 2.25$

P. = 0.05

Table (5)
Calculation of the Rating (NOSIE) Effects of the Program on Patients' Performance Regarding Every Day Life Activities.

Level	Before the program		After the program	
	Score	%	Score	%
Not present	84	38.88	99	45.84
Very rare	38	17.59	59	27.34
Rare	35	16.23	36	16.64
Average	28	12.96	13	6.03
Above average	22	10.18	7	3.23
Severe	9	4.16	2	0.92
Very Severe	-	-	-	-
Total	216	100.00	216	100.00

$Z = 4.35$ $P < 0.001$

A similar trend is seen in relation to symptom intensity as assessed by the BPRS (Table 5). There is a significant decrease in the frequency of severer forms of symptoms and increase in the milder forms. The changes were statistically significant ($z = 4.35$).

Discussion

The results of assessment of performance in the group activity program indicate a definite global improvement (table 1). Mean scores on all practised activities showed a statistically significant positive change by the end of the program.

Such positive result probably supports the observation that with chronic patients a better response is achieved through activity therapies which provide a good vehicle for paraverbal and non-verbal therapeutic messages.

In contrast, relying on verbal communication alone has proved to be ineffective in producing positive changes in

such patients (Bell, 1970). Developed skill and psychological changes associated with activity programs are what really matters on the long run (Linn et al., 1982).

Results of assessment of social competence in terms of the degree of improvement in ego functions, performance in daily life activities and psychiatric symptomatology indicate a significant positive change.

Mean scores of the six ego functions selected for their relevance to social competence showed a statistically significant positive change after the program termination.

It can be observed that improvement in ego functions after the program follows the same relative pattern seen before its start i.e., functions scoring lowest (e.g. object relations and judgement) remained relatively lowest while functions scoring high (e.g. autonomous functions and sense of reality of the self

and world) remained relatively highest. This pattern is consistent with the pattern usually observed in schizophrenia which is the diagnosis given to most of the sample (75%). In schizophrenia, functions such as object relations are most impaired (Benedetti, 1971), while other functions such as autonomous ego functions are less impaired (Hartman, 1953).

Assessment of patients' performance in everyday-life activities (NOSIE) on program termination, also indicates a statistically significant improvement (tables 2,4). These findings reflect the success of the program in utilizing all available facilities whether materials or personnel, structure the daily-life hospital environment and create an active rehabilitative therapeutic community that prepares the patient for a reasonable adjustment in the real community.

Positive response to such efforts on the part of the chronically ill patients is not unexpected. As indicated by Gelperin (1976) such patients only need opportunities to be responsible, productive and useful within a non-threatening supportive and actively stimulating environment.

The significant improvement in symptomatology, as indicated from the results of the BPRS, (Table 5) represents another parameter confirming the effectiveness of activity program in improving patients' capacity for a better social adjustment.

In a study by Waryszak (1982) an attempt was made to evaluate the changes in both symptoms and social adjustment in psychiatric patients undergoing an intensive treatment program. Besides medications, the program included individual and group activities, group therapy individual counselling and social services. A significant improvement was observed as regards symptoms but major changes

were noticed in relation to social adjustment. According to these findings the author suggested that a decrease in the patients symptomatology does not necessarily result in more effective social functioning. This opinion is shared by Glazer et. al., (1980) who states that schizophrenic patients often lead socially impaired lives even when a symptomatic on medications.

These findings are not supported by the results of this study. The significant improvement in the patients symptomatology was clearly associated with a significant progress in social competence as indicated from several assessment parameters covering performance in different group activities, performance in daily-life activities, as well as the level of relevant ego functioning.

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Maniement des Patients Psychiatriques Chroniques Le Role Effectif D'un Programme thérapeutique D'activités Dans Un Milieu Thérapeutique

Cette étude est faite pour evaluer les effets d'un programme thérapeutique d'activités integral sur la compétence sociale des patients psychiatriques chroniques hospitalisés.

Pour 10 semaines, 12 patients psychiatriques chroniques (la plupart sont schizophrènes) ont été soumis à la compétence sociale, ont été déterminé au début et à la fin du programme.

Les résultats ont indiqué un changement positif significatif dans toutes les vues estimées.

مداواة المرضى النفسيين المزمنين الدور الفعال لبرنامج النشاط العلاجي داخل وسط علاجي

تتناول هذه تقييم فعالية برنامج للأنشطة العلاجية المتكاملة على الكفاءة الاجتماعية للمرضى النفسيين المزمنين داخل المستشفى.

وقد إشترك في هذه الدراسة ١٢ مريض نفسي مزمن (معظمهم فصامين) لمدة عشرة أسابيع ساهموا خلالها في أنشطة علاجية جماعية ومنظمة داخل الوسط العلاجي، وقد تم تقويم الأداء في بداية ونهاية البرنامج، وتشير النتائج إلى تغييرات إيجابية ملموسة على جميع المؤشرات المستخدمة في التقييم.