A Program of Social Skills Training in Chronic Schizophrenic Patients

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Abstract

Background: Severe impairment of social functioning is one of the hallmarks of schizophrenia. This study was carried to modify maladaptive behaviors of chronic schizophrenic patients, and to help patients learn, practice, and develop the skills necessary to be effectively interact with others. Methods: It was conducted on a sample of 30 chronic schizophrenic patients admitted in the psychiatriy department of Assiut University Hospital, whose age ranged from 19-55 with illness duration from 2-14 years, 24 were males and 6 were females. 7cases (23.3%) were disorganized schizophrenia, 7cases (23.3%) were undifferentiated schizophrenia, 15cases (50%) were paranoid schizophrenia, and one case (3.3%) was catatonic schizophrenia. (DSM-IV) the duration of illness ranged from 2-14 years. They were diagnosed according to DSM-IV (1994). They were subjected to Nurse's observation rating scale, (N.O.R.S), Initiative rating scale. (I.R.S), the Brief psychiatric rating scale (B.P.R.S), and group activities including: group psychotherapy, group reading newspaper, rhythmic body movements, and physical exercise activities. They were admitted for one month in the hospital, and then followed up 3 times every month after discharge. Results: Patients scores improved Significantly at the end of the program in all activities. A significant improvement (P<0.001) in I.R.S in all of its items except sleeping, in B.P.R.S (P<0.001) in all of its items except megalomania, in N.O.R.S. in all schizophrenic groups except the disorganized group, in group psychotherapy (P<0.001) in all items except in attitude toward beer member, and a significant improvement (P<0.001) in the scores of other group activities e.g. reading newspaper, rhythmic body movements, and physical exercise activity at the end of the program. Relevant conclusions as well as recommendations were cited.

***Key words**: Social skills training, Schizophrenia.*

Introduction

Social impairments have long been recognized as a core feature of schizophrenia. Poor social, self care, and vocational functioning are criteria for a diagnosis of schizophrenia in most diagnostic systems. Consequently, improving the social behaviors of persons with schizophrenia has been a key target of psychiatric rehabilitation techniques (Torres et al., 2002).

Deterioration in the psychosocial functioning of chronic schizophrenic patients is a major problem in psychiatric hospitals. Prolonged hospital stay leads to a progressive decline in patient's ability to take initiative in managing basic problems of living such as getting up and eating (Butler and Rosenthal, 1994).

Argyle (1981) reported that schizophrenics have a variety of specific skills deficits, including inappropriate social expression, gestures and posture, low rewardiness, and poor synchronizing.

Patients with schizophrenia can clearly improve their social competence with social skills training, which may translate into a more adaptive functioning in the community (Bustillo et al., 2001).

Activities of daily living are essential skills needed to live independently. Persons with chronic mental illness often lack basic self maintenance skills such as personal grooming, table manners, and Social interaction skills. Their careless behavior may result from impaired judgment, forget fullness, or lack of motivation. The lack of these social skills interfere with the individual ability to be accepted in community settings (Bellack and Mueser, 1986).

Social skills can be defined as those interpersonal behaviors required to attain instrumental goals necessary for community survival and independence, and to establish, maintain deepen supportive and socially rewarding relationship. Applying behavior analysis principles to identify and remedy deficits in social behaviors, the clinician uses a variety of techniques, such as focused instructions, role modeling, feedback and social reinforcement. (Kaplan and Sadock, 1996).

Patients with psychosis that is not responsive to pharmacotherapy may benefit from specific modalities of cognitive-behavioral therapy currently being developed, while persons with persistent negative symptoms and limited social competence may find social-skills training useful (Bustillo et al., 1999).

The aims of the present work are to modify maladaptive behaviors of chronic schizophrenic patients (e.g. social isolation, impaired role functioning, impaired personal hygiene and grooming). Also to help the patients learn, practice and develop the skills necessary to be effectively interacting with others.

Subjects And Methods

The subjects of the present work is formed of 30 patients admitted to the psychiatry department, Assiut University

Hospital, suffering from chronic schizophrenia. They were diagnosed according to DSM-IV (1994). 7cases (23.3%) were disorganized schizophrenia, 7cases (23.3%) were undifferentiated schizophrenia, 15cases (50%) were paranoid schizophrenia, and one case (3.3%) was catatonic schizophrenia, their ages ranged from 19-55years, 24 were males and 6 were females. The duration of illness ranged from 2-14years. Tab. (I). We applied the following tools to the studied patients:- 1) nurse's observation rating scale (N.O.R.S), 2) initiative rating scale (I.R.S), 3) brief psychiatric rating scale (B.P.R.S), and 4) a program of activities including (group psychotherapy, group reading newspaper, rhythmic body movements, and physical exercise activities).

Table (1): Demographic characteristics of the studied patients.

Items	a) Disorganized (N=7)		b) Unidiff. (N=7)		c) Paranoid (N=15)		d) Catatonic (N=1)	
	No.	%	No.	%	No.	%	No.	%
• Age:(ys.)								
20	0		1	14.3	1	6.7	0	0.1
21-30	3	42.8	4	57.2	5	33.3	1	100
31-40	2	28.6	1	14.3	5	33.3	0	
41-50	2	28.6	1	14.3	3	20	0	
>50	0		0		1	6.7	0	
• Sex:								
Males	4	57.1	6	85.7	13	86.7	1	100
Females	3	42.9	1	14.3	2	13.3	0	
• Residence:								
Urban	3	42.9	3	42.9	11	73.3	1	100
Rural	4	57.1	4	57.1	4	26.7	0	
• Marital status:								
Single	4	57.1	5	71.4	9	60	1	100
Married	2	28.6	2	28.6	5	33.3	0	
Divorced	0		0	0	0		0	
Widdow	0		0	0	0		0	
Separated	1	14.3	0	0	1	6.7	0	
• Education:								
Illiterate	4	57.1	2	28.6	6	40	0	
Read & write	1	14.3	0		0		0	
Primary	0		0		1	6.7	0	
Preparatory	1	14.3	2	28.6	2	13.3	1	100
Secondary	1	14.3	3	42.8	4	26.7	0	
University	0		0		2	13.3	0	
• Occupation:								
Unemployed	2	28.6	3	42.9	1	6.7	1	100
House wife	2	28.6	1	14.3	3	20	0	
Student	0		0		3	20	0	
Unskilled	1	14.3	3	42.9	2	13.3	0	
Skilled	1	14.3	0		1	6.7	0	
Simi P	1	14.3	0		1	6.7	0	
Proeff	0		0		2	13.3	0	
• Duration of illness : (ys.)								
2	1	14.3	2	28.6	7	46.7	0	
>2	6	85.7	5	71.4	8	53.3	1	100

N.B. *Comparisons between groups were N.S. (>0.5)

These activities were scheduled and timed. The members of the group as well as the therapists were could be introduced to each other and have their informed consent about the planned activities, its goal, time, place and frequency.

A follow up was performed after the patients discharged from hospital. It consists of three sessions, one every month, for 3 months. In every follow up, the following items were evaluated:-1) Nurse's observation rating scale and 2) brief psychiatric rating scale, and at the end of each session, health education about the patient's condition and treatment was given to the patient and his or her family.

The tools used and the program of activities are as follow:-

1- Nurse's observation rating scale (N.O.R.S):- This observation sheet include personal data and 22 items. These items were grouped into 5categories:- Social competence, social interest, cooperation, irritability, and psychotic manifestations.

This scale is scored for each patient at the beginning of the program "pre-prog", after the program "Post-prog" and in the follow- ups monthly for 3months. Reading of this scale ranged from the (upper score 110), and the (lower score 22).

2- Initiative rating scale (I.R.S):- It consists of daily living activities of the patients. It include personal self care, activities such as hygiene, clothing, meals, and all other behaviors associated with daily routine life. This sheet is checked every other day for one month. Reading of this scale ranged from 18 (upper score), and O (lower score).

3- Brief psychiatric rating scale (B.P.R.S):- It consists of 18 items, each of them rated on 7 points scale, higher scores indicate greater severity. It was used once before the start of the program, post program, and in the follow up monthly for 3months. Reading of this scale ranged from 126 (upper score) and 18 (lower score).

4- Group psychotherapy:- The sessions were held 3 times per week for one month, every session lasting one hour, we applied a sheet consisted of 3 pages for evaluation:- the first, represents the frequency of interaction, the second, represents the patient's attitude towards the therapist, and shows the attitude of the patient towards peer members.

5- Group reading newspaper:- The sessions were held daily for one month for 45 minutes. It consists of 7 items:- Initiative, persistence, abstraction, attention, degree of interaction, coherence and emotional reactivity, its score ranged from 0-3.

6- Rhythmic body movements:- It refers to body movements in an integrative manner, these activities were performed once per week for 1.5hours for one month. It consists of 6 items: Initiation, persistence, emotional reactivity, degree of interaction with others, appropriation of movements and ability to regress, its score ranged from 0-3.

7- Physical exercise activities:- These activities were performed once per week for 1.5hours for one month. It consists of 6 items: Initiative, persistence, body awareness, interaction with others, emotional reactivity, and attention. Its score ranged from 0-3.

At the end of the inpatient program (one month), and discharge from hospital, 6 cases could not complete some parts of the follow-up program.

Results

The mean and standard deviation of I.R.S in each schizophrenic group (Table 2) shows a higher score was present in the first week, the score began to decrease (i.e.

improvement) from the second week, and continued decreasing up to the fourth week, and is statistically significant in all groups.

Table (2): Initiative rating scale (I.R.S) of different schizophrenic groups.

Groups (M±D)	1st week	2nd week	3rd week	4th week	P For comparison between different readings and 1st week reading		
					b vs a	c vs a	d vs a
Disorganized	13.11±8.20	10.11±5.01	6.86±5.05	6.29±5.02	0.01**	0.001***	0.001***
Undifferentiated	9.82±3.53	5.75±3.23	2.32±1.98	1.71±1.80	0.01**	0.001***	0.001***
Paranoid	10.53±3.87	6.82±3.37	3.12±3.02	2.40±2.80	0.001***	0.001***	0.001***
Catatonic	10.25 -	7.75 -	2.50 -	2.00 -	---	---	---

The comparison between different schizophrenic groups regarding I.R.S (Table 3). On comparing the degree of improvement between the disorganized and the undifferentiated schizophrenic groups, there is improvement from the 3rd & 4th weeks towards the undifferentiated group. On comparing between the disorganized and the paranoid schizophrenic groups, there is improvement from the 3rd & 4th weeks towards the paranoid group. No significant change between the undifferentiated and the paranoid groups.

Table (3): Comparison between different schizophrenic groups regarding initiative rating scale (I.R.S).

	1st week	2nd week	3rd week	4th week
Disorganized vs Undifferentiated	N.S	N.S	<0.05*	<0.05*
Disorganized vs Paranoid	N.S	N.S	<0.05*	<0.05*
Undifferentiated vs Paranoid	N.S	N.S	N.S	N.S

The analysis of the items of I.R.S (Table 4), demonstrated that, a higher score was present in the first week, then the score began to decrease (i.e improvement) from the second to the fourth week, and this was statistically significant in all activities.

Table (4): Analysis of initiative rating scale (I.R.S) during the program.

Weeks / Activities (M±SD)	First Week	Second Week	Third Week	Fourth Week	Comparison versus the first week		
					2nd week	3rd week	4th week
Getting up	1.02±0.70	0.62±0.60	0.30±0.42	0.17±0.38	<0.001***	<0.001***	<0.001***
Washing	1.27±0.81	0.86±0.62	0.38±0.54	0.27±0.52	<0.001***	<0.001***	<0.001***
Bed making	1.80±0.38	1.27±0.54	0.72±0.68	0.60±0.72	<0.001***	<0.001***	<0.001***
Wearing clothes	1.52±0.56	1.07±0.51	0.63±0.50	0.57±0.50	<0.001***	<0.001***	<0.001***
Eating	1.37±0.61	0.84±0.61	0.46±0.54	0.40±0.56	<0.001***	<0.001***	<0.001***
Taking medication	1.10±0.51	0.83±0.47	0.46±0.49	0.40±0.50	<0.001***	<0.001***	<0.001***
Activity therapy	1.44±0.55	0.91±0.58	0.34±0.48	0.27±0.45	<0.001***	<0.001***	<0.001***
Sleeping	0.56±0.65	0.33±0.53	0.21±0.48	0.20±0.48	<0.001***	<0.001***	<0.001***
Excretion	0.91±0.75	0.65±0.64	0.30±0.53	0.27±0.52	<0.001***	<0.001***	<0.001***

A higher score of the B.P.R.S. (Table 5) was present in the pre-program, then the score began to decrease (i.e improvement) from the post-program to the third follow up, and is statistically significant except on comparing the post-program and the third follow up in the disorganized and paranoid groups.

Table (5): B.P.R.S. of different schizophrenic groups during the program and follow up.

Groups (M±SD)	Pre prog.	Post-prog.	FO-I	FO-II	FO-III	P For comparison between different readings				
						b vs a	c vs a	d vs a	e vs a	e vs b
Disorganized	68.29±7.56	29.00±8.08	22.00±4.15	22.20±4.34	22.20±4.76	***	***	***	***	NS
Undifferentiated	81.29±20.38	32.43±4.47	35.83±14.05	33.60±12.91	33.60±16.53	***	*	**	*	-
Paranoid	85.93±11.32	31.47±5.17	31.07±3.43	25.29±5.44	25.29±8.99	***	***	***	***	NS
Catatonic	81.00 -	38.00 -	-	-	-	-	-	-	-	-

The comparison between different schizophrenic groups regarding B.P.R.S. (Table 6) On comparing between the disorganized and the undifferentiated groups, no significant difference in the pre-program, but there is a significant difference from post-program towards the undifferentiated group, and there is a significant difference from the first to the third follow ups towards the disorganized group. On comparing between the disorganized and paranoid groups, there is no significant difference in the pre program, and from the first to the third follow ups, but there is a significant difference in the post-program towards the paranoid group. On comparing between the undifferentiated and the paranoid groups, only a significant difference in the first follow up towards the paranoid group, others are not significant.

Table (6): Comparison between different schizophrenic groups regarding B.P.R.S.

	Pre-prog.	Post.prog.	FO-I	FO-II	FO-III
Disorganized x Undifferentiated	NS	*	*	*	*
Disorganized x Paranoid	NS	*	NS	NS	NS
Undifferentiated x Paranoid	NS	NS	**	NS	NS

A higher score of the items of B.P.R.S (Table 7) was present in the pre-program, then the score began to decrease (i.e. improvement) from the post-program and continued up to the third follow-up, and is statistically significant in all items except in item (8) "megalomania" in the first and third follow ups.

Table (7): Analysis of B.P.R.S. during program and follow up for all patients.

Question No.	a) Pre-prog. (N=30)		b) Post-prog. (N=30)		c) FO-I (N=27)		d) FO-II (N=25)		e) FO-III (N=24)		P For comparison between different reading and pre-prog reading			
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	b vs a	C vsa	D vsa	e vs a
1	3.3	2.59	1.1	0.4	1.67	1.39	1.64	1.25	1.75	1.45	***	***	***	**
2	3.07	1.89	1.5	0.78	1.59	0.93	1.68	0.95	1.92	1.47	***	***	***	***
3	3.03	1.48	1.43	0.82	1.48	0.89	1.4	0.71	1.67	1.13	***	***	***	***
4	3.37	1.71	1.43	.82	1.15	0.6	1.08	0.28	1.36	0.95	***	***	***	***
5	3.3	2.42	1.2	.92	1.15	0.46	1.28	1.06	1.29	1.08	*	**	**	*
6	3.67	1.15	1.47	0.86	1.7	1.35	1.8	1.41	2.29	1.65	***	***	***	***
7	3.6	1.28	1.33	0.66	1.63	1.31	1.32	0.85	1.5	0.93	***	***	***	***
8	2.3	2.25	1	0	1.19	0.96	1.04	0.2	1.17	0.64	*	NS	*	NS
9	3.3	1.86	1.37	0.89	1.3	0.67	1.68	1.25	1.58	0.93	***	***	***	***
10	3.33	2.55	1.03	0.18	1.22	0.97	1.08	0.4	1.25	0.74	***	***	***	***
11	3	2.59	1.47	1.43	1.04	0.19	1.12	0.33	1.25	1.03	***	***	***	***
12	3.7	2.2	1.23	0.57	1.48	1.19	1.56	1.56	1.42	1.41	***	***	***	***
13	3.7	1.76	1.47	0.82	1.56	0.93	1.56	1.16	1.67	1.05	***	***	***	***
14	3.27	1.61	1.4	0.67	1.41	0.93	1.28	0.74	1.46	0.72	***	***	***	***
15	3.1	2.39	1.27	0.98	1.04	0.19	1.12	0.33	1	0	***	***	***	***
16	3.3	1.9	1.33	0.55	1.33	0.68	1.04	0.2	1.25	0.74	***	***	***	***
17	3.37	2.71	1	0	1.26	1.02	1.2	1	1.38	0.88	***	***	***	***
18	3.83	2.76	1.3	0.75	1.37	0.84	1.32	1.22	1.29	1.04	***	***	**	***

A decrease in the N.O.R.S (Table 8) in the pre-program, then the score began to increase (i.e improvement) from the post-program to the third follow up., and is statistically significant except in the third follow up compared with post-program in the disorganized and paranoid groups,. In the undifferentiated group, it is statistically significant on comparing pre-program and post-program, and in the third follow up, but not in others.

Table (8): N.O.R.S of different schizophrenic groups during the program and follow up.

Group (M±SD)	Pre prog.	Post-prog.	FO-I	FO-II	FO-III	P For comparison between different readings				
						b:a	c:a	d:a	e:a	e:b
Disorganized	51.29 ± 8.81	88.00 ± 12.3	92.67 ± 6.44	96.60 ± 3.21	96.00 ± 4.00	***	***	***	***	NS
Undifferentiated	73.71 ± 10.83	93.57 ± 8.04	86.29 ± 11.91	90.33 ± 9.87	82.80 ± 10.57	**	NS	NS	NS	*
Paranoid	70.33 ± 13.43	97.13 ± 7.39	98.14 ± 7.22	96.43 ± 6.74	94.43 ± 9.10	***	***	***	***	NS
Chronic	45.00	95.00	---	--	---	---	---	---	---	---

The comparison between different schizophrenic groups regarding N.O.R.S. (Table 9). Shows that on comparing between the disorganized and the undifferentiated groups, there is a significant difference in the pre-program towards the undifferentiated group, while a significant difference in the third follow up towards the disorganized group. On comparing between the disorganized and the paranoid groups, there is a significant difference in the pre- and post-program towards the paranoid group. On comparing between the undifferentiated and the paranoid groups, there is a significant difference in the first and third follow ups towards the paranoid group.

Table (9): Comparison between different schizophrenic groups regarding N.O.R.S

	Pre-prog.	Post.prog.	FO-I	FO-II	FO-III
Disorganized vs Undifferentiated	**	NS	NS	NS	**
Disorganized vs Paranoid	**	*	NS	NS	NS
Undifferentiated vs Paranoid	NS	NS	**	NS	*

A lower score of the N.O.R.S (Table 10) in the pre-program, then the score began to increase (i.e improvement) from post-program to the third follow-up, in all of its items except in item (6) "hallucinatory behaviors", item (9) "hyperactivity, item (14) "talkativeness" and item (19) grandiosity. Other items such as (10 irritability, and (17) "hostility to others" are significant in post-program only.

Table (10): Analysis of N.O.R.S. during program and follow up for all patients.

Question No. (M±SD)	Pre prog. (N=30)	Post-prog. (N=30)	FO-I (N=27)	FO-II (N=25)	FO-III (N=24)	P For comparison between different reading and pre-prog reading			
						b:a	c:a	d:a	e:a
1	3.3 ± 0.95	4.77 ± 0.43	4.74 ± 0.45	4.84 ± 0.47	4.71 ± 0.55	***	***	***	***
2	3.33 ± 0.92	4.77 ± 0.43	4.7 ± 0.47	4.84 ± 0.47	4.71 ± 0.55	***	***	***	***
3	3.47 ± 1.17	4.77 ± 0.43	4.78 ± 0.42	4.72 ± 0.46	4.67 ± 0.56	***	***	***	***
4	3.2 ± 1.27	4.53 ± 0.73	4.78 ± 0.58	4.76 ± 0.52	4.71 ± 0.62	***	***	***	***
5	3.37 ± 1.35	4.63 ± 0.72	4.93 ± 0.38	4.92 ± 0.28	4.79 ± 0.59	***	***	***	***
6	4.27 ± 1.01	4.57 ± 0.82	4.67 ± 1.07	4.68 ± 0.63	4.54 ± 0.78	NS	NS	NS	NS
7	2 ± 1.23	3.4 ± 0.86	3.41 ± 1.12	3.52 ± 0.92	3.58 ± 0.83	***	***	***	***
8	2.63 ± 1.1	4 ± 1.11	4.56 ± 0.85	4.68 ± 0.63	4.58 ± 0.65	***	***	***	***
9	4.27 ± 1.01	4.1 ± 0.99	4 ± 1.33	3.92 ± 0.91	3.96 ± 0.91	NS	NS	NS	NS
10	3.87 ± 1.25	4.53 ± 0.68	4.41 ± 1.08	4.4 ± 0.87	4.29 ± 1	*	NS	NS	NS
11	3 ± 1.44	4.53 ± 0.68	4.59 ± 0.64	4.4 ± 0.87	4.25 ± 0.99	***	***	***	***
12	2 ± 1.05	3.37 ± 0.81	3 ± 1.07	3.4 ± 0.91	3.46 ± 0.98	***	***	***	***
13	2.57 ± 1.41	4.2 ± 0.81	4.26 ± 0.76	4.32 ± 0.69	4.08 ± 0.93	***	***	***	***
14	4.27 ± 1.34	4.7 ± 0.6	4.26 ± 1.1	4.24 ± 0.88	4.04 ± 1.08	NS	NS	NS	NS
15	1.47 ± 0.73	3.37 ± 1	3.15 ± 1.2	3.32 ± 0.99	3.04 ± 0.81	***	***	***	***
16	1.73 ± 1.08	3.97 ± 0.85	3.7 ± 1.03	3.52 ± 1.08	3.54 ± 0.93	***	***	***	***
17	4.57 ± 0.9	4.97 ± 0.18	4.89 ± 0.42	4.92 ± 0.28	4.79 ± 0.51	*	NS	NS	NS
18	3.93 ± 1.36	3.43 ± 0.94	3.33 ± 1.04	3.6 ± 0.91	3.25 ± 0.85	***	***	***	***
19	4.83 ± 0.46	5 ± 0	4.96 ± 0.19	5 ± 0	4.92 ± 0.41	NS	NS	NS	NS
20	2.47 ± 0.82	3.7 ± 0.95	3.7 ± 1.07	3.84 ± 0.8	3.54 ± 0.78	***	***	***	***
21	3.1 ± 1.24	4.77 ± 0.5	4.78 ± 0.51	4.72 ± 0.61	4.63 ± 0.65	***	***	***	***
22	2 ± 1.17	4.03 ± 0.96	4.26 ± 4.44	4.44 ± 0.77	4.25 ± 0.9	***	***	***	***

The results of group psychotherapy (Table 11a, 11b, 11c) demonstrate the item of frequency of interaction, it began to improve from the second week to the end of the program and is statistically significant. Regarding the attitude towards the therapist, it began to improve significantly from he second week to the end of the program in all of its items except in the

hostile attitude. Regarding the attitude towards peer members, aloofness and friendly reporting impro- vement significantly from the third week.

Table (11-a): Results of program activities Group psychotherapy
Frequency of interaction

Weeks / Activities	First Week	Second Week	Third Week	Fourth Week	Comparison versus the first week 2nd week	3rd week	4th week
Frequency of Interaction	0.36±0.57	0.62±0.64	1.03±0.72	1.47±0.74	<0.01**	<0.001***	<0.001***

Table (11-b): Attitude towards the therapist

Weeks / Activities	First Week	Second Week	Third Week	Fourth Week	Comparison versus the first week 2nd week	3rd week	4th week
Hostile	0.11±0.34	0.07±0.18	0.01±0.06	0.02±0.08	0.05	0.05*	0.05
Friendly	0.22±0.47	0.54±0.73	1.13±0.82	1.65±0.84	0.001***	0.001***	0.001***
Complain	0.47±0.60	0.93±0.71	1.29±0.74	1.70±0.69	0.001***	0.001***	0.001***
Suggestible	0.44±0.58	0.93±0.71	1.28±0.73	1.66±0.68	0.001***	0.001***	0.001***
Understanding	0.39±0.57	0.73±0.74	1.12±0.79	1.51±0.78	0.001***	0.001***	0.001***
Avoiding	0.53±0.85	1.09±1.11	1.19±1.14	0.70±1.00	0.001***	0.001***	0.001***

Table (11-c): Attitude towards peer members

Weeks / Activities	First Week	Second Week	Third Week	Fourth Week	Comparison versus the first week 2nd week	3rd week	4th week
Aloof	3.0±---	3.0±---	2.33±---	1.00±---	>0.05	<0.01**	<0.001***
Hostile	0.0±---	0.0±---	0.0±---	0.0±---	>0.05	>0.05	>0.05
Superior	0.0±---	0.0±---	0.0±---	0.0±---	>0.05	>0.05	>0.05
Inferior	0.0±---	0.0±---	0.0±---	0.0±---	>0.05	>0.05	>0.05
Friendly	0.0±---	0.0±---	0.67±---	1.33±---	>0.05	<0.01***	<0.001***

The scores of reading newspapers (Table 12), began to increase (i.e improvement) from the second week in all items except abstraction which began to improve from the third week. All these results are statistically significant.

Table (12): Reading newspapers

Weeks / Activities	First Week	Second Week	Third Week	Fourth Week	Comparison versus the first week 2nd week	3rd week	4th week
Initiative	0.75±0.68	1.27±0.86	1.67±0.93	1.92±0.92	0.001***	0.001***	0.001***
Persistence	0.79±0.73	1.32±0.84	1.65±0.85	1.95±0.90	0.001***	0.001***	0.001***
Abstraction	0.48±0.67	0.63±0.80	0.91±0.95	1.29±1.09	0.05	0.01**	0.001***
Attention	0.76±0.73	1.20±0.82	1.53±0.97	1.84±0.97	0.001***	0.001***	0.001***
Degree of interaction	0.61±0.67	1.07±0.73	1.45±0.76	1.81±0.82	0.001***	0.001***	0.001***
Coherence	0.75±0.73	1.10±0.84	1.42±0.96	1.77±0.98	0.01**	0.01**	0.001***
Emotional reactivity	0.50±0.45	0.68±0.61	1.11±0.81	1.45±0.83	0.001***	0.001***	0.001***

The results of physical exercise activities and rhythmic body movements (Table 13a, 13b) shows that the scores of each began to increase (i.e improvement) from the second week and are statistically significant.

Table (13-a): Physical exercise activities.

Weeks / Activities	First Week	Second Week	Third Week	Fourth Week	Comparison versus the first week 2nd week	3rd week	4th week
Initiative	0.50±0.78	1.07±0.91	1.40±0.77	1.60±0.77	0.001***	0.001***	0.001***
Persistence	0.53±0.78	1.10±0.92	1.40±0.81	1.67±0.76	0.001***	0.001***	0.001***
Body awareness	0.53±0.78	1.07±0.91	1.40±0.72	1.60±0.77	0.001***	0.001**	0.001***
Interaction with others	0.50±0.78	1.03±0.89	1.37±0.72	1.53±0.73	0.01**	0.001***	0.001***
Emotional reactivity	0.50±0.78	0.97±0.93	1.20±0.85	1.47±0.82	0.01**	0.01**	0.001***
Attention	0.57±0.82	1.10±0.92	1.33±0.76	1.53±0.78	0.01**	0.001***	0.001***

Table (13-b): Rhythmic body movements.

Weeks / Activities	First Week	Second Week	Third Week	Fourth Week	Comparison versus the first week 2nd week	3rd week	4th week
Initiative	0.40±0.77	0.97±0.76	1.37±0.72	1.53±0.73	<0.001***	<0.001***	<0.001***
Persistence	0.47±0.78	0.97±0.76	1.37±0.72	1.50±0.73	<0.001***	<0.001***	<0.001***
Emotional reactivity	0.43±0.82	0.93±0.78	1.37±0.72	1.52±0.74	<0.001***	<0.001**	<0.001***
Degree of interaction with others	0.43±0.77	0.93±0.78	1.37±0.72	1.53±0.73	<0.001***	<0.001***	<0.001***
Appropriation of movement	0.40±0.77	0.83±0.83	1.23±0.86	1.43±0.82	<0.001***	<0.001***	<0.001***
Ability to degrees	0.50±0.82	0.93±0.78	1.3 ±0.76	1.47±0.78	<0.001***	<0.001***	<0.001***

Discussion

The deficits in social functioning that characterize individuals with schizophrenia have important theoretical and clinical implications (Dworkin, 1992).

Initiative Rating Scale:-

In the present study, it was noted that, there was a significant improvement in this scale in different schizophrenic groups, and this improvement increases with the increased duration of the program (Table 2). This study was consistent with the results of Ramadan (1996) who implementing a social competence training program for hospitalized psychiatric patients. She noted that, those patients showed a marked improvement in their ability to function independently in the ward setting.

In comparison between different schizophrenic groups, a significant improvement from the third and fourth week towards the undifferentiated group than the disorganized, also the same with the paranoid group when compared with the disorganized group. But no significant difference of improvement between undifferentiated and paranoid groups. This may be due to the poor performance of that group of patients which reflect the nature of their illness. This finding was supported by Rollant and Depoliti (1996), they noted that,

the prognosis of paranoid schizophrenia is better for occupational functioning and independent living, prognosis of undifferentiated schizophrenia is fair, but the prognosis of disorganized schizophrenia is poor.

Improvement in patient's performance in daily living activities of the studied sample as getting up, washing, bed making, wearing clothes, and so on, are highly statistically significant ($P<0.001$) table (4).

This study was supported by Wang (1994), who implemented the behavioral training program for chronic schizophrenic patients. He found that, lack of initiative is the main behavioral problem of long impatient whose clinical picture is dominated by negative symptoms and an inability to manage their daily affairs. This study demonstrates convincingly that behavioral intervention can improve some of these skills. At the end of the treatment period, experimental group patients were able to observe the ward schedule of getting up, eating, going to bed and so forth, to maintain a satisfactory level of personal hygiene and tidiness, to cooperate with the treatment program, to keep their personal space clean and tidy, to participate in ward activities and to manage their personal possessions. Overall, these patients showed a marked improvement in their ability to function independently in the ward setting. Also, observe is that the paranoid group improved significantly than the disorganized and undifferentiated groups, these results may be due to these groups of patients (disorganized and undifferentiated) have a more disturbance in sleeping pattern and vegetative behaviors. From the above findings, Butler (1994) noted that, at least some of social dysfunction seen in chronic schizophrenia is the result of disuse.

Clearly behavioral training program focused on life skills should be instituted in other chronic psychiatric facilities. Also, Mahfouz et al., (1992) noted that the result of assessment of social competence, performance of daily life activities indicates significantly positive change in cases of schizophrenia.

Brief Psychiatric Rating Scale (B.P.R.S):

A higher score was present at the beginning of the program, then it tend at the end of the program and continued to the third follow up (tables 5 & 6). This may be due to, during the program, the patients were under control of hospital treatments, which were given regular and under supervision, and other activities (e.g group psychotherapy, and activity therapy). Huxley et al., (2000) reported that adjunctive psychosocial treatments augment the benefits of pharmacotherapy and enhance functioning in psychotic disorders.

These results is supported by Zhengshu (1994) on his study, he noted that a significant improvement in each type of positive symptom assessed by B.P.R.S. There are several possible mechanisms for this improvement, the environmental change itself may have directly resulted in an improvement in positive symptoms, the environmental change may have augmented the effectiveness of the drug treatment, and the improvement in negative symptoms may have indirectly lead to improvement in positive symptoms.

In comparison between different schizophrenic groups (table 6), a significant improvement from the post-program towards the undifferentiated group than the disorganized group, also the same with the paranoid group when compared with the disorganized group, but no significant difference between the paranoid and the undifferentiated groups except in the first follow up towards the paranoid group. Mahfouz, et al., (1992) noted that, the significant improvement in symptomatology as indicated from the results of B.P.R.S represents another parameter confirming the effectiveness of activity program in improving patient's capacity for a better social adjustment.

Nurse's Observation Rating Scale (N.O.R.S):

A significant improvement in N.O.R.S occurred from the post-program and continued to the third follow up (table 8), in disorganized and paranoid schizophrenic groups, but in undifferentiated group, no significant improvement occurred after the post-program. This also, might be explained by, during the program, the patients being under hospital treatment and supervision together with other activities, and away from negligence of some families, and community stressors.

This finding is supported by Judy et al., (1990), he noted that many families and consumers are dissatisfied with care and treatment of schizophrenic patients and the mental illness carries such a strong stigma and sham, parents may blame themselves for their defective child wondering what they did wrong. The best improvement in N.O.R.S. occurred in the paranoid group (table 9). This finding may also be explained as; the course of paranoid schizophrenia may be episodic, with partial or with complete remission.

A significant improvement occurred in most of the items (Table 10) except in (hallucinatory behavior, higher activity, irritability, talkativeness, hostile to others, and grandiosity). This may be due to, these symptoms may need a longer time of treatment during the program, and most of these symptoms may need other lines of treatment e.g. antipsychotic drug treatment. These results are supported by Zhanhuai (1994), he noted that all items of the N.O.R.S showed differences in the expected directions, but the differences between experiment and control groups for items related to irritability were less marked than the differences for items related to other factors. Also, he noted that; in the rehabilitation treatment group, there was a significant difference in the amount of improvement between patients with different subtypes of schizophrenia. Patients with disorganized subtype had the best outcome, those

with paranoid subtype, the second best outcome, those with undifferentiated subtype, the worst outcome.

Group psychotherapy:- tables (11 a &b & c)
In this study, the results of group psychotherapy was statistically significant, and the improvement began from the second week and continued to the-end-of the program. This is consistent with Ramadan (1996) who implementing a social competence training program for hospitalized psychiatric patients, she pointed that discussion in group sessions had a significant effect, and the percentage of best performance increased in comparing pre and post assessment in the experimental group regarding all psychiatric symptoms.
Maureen, et al., (1996) noted that group therapy benefits included gaining new friendships, adapting new life styles, learning to express and share feelings, receiving social and sensory stimulation, increasing self esteem and experiencing a sense of belonging.

Activity therapy:

In the present study, the results of reading exercise activity are statistically significant. This improvement occurs from the second week and continued till the end of the program (tables 12, 13 a & b).

These results were consistent with Ramadan (1996), she pointed that, the social competence training program in her study include many activities like sports (e.g. physical exercise, running wolfing by using machines in rehabilitation department) has effect in reducing hostility, anger, and social withdrawal. Also, she pointed that the recreational activities such as dominos, cards, games, chess.. etc, had a positive effect to minimize the psychiatric symptoms e.g. anxiety, social withdrawal, hallucinations, motor retardation, hostility, anger, and depressive mood.

Lancaster (1996) described activity group therapy with patients diagnosed as having schizophrenia, she stated that "activity can serve as stimulus for interaction by providing a starting point for conversation and reducing anxiety". Activities include listening to music, reading poetry and drawing pictures. Members began to focus more on the needs of the group rather than on themselves.

William (1996) pointed that, movement is a direct expression of the self through the body and change in feeling state, cognition, and behavior. She also noted that the increased awareness of the body in space allowed distorted body image perception to be confronted, and corrected and achieve greater body awareness and social interaction through rhythmic exercises and response to music.

Conclusion:

It can be concluded that paranoid schizophrenia is the best group in improvement, then the undifferentiated, and disorganized group is the worst outcome, social skills training and group activity can recoup some of these lost skills, and group activities helped patients to interact with each others, and helped them to modify their maladaptive behaviors.
Also, it is recommended that, all psychiatric hospitals should be interested in and use activity therapy and group psychotherapy as a pattern of treatment to complement medication in chronic schizophrenic patients, and Before discharge of patients from hospital, we must learn their families should be thought to practice the social skills and activity therapy with them after discharge.

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الملخص العربي

برنامج للتدريب على المهارات الاجتماعية في مرضى الفصام المزمن

هدف البحث: يعتبر النقص الشديد في الوظائف الاجتماعية من العلامات الأساسية في مرض الفصام. وقد أجريت هذه الدراسة بهدف تعليم مرضى الفصام المزمن ممارسة وتطوير المهارات الاجتماعية اللازمة لتفاعلهم مع الآخرين وأيضا لمحاولة تحسين سلوكهم المرضى.

طريقة البحث: وقد تم اختيار ثلاثين مريضا بمرض الفصام المزمن الذين تم دخولهم وحدة الطب النفسي بمستشفى جامعة أسيوط ٢٤ من الذكور، ٦ من الإناث (١٥ حالة مرضى الفصام الضلالى، ٧ حالات مرضى الفصام غير المتميز، ٧ حالات مرضى الفصام غير المنتظم وحالة واحدة فصام كتاتونى تخشبي) تم تشخيصهم بناء على دليل التشخيص الإحصائي للأمراض النفسية الأمريكي الرابع ، وتراوحت أعمارهم ما بين ١٩ – ٥٥ سنة وفترة المرض ما بين ٢- ١٤ سنة. وقد تم تطبيق هذه الأدوات ١- مقياس ملاحظة الممرضة لسلوك المريض داخل المستشفى. ٢- مقياس ملاحظة سلوك المريض اليومي من حيث المبادأة ٣- مقياس الطب النفسي المختصر لتقييم الحالة النفسية.

٤- مجموعة مختلفة من الأنشطة العلاجية وتشمل (العلاج النفسي الجمعي، قراءة الصحف اليومية، حركات الجسم الإيقاعية والتدريبات الرياضية). وكانت فترة البرنامج العلاجي داخل الوحدة لمدة شهر وأيضا تمت متابعتهم ثلاث مرات بعد الخروج (مرة كل شهر).

نتائج البحث: وأوضحت النتائج أن هناك تحسنا واضحا في أداء المريض عند نهاية البرنامج العلاجي وبالنسبة لمقياس ملاحظة سلوك المريض اليومي من حيث المبادأه في كل عناصره ما عدا النوم. وأيضا بالنسبة لمقياس الطب النفسي المختصر لتقييم الحالة النفسية في كل عناصره ما عدا هوس العظمة. في مقياس ملاحظة الممرضة لسلوك المريض. وكان هذا التحسن واضح بالنسبة لمرضى الفصام الزوراني ويليهم الفصام غير المتميز وأقلهم في مرضى الفصام غير المنتظم. أما بالنسبة للأنشطة العلاجية المختلفة (العلاج النفسي الجمعي، قراءة الصحف اليومية، حركات الجسم الإيقاعية والتدريبات الرياضية) فقد وجد بها تحسن واضح في نهاية البرنامج العلاجي. وقد رصدت الأستخلاصات والتوصيات ذات الصلة .